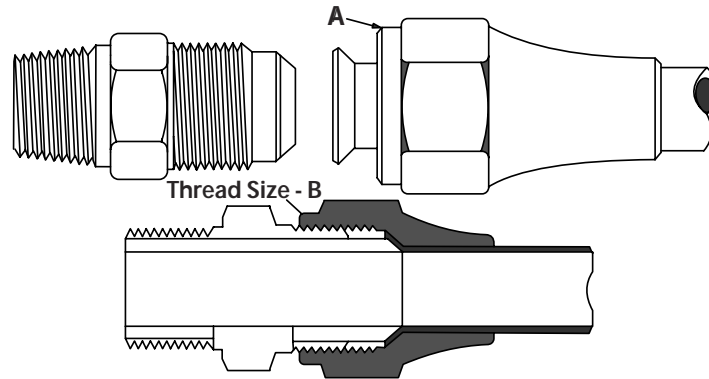


45° Flare



Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
Thread Size-B	5/16-24	3/8-24	7/16-20	1/2-20	5/8-18	11/16-16	3/4-16	7/8-14	1-1/16-14

•Typical Application

LP and natural gas, flammable liquids, instrumentation, refrigeration, power steering, hydraulic and pneumatic systems.

•Working Pressure Ranges

Temperature and type of tubing used are important factors. However, the following table is a good guide for proper selection. Temperature 73°F with copper tubing:

PSI	Tube O.D. (in.)	Tube Wall (in.)
2800	1/8	.030
1900	3/16	.030
1400	1/4	.030
1200	5/16	.032
1000	3/8	.032
750	1/2	.032
650	5/8	.035
550	3/4	.035
450	7/8	.035

•Vibration

Good resistance - use long nut when greater vibration resistance is required.

•Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures.

•Material

CA360 Brass for Barstock fittings.

CA377 Brass for forged fittings.

•Used With

Copper, brass, aluminum and steel hydraulic tubing that can be flared

•Tolerance

+/- .03 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Conformance

Meets specifications and standards of ASA, ASME, SAE and MS (Military standards).

Assembly Instructions

- 1- Cut tubing to desired length. Make sure all burrs are removed and ends are cut square.
- 2- Slide nut on tube. Threaded end "A" of nut must face out.
- 3- Flare end of tube with a 45° flaring tool.
 - a- Measure flare diameter
 - b- Examine flare for excessive thin out.
- 4- Lubricate threads and assemble to fitting body. Nut should be turned hand tight.
- 5- Tighten assembly with wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.

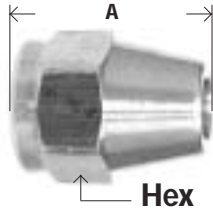
Note: Do not over-torque as it may damage the fitting or split the tubing at the flare.

Actual O.D. of Flare Fittings



SHORT ROD NUT

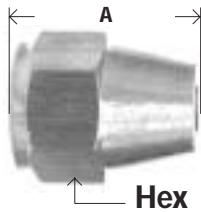
SAE# 010110



20910
41FS
1110
N1
41FX
441S
'L'

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-013	1/8"	0.50	0.37	0.01	0.90
10-014	3/16"	0.62	0.43	0.02	0.73
10-015	1/4"	0.75	0.56	0.03	0.47
10-016	5/16"	0.88	0.62	0.04	1.57
10-017	3/8"	1.00	0.75	0.04	1.05
10-018	7/16"	1.06	0.81	0.06	10.41
10-019	1/2"	1.12	0.87	0.09	1.42
10-020	5/8"	1.31	1.06	0.15	2.44
10-021	3/4"	1.50	1.25	0.24	4.72
10-022	7/8"	1.62	1.50	0.36	12.09
10-026	1"	1.81	1.62	0.44	20.92

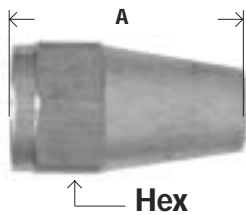
REDUCING SHORT ROD NUT



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-023	3/8" x 1/4"	0.74	0.81	0.06	5.33
10-024	1/2" x 3/8"	0.86	0.94	0.10	7.13
10-025	5/8" x 1/2"	0.99	1.06	0.12	15.15

LONG ROD NUT

SAE# 010111



14FL
N2
241
441
41

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-001	1/8"	0.75	0.37	0.01	3.18
10-002	3/16"	0.81	0.43	0.02	1.03
10-003	1/4"	0.94	0.56	0.03	1.06
10-004	5/16"	1.12	0.62	0.04	1.82
10-005	3/8"	1.31	0.75	0.06	2.15
10-006	1/2"	1.62	0.87	0.12	2.75
10-007	5/8"	1.88	1.06	0.20	4.41
10-008	3/4"	2.19	1.25	0.34	16.16

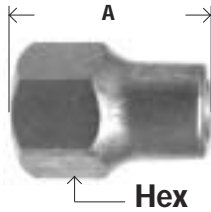
Dimension data can change without notice.
Please call us when dimensions are critical.



LONG FORGED NUT

SAE# 010167

41FF
39
N4
14FL
641

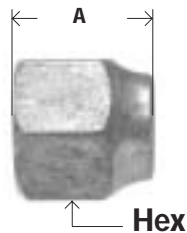


Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-028	1/4"	0.94	0.62	0.05	2.27
10-030	3/8"	1.06	0.81	0.08	3.50
10-031	1/2"	1.19	0.94	0.12	4.50
10-032	5/8"	1.44	1.06	0.26	7.67
10-033	3/4"	1.75	1.31	0.35	12.65

SHORT FORGED NUT

SAE# 010166

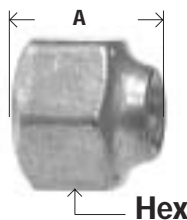
14FS
41FFS
40
641-S
1116
NS4



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-038	3/16"	0.56	0.50	0.02	5.38
10-039	1/4"	0.60	0.62	0.04	1.38
10-040	5/16"	0.66	0.69	0.04	3.30
10-041	3/8"	0.70	0.81	0.06	1.29
10-042	1/2"	0.82	0.94	0.08	1.93
10-043	5/8"	0.95	1.06	0.12	3.68
10-044	3/4"	1.16	1.31	0.22	7.79
10-045	7/8"	1.18	1.38	0.30	11.44

EXTRA HEAVY SHORT FORGED NUT

NSA



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-046	1/4"	0.63	0.75	0.04	3.27
10-047	3/8"	0.72	0.88	0.06	2.92
10-048	1/2"	0.88	1.00	0.08	3.66
10-049	5/8"	0.98	1.12	0.12	6.69

FORGED REDUCING NUT

NSR4
14FS
41FRS
40R
662-S

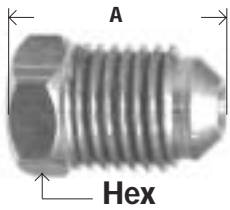


Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-051	5/16" x 1/4"	0.66	0.75	0.06	12.02
10-052	3/8" x 1/4"	0.72	0.81	0.06	2.92
10-053	3/8" x 5/16"	0.72	0.81	0.08	4.79
10-054	1/2" x 3/8"	0.81	0.94	0.08	3.66
10-055	5/8" x 3/8"	0.96	1.12	0.15	11.31
10-056	5/8" x 1/2"	0.97	1.06	0.12	5.67
10-058	3/4" x 5/8"	1.17	1.31	0.30	16.97

Dimension data can change without notice.
Please call us when dimensions are critical.



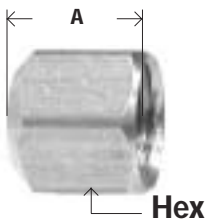
FLARED PLUG



58 57 439
639F P2
PF 2229

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-063	3/16"	0.59	0.50	0.02	4.86
10-064	1/4"	0.69	0.43	0.02	1.34
10-065	5/16"	0.78	0.50	0.04	3.34
10-066	3/8"	0.88	0.62	0.06	1.05
10-067	1/2"	1.06	0.75	0.10	2.03
10-068	5/8"	1.19	0.87	0.14	3.64

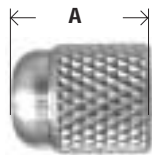
FLARED CAP



640F N5 440
41FC 2129
56 54

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-074	3/16"	0.47	0.50	0.02	2.95
10-075	1/4"	0.48	0.50	0.02	0.50
10-076	5/16"	0.62	0.62	0.04	1.92
10-077	3/8"	0.58	0.75	0.03	1.18
10-078	1/2"	0.69	0.81	0.14	1.33
10-079	5/8"	0.81	0.94	0.20	1.73
10-080	3/4"	1.17	1.37	0.30	10.94

FINGER TIGHTENING CAP



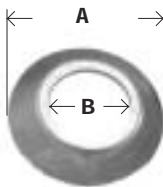
NFT5

Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
10-081	1/4"	0.62	0.02	1.07

COPPER GASKET

SAE# 010113

B2
2GF
6251
FG
157
59
463



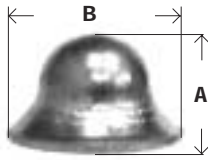
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
10-084	3/16"	0.31	0.12	0.01	0.85
10-085	1/4"	0.36	0.19	0.01	0.27
10-086	5/16"	0.42	0.22	0.01	0.60
10-087	3/8"	0.55	0.28	0.01	0.40
10-088	1/2"	0.66	0.41	0.01	0.60
10-089	5/8"	0.77	0.50	0.01	0.93
10-090	3/4"	0.95	0.62	0.01	1.17

Dimension data can change without notice.
Please call us when dimensions are critical.



COPPER BONNET

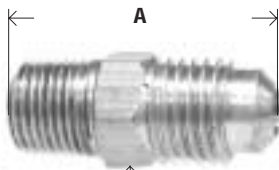
SAE# 010114



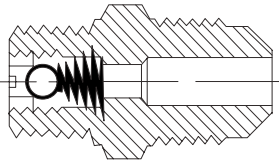
B1 156
3GF FB
64C 695
57 464

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
10-094	3/16"	0.16	0.31	0.01	1.84
10-095	1/4"	0.22	0.36	0.01	1.40
10-097	3/8"	0.34	0.55	0.01	0.67
10-098	1/2"	0.41	0.66	0.01	2.33
10-099	5/8"	0.44	0.77	0.01	2.18
10-100	3/4"	0.56	0.95	0.01	3.34

MALE BALL CHECK CONNECTOR



43A

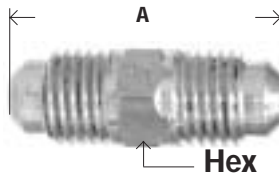


Part #	Male NPTF x Male UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-131	1/4" x 1/8"	1.06	0.43	0.04	9.85
10-133	3/8" x 1/4"	1.31	0.62	0.08	13.67

Note: Ball & Spring position may be reversed to change flow/check position. Min working pressure 3 PSI

UNION

SAE# 010101



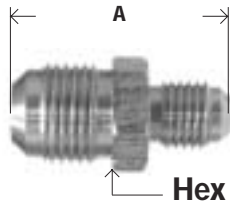
42F
U2

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-104	1/8"	0.91	0.31	0.02	3.89
10-105	3/16"	1.06	0.37	0.02	1.98
10-106	1/4"	1.19	0.43	0.03	1.53
10-107	5/16"	1.34	0.50	0.05	2.27
10-108	3/8"	1.50	0.62	0.09	1.84
10-109	1/2"	1.81	0.75	0.14	2.78
10-110	5/8"	2.12	0.87	0.20	4.44
10-111	3/4"	2.44	1.06	0.35	12.85
10-112	7/8"	2.72	1.25	0.52	21.91

Dimension data can change without notice. Please call us when dimensions are critical.



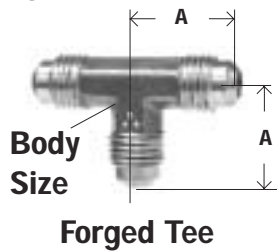
REDUCING UNION



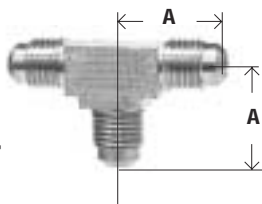
656F
UR2
42-R

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-117	5/16" x 1/4"	1.28	0.50	0.04	3.11
10-118	3/8" x 1/4"	1.38	0.62	0.06	2.24
10-119	3/8" x 5/16"	1.44	0.62	0.08	4.93
10-120	1/2" x 1/4"	1.53	0.75	0.10	4.46
10-121	1/2" x 3/8"	1.69	0.75	0.10	2.48
10-122	5/8" x 3/8"	1.88	0.87	0.17	5.21
10-123	5/8" x 1/2"	1.75	0.87	0.14	4.06

UNION TEE



Forged Tee



Barstock Tee

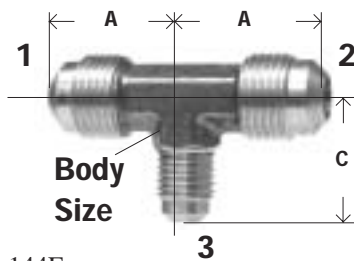
244F
T2
144F

SAE# 010401

Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	List Price
10-157	1/8"	0.67	0.36	0.04	7.35
10-158	3/16"	0.75	0.36	0.06	4.31
10-159	1/4"	0.78	0.36	0.06	3.98
10-159B*	1/4"	0.88	0.50	0.08	5.52
10-160	5/16"	0.91	0.44	0.10	5.80
10-161	3/8"	1.00	0.44	0.12	3.80
10-162	1/2"	1.16	0.59	0.19	4.91
10-163	5/8"	1.41	0.69	0.30	8.79
10-164	3/4"	1.64	0.88	0.53	26.12
10-165	7/8"	1.75	1.25	0.93	47.26

* Barstock

REDUCING TEE 1 x 2 x 3



144F
TR2
659F
684F
44R

Part #	Thread Size UNF 1x2x3	A	C	Body Size	Approx. Wt. Lbs.	List Price
10-170	1/4" x 1/4" x 3/8"	0.91	1.00	0.44	0.10	5.78
10-171	5/16" x 5/16" x 1/4"	0.94	0.94	0.44	0.12	10.05
10-172	3/8" x 1/4" x 1/4"	0.91	1.00	0.44	0.10	8.33
10-173	3/8" x 1/4" x 3/8"	1.00	0.91	0.44	0.12	7.16
10-174	3/8" x 3/8" x 1/4"	1.00	0.88	0.44	0.11	7.30
10-175	3/8" x 3/8" x 1/2"	1.00	1.19	0.59	0.14	7.57
10-176	3/8" x 3/8" x 5/8"	1.16	1.44	0.69	0.16	16.66
10-178	1/2" x 3/8" x 3/8"	1.16	1.12	0.59	0.18	6.17
10-179	1/2" x 3/8" x 1/2"	1.16	1.09	0.59	0.18	7.89
10-180	1/2" x 1/2" x 1/4"	1.16	0.97	0.59	0.18	11.41
10-181	1/2" x 1/2" x 3/8"	1.16	1.12	0.59	0.19	7.07
10-182	1/2" x 1/2" x 5/8"	1.28	1.41	0.69	0.28	12.69
10-187	5/8" x 1/2" x 5/8"	1.44	1.33	0.69	0.27	19.68
10-188	5/8" x 5/8" x 3/8"	1.38	1.16	0.69	0.30	10.88
10-189	5/8" x 5/8" x 1/2"	1.38	1.28	0.69	0.28	10.08
10-197	3/4" x 3/4" x 5/8"	1.66	1.50	0.88	0.36	33.12

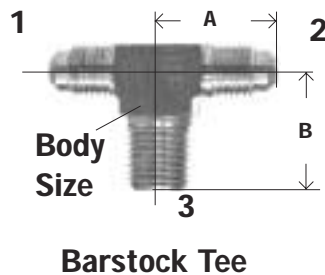
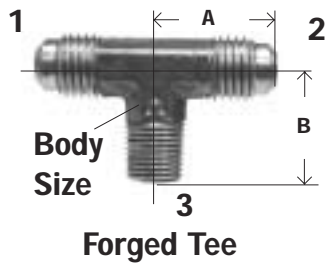
Dimension data can change without notice.
Please call us when dimensions are critical.



MALE BRANCH TEE

SAE# 010425

BRASS



T1
145F
45

Part #	Male Flare x Male NPT (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-203	3/16" x 1/8"	0.75	0.75	0.36	0.10	4.72
10-204	1/4" x 1/8"	0.78	0.75	0.36	0.05	3.43
10-204B*	1/4" x 1/8"	0.82	0.81	0.47	0.08	6.32
10-205	1/4" x 1/4"	0.88	0.88	0.44	0.08	5.31
10-205B*	1/4" x 1/4"	0.91	0.94	0.56	0.10	7.41
10-206	1/4" x 3/8"	0.92	1.00	0.47	0.10	8.59
10-207	5/16" x 1/8"	0.89	0.78	0.44	0.08	5.78
10-208	5/16" x 1/4"	0.94	0.94	0.44	0.08	7.17
10-209	3/8" x 1/8"	1.00	0.91	0.44	0.14	5.15
10-210	3/8" x 1/4"	1.00	0.94	0.44	0.12	5.19
10-211	3/8" x 3/8"	1.00	1.00	0.47	0.13	6.43
10-212	3/8" x 1/2"	1.12	1.22	0.69	0.22	12.21
10-213	1/2" x 1/4"	1.16	1.00	0.59	0.20	8.72
10-214	1/2" x 3/8"	1.16	1.14	0.59	0.19	9.18
10-215	1/2" x 1/2"	1.22	1.22	0.69	0.24	10.78
10-216	1/2" x 3/4"	1.38	1.41	0.88	0.22	21.57
10-217	5/8" x 3/8"	1.38	1.25	0.69	0.24	15.63
10-218	5/8" x 1/2"	1.41	1.31	0.69	0.29	15.49
10-219	5/8" x 3/4"	1.41	1.41	0.88	0.36	21.86
10-220	3/4" x 1/2"	1.63	1.59	0.88	0.49	31.19
10-221	3/4" x 3/4"	1.63	1.44	0.88	0.48	28.06

* Barstock

I cdnuolt blveiee taht I cluod aulacly uesdnatnrd waht I was rdgnieg The phaonmneal pweor of the hmuan mnid Aoccdnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mtttaer inwaht oredr the ltteers in a wrod are, the olny iprmoatnt tihg is taht the frist and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Amzanig huh? yaeh and I awlyas thought slpeling was ipmorantt!

Dimension data can change without notice.
Please call us when dimensions are critical.

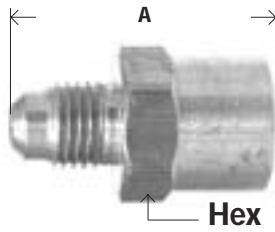


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WebSales@GoodyearRubberProducts.com

We Ship World Wide

FEMALE ADAPTER

SAE# 010103



46
U3

Part #	Male Flare x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-226	1/8" x 1/8"	0.91	0.56	0.03	2.00
10-227	3/16" x 1/8"	0.97	0.56	0.03	4.12
10-228	1/4" x 1/8"	1.03	0.56	0.04	3.36
10-229	1/4" x 1/4"	1.23	0.68	0.07	1.64
10-230	1/4" x 3/8"	1.18	0.75	0.08	3.24
10-231	1/4" x 1/2"	1.31	0.94	0.06	3.58
10-232	5/16" x 1/8"	1.06	0.56	0.05	5.13
10-233	5/16" x 1/4"	1.28	0.68	0.08	2.57
10-224	5/16" x 3/8"	1.34	0.81	0.09	3.38
10-234	3/8" x 1/8"	1.09	0.62	0.08	2.89
10-235	3/8" x 1/4"	1.31	0.81	0.08	2.16
10-236	3/8" x 3/8"	1.25	0.81	0.10	2.20
10-237	3/8" x 1/2"	1.60	1.00	0.16	1.80
10-238	3/8" x 3/4"	1.41	1.18	0.11	2.76
10-239	1/2" x 1/4"	1.37	0.75	0.10	2.24
10-240	1/2" x 3/8"	1.50	0.81	0.14	2.78
10-241	1/2" x 1/2"	1.75	1.00	0.12	2.86
10-242	1/2" x 3/4"	1.60	1.12	0.16	3.65
10-243	5/8" x 3/8"	1.24	0.87	0.12	4.55
10-244	5/8" x 1/2"	1.53	0.87	0.12	3.07
10-245	5/8" x 3/4"	1.65	1.12	0.17	5.06
10-246	3/4" x 1/2"	1.74	1.18	0.32	16.88
10-247	3/4" x 3/4"	1.75	1.18	0.22	14.77
10-248	7/8" x 3/4"	1.94	1.31	0.26	18.48

Dimension data can change without notice.
Please call us when dimensions are critical.

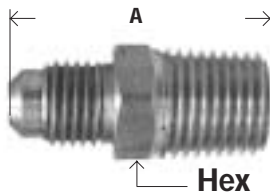
“We’re all afraid of something. Some have more fears than others. The one we must all guard against is the fear of ourselves. Don’t let the sensation of fear convince you that you’re too weak to have courage. Fear is the opportunity for courage, not proof of cowardice. No one is born a coward. We were meant to love. And we were meant to have courage for it. So be brave. The rest is easy.”

- John Mc Cain



MALE ADAPTER

SAE# 010102

U1
48

Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-253	1/8" x 1/8"	0.92	0.43	0.02	2.41
10-254	3/16" x 1/8"	1.00	0.43	0.03	0.92
10-255	1/4" x 1/8"	1.06	0.43	0.04	0.74
10-256	1/4" x 1/4"	1.25	0.56	0.04	1.05
10-257	1/4" x 3/8"	1.31	0.68	0.06	2.12
10-258	1/4" x 1/2"	1.44	0.87	0.11	2.74
10-259	5/16" x 1/8"	1.16	0.50	0.04	1.58
10-260	5/16" x 1/4"	1.34	0.56	0.06	1.83
10-261	5/16" x 3/8"	1.38	0.68	0.08	2.33
10-262	3/8" x 1/8"	1.25	0.62	0.07	1.66
10-263	3/8" x 1/4"	1.44	0.62	0.08	1.83
10-264	3/8" x 3/8"	1.44	0.68	0.09	2.00
10-265	3/8" x 1/2"	1.69	0.87	0.14	4.94
10-266	3/8" x 3/4"	1.81	1.06	0.18	3.07
10-267	1/2" x 1/4"	1.60	0.75	0.11	2.86
10-268	1/2" x 3/8"	1.62	0.75	0.12	2.46
10-269	1/2" x 1/2"	1.79	0.87	0.15	3.14
10-270	1/2" x 3/4"	1.75	1.06	0.22	3.16
10-271	5/8" x 1/4"	1.81	0.87	0.14	7.87
10-272	5/8" x 3/8"	1.81	0.87	0.18	3.73
10-273	5/8" x 1/2"	2.00	0.87	0.20	3.33
10-274	5/8" x 3/4"	1.85	1.06	0.21	4.00
10-275	3/4" x 1/2"	2.19	1.06	0.28	10.74
10-276	3/4" x 3/4"	2.08	1.06	0.28	4.43
10-277	7/8" x 1/2"	2.22	1.25	0.52	29.46
10-278	7/8" x 3/4"	2.35	1.25	0.41	15.25
10-279	1" x 3/4"	2.44	1.43	0.53	25.52
10-280	1" x 1"	2.44	1.43	0.53	31.34

BRASS

"You can live to be 100 if you want to give up all things that make you want to live to be 100"

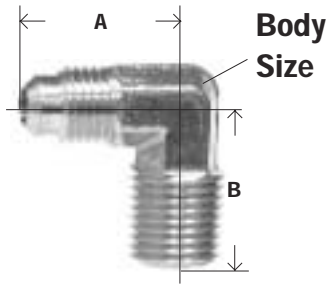
- Woody Allen

Dimension data can change without notice.
Please call us when dimensions are critical.

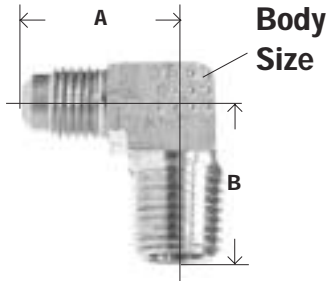


90° MALE ELBOW

SAE# 010202



Forged Elbow



Barstock Elbow

249F
49
E1
149F

Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-283	1/8" x 1/8"	0.63	0.73	0.37	0.04	5.52
10-283B*	1/8" x 1/8"	0.62	0.69	0.43	0.04	5.15
10-284	3/16" x 1/8"	0.75	0.75	0.44	0.04	4.45
10-284B*	3/16" x 1/8"	0.75	0.75	0.43	0.06	2.50
10-285	3/16" x 1/4"	0.81	0.88	0.44	0.08	5.40
10-286	1/4" x 1/8"	0.84	0.78	0.38	0.04	2.10
10-286B*	1/4" x 1/8"	0.81	0.78	0.47	0.05	2.35
10-287	1/4" x 1/4"	0.81	0.88	0.44	0.05	2.36
10-287B*	1/4" x 1/4"	0.91	0.93	0.59	0.08	3.45
10-288	1/4" x 3/8"	0.91	0.91	0.47	0.08	3.70
10-289	1/4" x 1/2"	1.03	1.09	0.59	0.10	6.72
10-290	5/16" x 1/8"	0.91	0.88	0.44	0.06	3.72
10-290B*	5/16" x 1/8"	0.91	0.78	0.52	0.06	2.72
10-291	5/16" x 1/4"	0.98	0.96	0.44	0.08	3.92
10-291B*	5/16" x 1/4"	0.95	0.92	0.62	0.08	3.90
10-292	5/16" x 3/8"	1.06	1.09	0.59	0.08	5.05
10-293	3/8" x 1/8"	1.00	0.91	0.53	0.08	3.66
10-293B*	3/8" x 1/8"	1.03	0.91	0.65	0.08	4.78
10-294	3/8" x 1/4"	1.01	0.89	0.48	0.08	2.71
10-294B*	3/8" x 1/4"	0.97	1.04	0.68	0.11	4.61
10-295	3/8" x 3/8"	1.00	0.88	0.47	0.10	2.90
10-295B*	3/8" x 3/8"	1.06	1.09	0.69	0.12	4.54
10-296	3/8" x 1/2"	1.10	1.09	0.59	0.12	3.59
10-297	3/8" x 3/4"	1.25	1.31	0.81	0.12	9.00
10-298	1/2" x 1/4"	1.19	1.00	0.59	0.12	5.06
10-298B*	1/2" x 1/4"	1.22	1.19	0.81	0.12	9.34
10-299	1/2" x 3/8"	1.10	1.00	0.59	0.13	4.27
10-299B*	1/2" x 3/8"	1.22	1.12	0.77	0.18	5.95
10-300	1/2" x 1/2"	1.16	1.13	0.59	0.14	5.83
10-300B*	1/2" x 1/2"	1.26	1.36	0.94	0.26	7.72
10-301	1/2" x 3/4"	1.42	1.25	0.81	0.24	6.33
10-311	5/8" x 1/4"	1.34	1.13	0.72	0.28	10.56
10-302	5/8" x 3/8"	1.35	1.22	0.72	0.20	8.06
10-302B*	5/8" x 3/8"	1.41	1.25	0.94	0.20	11.48
10-303	5/8" x 1/2"	1.35	1.22	0.72	0.20	5.08
10-303B*	5/8" x 1/2"	1.41	1.38	0.94	0.20	9.48
10-304	5/8" x 3/4"	1.44	1.31	0.81	0.25	9.05
10-305	3/4" x 1/2"	1.67	1.50	0.88	0.34	13.16
10-306	3/4" x 3/4"	1.67	1.63	0.88	0.30	12.18
10-306B*	3/4" x 3/4"	1.60	1.62	0.91	0.32	23.95
10-307	7/8" x 3/4"	1.75	1.68	1.00	0.44	30.09
10-308	1" x 3/4"	1.94	1.69	1.31	0.75	42.32
10-309	1" x 1"	1.94	1.75	1.25	0.78	42.78

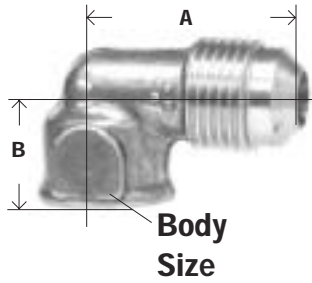
* Barstock

Dimension data can change without notice.
Please call us when dimensions are critical.

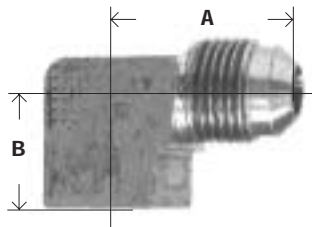


90° FEMALE ELBOW

SAE# 010203



Forged Elbow



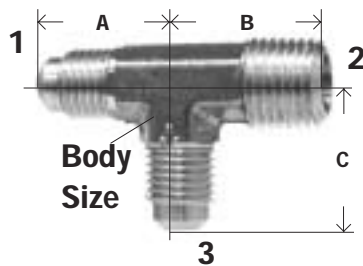
Barstock Elbow

E3
50
150F

Part #	Male Flare x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-312	3/16" x 1/8"	0.81	0.44	0.56	0.05	6.77
10-313	1/4" x 1/8"	0.90	0.46	0.56	0.06	3.35
10-313B*	1/4" x 1/8"	0.88	0.47	0.56	0.06	3.16
10-314	1/4" x 1/4"	0.97	0.59	0.75	0.08	4.64
10-315	1/4" x 3/8"	1.03	0.57	0.81	0.09	6.20
10-333	1/4" x 1/2"	1.08	0.66	1.00	0.12	8.33
10-316	5/16" x 1/8"	0.94	0.88	0.45	0.08	5.59
10-316B*	5/16" x 1/8"	0.94	0.47	0.56	0.08	5.07
10-317	5/16" x 1/4"	1.03	0.58	0.75	0.06	5.07
10-318	3/8" x 1/8"	1.00	0.88	0.47	0.10	3.72
10-319	3/8" x 1/4"	1.06	0.59	0.75	0.09	4.16
10-319B*	3/8" x 1/4"	1.09	0.69	0.75	0.10	7.86
10-320	3/8" x 3/8"	1.06	0.57	0.81	0.10	3.85
10-321	3/8" x 1/2"	1.16	0.66	1.00	0.14	4.08
10-322	3/8" x 3/4"	1.28	0.72	1.25	0.12	6.72
10-323	1/2" x 1/4"	1.25	0.70	0.88	0.13	8.62
10-324	1/2" x 3/8"	1.25	0.70	0.88	0.12	6.18
10-324B*	1/2" x 3/8"	1.28	0.75	0.81	0.19	9.94
10-325	1/2" x 1/2"	1.29	0.72	1.00	0.18	4.95
10-326	1/2" x 3/4"	1.41	0.72	1.25	0.20	7.64
10-327	5/8" x 3/8"	1.35	1.22	0.72	0.22	11.95
10-328	5/8" x 1/2"	1.38	0.75	1.00	0.20	7.33
10-329	5/8" x 3/4"	1.50	0.76	1.25	0.28	8.19
10-330	3/4" x 1/2"	1.63	1.06	1.06	0.42	22.42
10-331	3/4" x 3/4"	1.88	1.06	1.31	0.40	34.56

* Barstock

FORGED MALE RUN TEE



T3
151F
51

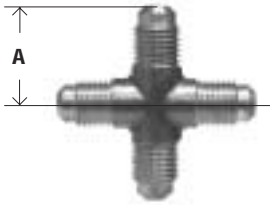
Part #	Male Flare x Male NPTF (1&3) x 2	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
10-343	3/16" x 1/8"	0.75	0.75	0.75	0.37	0.05	5.80
10-344	1/4" x 1/8"	0.78	0.75	0.78	0.37	0.06	4.42
10-345	1/4" x 1/4"	0.88	0.88	0.88	0.44	0.08	5.74
10-347	5/16" x 1/8"	0.88	0.80	0.88	0.44	0.08	5.95
10-348	5/16" x 1/4"	0.94	0.94	0.94	0.44	0.08	8.72
10-350	3/8" x 1/4"	1.00	0.94	1.00	0.44	0.12	6.93
10-351	3/8" x 3/8"	1.00	1.00	1.00	0.47	0.10	5.36
10-340	3/8" x 1/2" x 3/8"	1.09	1.09	1.16	0.59	0.18	10.64
10-352	3/8" x 1/2"	1.12	1.22	1.12	0.69	0.12	12.18
10-353	1/2" x 3/8" x 1/2"	1.22	1.22	1.15	0.69	0.22	13.28
10-354	1/2" x 3/8"	1.16	1.09	1.16	0.59	0.18	8.07
10-355	1/2" x 1/2"	1.22	1.22	1.22	0.69	0.22	10.57
10-357	5/8" x 1/2"	1.41	1.31	1.41	0.69	0.28	15.66
10-359	3/4" x 1/2"	1.63	1.59	1.63	0.88	0.48	32.98
10-360	3/4" x 3/4"	1.62	1.44	1.62	0.88	0.48	27.53
10-361	3/16" x 5/16" x 1/8"	0.87	0.78	0.97	0.44	0.08	3.73

Dimension data can change without notice.
Please call us when dimensions are critical.



FORGED FLARE CROSS

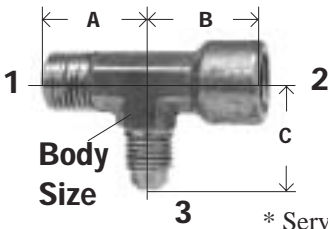
SAE# 010501



455
C1
147F
52

Part #	Thread Size UNF	A	Body Width	Approx. Wt. Lbs.	List Price
10-373	1/4"	0.88	0.44	0.10	12.67
10-374	5/16"	0.92	0.44	0.10	12.85
10-375	3/8"	1.00	0.44	0.16	10.19
10-376	1/2"	1.16	0.59	0.24	14.18

FORGED ADAPTER TEE

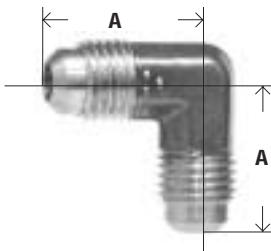


T17
53

* Service Tee

Part #	Size 1 x 2 x 3	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
10-382	1/8" x 1/8" x 1/4"	0.72	0.53	0.80	0.47	0.08	6.64
10-383	1/4" x 1/4" x 1/4"	0.88	1.00	0.91	0.47	0.11	8.53

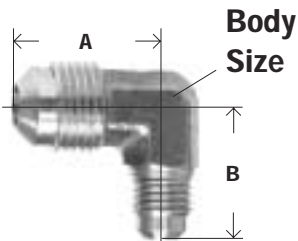
FORGED 90° FLARE ELBOW



E2
155F

Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
10-404	1/8"	0.64	0.04	8.70
10-405	3/16"	0.75	0.06	8.24
10-406	1/4"	0.81	0.08	2.96
10-407	5/16"	0.91	0.10	4.63
10-408	3/8"	1.00	0.10	3.98
10-409	1/2"	1.16	0.14	4.45
10-410	5/8"	1.41	0.22	6.70
10-411	3/4"	1.66	0.68	17.73
10-412	7/8"	1.81	0.82	40.16

FORGED REDUCING ELBOW



ER2
657F
55R

Part #	Male Flare x Male Flare	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-416	3/8" x 1/4"	1.00	0.88	0.47	0.08	5.80
10-417	3/8" x 5/16"	1.00	0.94	0.44	0.08	7.62
10-419	1/2" x 3/8"	1.19	1.02	0.59	0.14	6.18
10-421	5/8" x 1/2"	1.34	1.23	0.72	0.21	11.13

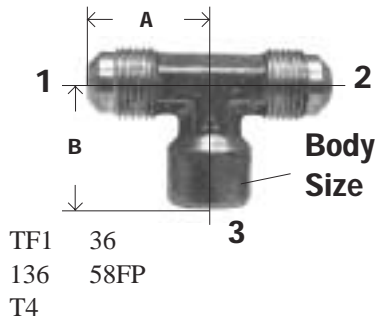
Dimension data can change without notice.
Please call us when dimensions are critical.



BRASS FITTINGS

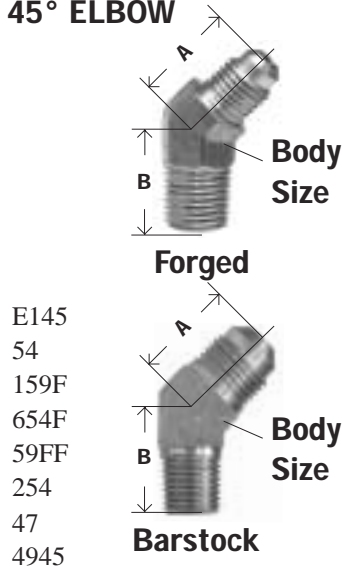
45° FLARE

FORGED FEMALE BRANCH TEE



Part #	Male Flare x Female NPTF (1&2) x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-429	1/4" x 1/4"	0.97	0.75	0.69	0.12	7.66
10-430	3/8" x 1/4"	1.00	1.03	0.47	0.14	9.28
10-431	3/8" x 3/8"	1.17	0.69	1.05	0.22	14.41
10-432	3/8" x 1/2"	1.16	0.69	1.05	0.19	13.61
10-434	1/2" x 1/2"	1.31	0.69	1.06	0.22	15.08
10-435	5/8" x 1/2"	1.38	0.76	1.06	0.24	12.21

45° ELBOW



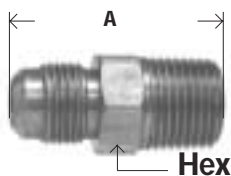
SAE# 010302

Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-448	1/4" x 1/8"	0.67	0.64	0.41	0.04	3.85
10-448B*	1/4" x 1/8"	0.67	0.64	0.44	0.04	5.66
10-449	1/4" x 1/4"	0.75	0.86	0.53	0.07	5.59
10-450	5/16" x 1/8"	0.78	0.64	0.53	0.06	6.35
10-451	5/16" x 1/4"	0.81	0.86	0.53	0.07	5.49
10-452	3/8" x 1/4"	0.91	0.86	0.53	0.09	4.84
10-452B*	3/8" x 1/4"	0.89	0.86	0.64	0.12	8.38
10-453	3/8" x 3/8"	0.93	0.94	0.59	0.11	5.82
10-454	3/8" x 1/2"	0.99	1.17	0.75	0.19	8.38
10-455	1/2" x 3/8"	1.07	0.88	0.59	0.12	6.74
10-455B*	1/2" x 3/8"	1.06	0.94	0.76	0.18	10.29
10-456	1/2" x 1/2"	1.12	1.18	0.75	0.20	9.77
10-460	5/8" x 3/8"	1.13	0.95	0.81	0.22	11.81
10-457	5/8" x 1/2"	1.12	1.17	0.78	0.18	10.65
10-458	3/4" x 1/2"	1.28	1.16	0.88	0.26	16.14
10-459	3/4" x 3/4"	1.41	1.20	0.88	0.31	17.47

* Barstock

BRASS GAS RANGE FITTINGS

BRASS MALE ADAPTERS



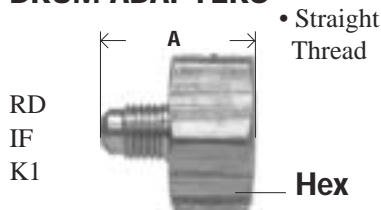
Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
35-132	1/2" x 1/2" (3/8" FIP TAP)	1.88	0.87	0.16	4.62
35-134	15/16" x 1/2"	1.90	0.94	0.14	4.45
35-135	15/16" x 3/4"				5.87

BRASS FEMALE ADAPTERS



Part #	Flare x FIP	A	Hex	Approx. Wt. Lbs.	List Price
35-136	5/16" x 1/2"				7.66
35-142	5/16" x 3/4"				9.54

DRUM ADAPTERS



SAE# 010165

Part #	Male Flare x FIP	A	Hex	Approx. Wt. Lbs.	List Price
50-011	1/4" x 1/2"	1.12	1.12	0.12	10.48
50-001	1/4" x 3/4"	1.16	1.25	0.14	12.82

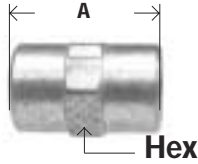


FEMALE 45° FLARE FITTINGS

• Use with Copper Gasket

UNION

SAE# 010107

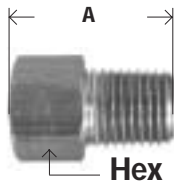


2310
U4
660HD
32

Part #	Female Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-135	1/4"	1.00	0.62	0.06	7.53
10-136	3/8"	1.25	0.81	0.14	9.40
10-137	1/2"	1.43	0.94	0.18	12.35

FEMALE FLARE ADAPTER

SAE# 010106

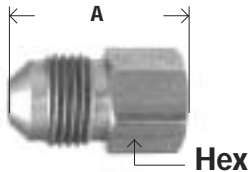


U5
664FHD
33
48-FF

Part #	Female Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-440	1/4" x 1/8"	0.91	0.62	0.05	5.21
10-441	1/4" x 1/4"	1.01	0.62	0.06	4.53
10-442	3/8" x 1/4"	1.28	0.81	0.10	6.33
10-443	1/2" x 3/8"	1.36	0.94	0.14	6.93
10-444	1/2" x 1/2"	1.46	0.94	0.14	11.19

FLARE REDUCER

SAE# 010105

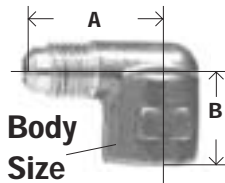


UR3
661FHD
227
46-FF

Part #	Male Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-462	1/4" x 3/8"	1.22	0.81	0.10	4.64
10-461	1/4" x 1/2"	1.36	0.94	0.14	11.27
10-463	3/8" x 1/4"	1.12	0.62	0.06	3.95
10-464	3/8" x 1/2"	1.44	0.94	0.14	4.91
10-473	3/8" x 5/8"	1.63	1.12	0.16	16.30
10-467	1/2" x 3/8"	1.41	0.81	0.13	5.11
10-468	1/2" x 5/8"	1.68	1.06	0.20	9.73
10-469	5/8" x 1/2"	1.63	1.00	0.17	17.05
10-470	5/8" x 3/4"	1.97	1.31	0.31	20.19
10-471	3/4" x 5/8"	1.75	1.18	0.32	21.73

90° ELBOW

• Use with Copper Gasket



E4
669F

Part #	Male Flare x Female Flare	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-500	1/4" x 1/4"	0.97	0.69	0.75	0.56	6.69
10-495	1/2" x 1/2"	1.41	1.12	0.81	0.72	13.39

Dimension data can change without notice.
Please call us when dimensions are critical.

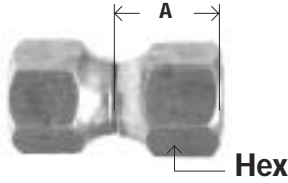


BRASS FLARE SWIVEL FITTINGS

FORGED SWIVEL

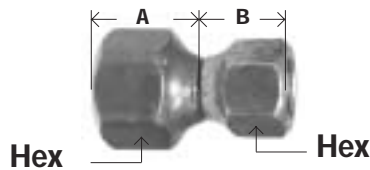
SAE# 010108

1350
US4
14FSV
34



Part #	Female Flare UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-481	1/4"	0.59	0.62	0.04	5.25
10-482	5/16"	0.62	0.68	0.06	8.11
10-483	3/8"	0.69	0.81	0.10	4.50
10-484	1/2"	0.81	0.94	0.16	5.92
10-485	5/8"	0.94	1.06	0.24	7.47
10-486	3/4"	1.12	1.31	0.34	31.79

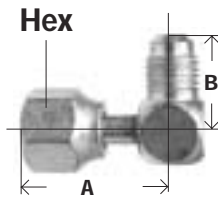
REDUCING SWIVELS



Part #	Female Flare UNF	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
10-487	3/8" x 1/4"	0.72	0.60	0.81	0.62	0.08	14.23
10-488	1/2" x 3/8"	0.84	0.70	0.94	0.81	0.12	14.25
10-489	5/8" x 1/2"	0.98	0.82	1.03	0.94	0.22	17.76

FORGED SWIVEL ELBOWS

ES4



Part #	Male Flare x Female Flare	A	B	Hex	Approx. Wt. Lbs.	List Price
10-493	1/4"	0.81	1.15	0.62	0.12	9.71
10-494	3/8"	1.09	1.00	0.75	0.36	25.87
10-495*	1/2"					13.39

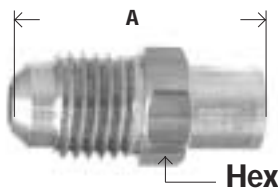
* no swivel

BRASS SOLDER FITTINGS

FLARE TO SWT UNION

SAE# 010104

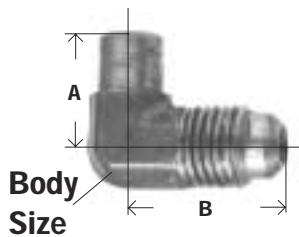
4085 46FS
US3 277
672FS



Part #	Male Flare x SWT	A	Hex	Approx. Wt. Lbs.	List Price
10-602	1/4" x 3/8"	1.00	0.50	0.06	2.56
10-611	1/2" x 5/8"	1.56	0.75	0.12	21.60
10-615	3/4" x 3/4"	2.06	1.06	0.32	16.55

FORGED 90° SOLDER ELBOWS

ES2
SOLE1

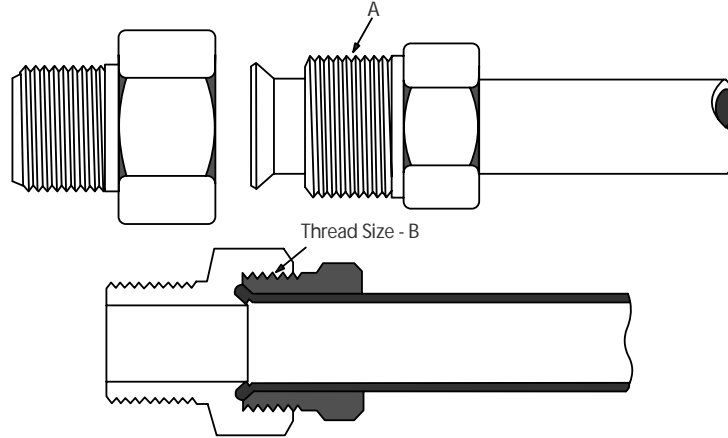


Part #	Male Flare x Solder	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-620	1/4" x 1/4"	0.62	0.81	0.39	0.08	5.39

Dimension data can change without notice.
Please call us when dimensions are critical.



Inverted Flare



Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
Thread Size-B	5/16-28	3/8-24	7/16-24	1/2-20	5/8-18	11/16-18	3/4-18	7/8-18	1-1/16-16	1-3/16-16	1-5/16-16

•Typical Application

Hydraulic brake, power steering, fuel lines and transmission cooler lines, LP and natural gas.

•Working Pressure Ranges

Temperature and type of tubing used are important factors. However, the following table is a good guide for proper selection. Temperature 73°F with copper tubing:

PSI	Tube O.D. (in.)	Tube Wall (in.)
2800	1/8	.030
1900	3/16	.030
1400	1/4	.030
1200	5/16	.032
1000	3/8	.032
750	1/2	.032
650	5/8	.035
550	3/4	.035

•Vibration

Excellent resistance.

•Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures.

•Material

CA360 Brass.

•Used With

Copper, brass, aluminum and steel hydraulic tubing that can be flared.

•Advantages

Very low cost and reusable. Seats and threads are internal and protected. Compact, excellent vibration life. Short nut affords very close tube bends. Steel or brass tube nut.

•Tolerance

+/- .03 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Conformance

Meets specifications and standards of ASA, ASME, SAE and MS (Military Standards).

•Assembly Instructions

- 1-Cut tubing to desired length. Make sure all burrs are removed and the ends are cut square.
- 2- Slide nut on tube. Threaded end "A" of nut must face out.
- 3- Flare end of tube with a 45° flaring tool.
 - a- Measure flare diameter.
 - b- Examine flare for excessive thin out.
 - c- On thin wall, welded or brazed tubing, use double flare to prevent pinch-off and cracked flares.
- 4- Lubricate threads and assemble to fitting body. Nut should be turned hand tight.
- 5- Tighten assembly with wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.

Note: Do not over-torque as it may damage the fitting or split the tubing at the flare.

Actual O.D. of male inverted flare threads

5/16"-28 2800 PSI	3/8"-24 1900 PSI	7/16"-24 1400 PSI	1/2"-20 1200 PSI	5/8"-18 1000 PSI	3/4"-18 750 PSI	7/8"-18 650 PSI	1-1/16"-16 550 PSI
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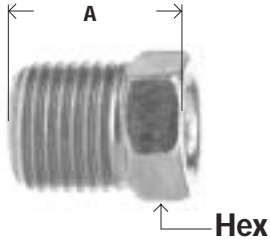
BRASS FITTINGS

INVERTED FLARE

BRASS

ZINC CHROMATE STEEL NUT

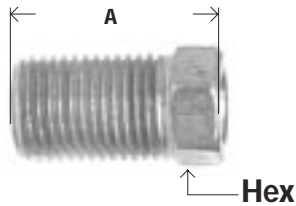
SAE# 040110



2105
411FS
105
41W

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-001	1/8"	0.52	0.31	0.01	0.88
12-002	3/16"	0.56	0.37	0.02	0.37
12-003	1/4"	0.56	0.43	0.02	0.37
12-004	5/16"	0.62	0.50	0.02	0.44
12-005	3/8"	0.66	0.62	0.03	0.74
12-000	7/16"	0.68	0.68	0.04	1.47
12-011	3/8"(11/16-18)	0.66	0.68	0.05	5.22
12-006	1/2"	0.74	0.75	0.08	1.10
12-007	5/8"	0.80	0.87	0.10	2.79
12-008	3/4"	0.88	1.06	0.10	4.85

LONG STEEL NUT

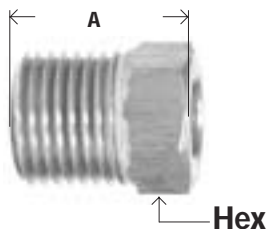


7896

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-009	3/16"	0.84	0.37	0.02	1.03
12-010	1/4"	0.81	0.43	0.02	1.03

INVERTED FLARE BRASS NUT

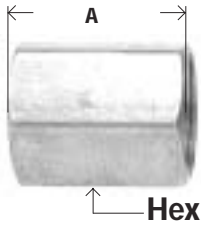
SAE# 040110



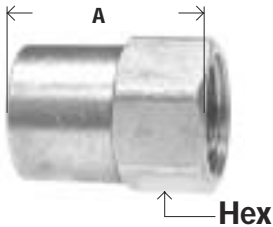
2100
411F
100
411B

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-012	1/8"	0.52	0.31	0.01	1.79
12-013	3/16"	0.56	0.37	0.01	0.72
12-014	1/4"	0.56	0.43	0.02	0.74
12-015	5/16"	0.62	0.50	0.03	0.77
12-016	3/8"	0.66	0.62	0.04	0.94
12-017	1/2"	0.74	0.75	0.05	1.78

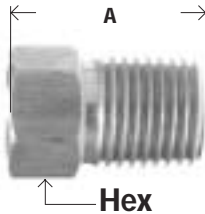


INVERTED FLARE**BRASS FITTINGS****BRASS****UNION INTERNAL****SAE# 040101**2300
42IFHD

Part #	Inv. Flare X Inv. Flare	A	Hex	Approx. Wt. Lbs.	List Price
12-022	1/8"	0.59	0.40	0.02	2.13
12-023	3/16"	0.62	0.47	0.02	0.98
12-024	1/4"	0.62	0.50	0.03	1.57
12-025	5/16"	0.70	0.56	0.04	2.64
12-026	3/8"	0.80	0.75	0.08	2.40
12-027	1/2"	0.91	0.90	0.10	5.37

FEMALE ADAPTER**SAE# 040103**46IFHD
252
46W

Part #	Inv. Flare X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
12-032	3/16" x 1/8"	0.75	0.50	0.02	1.84
12-033	1/4" x 1/8"	0.75	0.53	0.02	2.13
12-034	5/16" x 1/8"	0.78	0.59	0.04	1.93
12-035	3/8" x 1/4"	1.03	0.75	0.08	4.73
12-036	1/2" x 3/8"	1.10	0.90	0.12	8.60

MALE ADAPTER**SAE# 040102**2200
48IFHD
202
48W

Part #	Inv. Flare X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
12-041	1/8" x 1/8"	0.63	0.40	0.02	1.45
12-042	3/16" x 1/8"	0.70	0.43	0.02	1.29
12-043	1/4" x 1/8"	0.74	0.50	0.03	1.16
12-044	1/4" x 1/4"	0.89	0.56	0.04	1.54
12-045	5/16" x 1/8"	0.79	0.56	0.03	1.60
12-046	5/16" x 1/4"	0.98	0.56	0.05	2.32
12-047	3/8" x 1/8"	0.88	0.72	0.05	2.57
12-048	3/8" x 1/4"	1.02	0.75	0.06	2.70
12-049	3/8" x 3/8"	1.02	0.75	0.08	3.12
12-038	1/2" x 1/4"	0.97	0.87	0.10	5.64
12-050	1/2" x 3/8"	1.06	0.87	0.08	3.97
12-051	1/2" x 1/2"	1.06	0.87	0.11	5.51
12-052	5/8" x 1/2"	1.32	1.06	0.15	5.88
12-040	3/4" x 3/4"	1.39	1.25	0.24	11.91

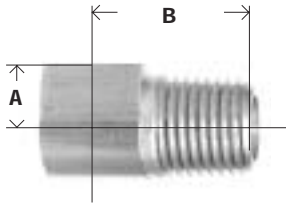
Dimension data can change without notice.
Please call us when dimensions are critical.**MIDLAND
METAL****GOODYEAR**
RUBBER PRODUCTS INC.**Call Toll Free: 1-866-711-4673**

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ELBOW

SAE# 040202



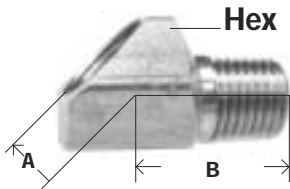
400
2400
249IFHD 249IF
402 49W

Part #	Inv. Flare X Male NPTF	A	B	Approx. Wt. Lbs.	List Price
12-057	1/8" x 1/8"	0.26	0.59	0.03	2.72
12-058	3/16" x 1/8"	0.26	0.61	0.03	1.62
12-059	1/4" x 1/8"	0.33	0.65	0.04	1.76
12-054*	1/4" x 1/8"	0.33	0.65	0.04	3.97
12-060	1/4" x 1/4"	0.28	0.82	0.06	2.35
12-061	5/16" x 1/8"	0.47	0.68	0.05	2.28
12-062	5/16" x 1/4"	0.45	0.85	0.08	3.60
12-063	3/8" x 1/8"	0.54	0.76	0.14	4.41
12-064	3/8" x 1/4"	0.53	0.92	0.14	4.70
12-065	3/8" x 3/8"	0.50	0.94	0.12	6.32
12-066	1/2" x 3/8"	0.59	1.03	0.16	6.39
12-067	1/2" x 1/2"	0.66	1.22	0.25	9.85
12-056	5/8" x 3/8"	0.67	1.09	0.20	10.22
12-068	5/8" x 1/2"	0.67	1.29	0.18	12.27
12-069	3/4" x 1/2"	0.80	1.39	0.42	29.77
12-080	7/8" x 3/4"	0.94	1.43	0.48	38.07
12-081	1" x 1"	1.02	1.69	0.60	46.89

* Restricted pipe end

45° ELBOW

SAE# 040302

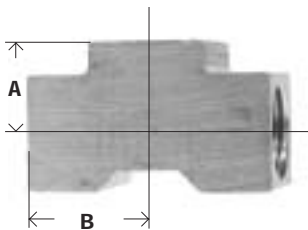


154
2352
259IFHD
352 94W

Part #	Inv. Flare X Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
12-071	1/8" x 1/8"	0.22	0.52	0.50	0.02	5.17
12-072	3/16" x 1/8"	0.25	0.55	0.53	0.02	3.09
12-073	1/4" x 1/8"	0.27	0.58	0.56	0.04	3.16
12-074	5/16" x 1/8"	0.36	0.56	0.62	0.06	3.45
12-075	5/16" x 1/4"	0.23	0.83	0.62	0.06	7.72
12-076	3/8" x 1/4"	0.51	0.84	0.78	0.09	6.10
12-077	1/2" x 3/8"	0.38	0.91	0.84	0.11	8.34
12-079	5/8" x 1/2"	0.44	1.00	1.06	0.21	17.49

UNION TEE

SAE# 040401



244IFHD
702
44I

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
12-085	1/8"	0.33	0.47	0.04	5.59
12-086	3/16"	0.39	0.55	0.04	3.45
12-087	1/4"	0.42	0.56	0.08	3.75
12-088	5/16"	0.45	0.63	0.09	4.41
12-089	3/8"	0.56	0.74	0.17	8.82
12-090	1/2"	0.67	0.88	0.24	13.38



INVERTED FLARE

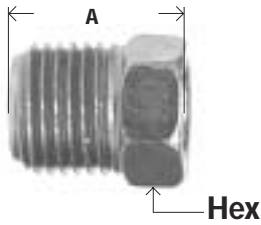
BRASS FITTINGS

BRASS

STEEL PLUG

• cored

SAE# 040109

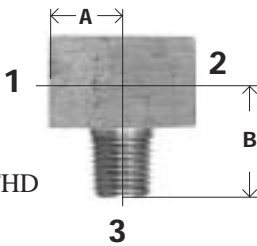


106
41IP
131
2131

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-091	3/16"	0.53	0.37	0.01	0.44
12-092	1/4"	0.54	0.43	0.02	0.74
12-093	5/16"	0.59	0.50	0.03	0.66
12-094	3/8"	0.66	0.62	0.04	1.98

MALE BRANCH TEE

SAE# 040427

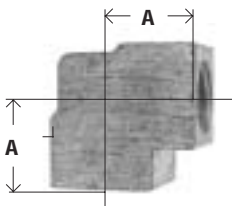


145
245IFHD
602
2600
600

Part #	Inv. Flare x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
12-100	3/16" x 1/8"	0.41	0.60	0.04	4.48
12-101	1/4" x 1/8"	0.42	0.64	0.06	4.04
12-102	5/16" x 1/8"	0.47	0.68	0.07	5.95
12-103	3/8" x 1/4"	0.58	0.93	0.15	8.82

FEMALE ELBOW

SAE# 040203

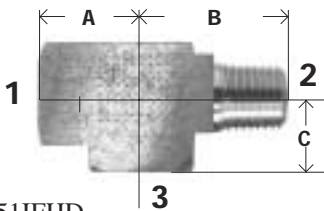


450

Part #	Inv. Flare x Female NPTF	A	Approx. Wt. Lbs.	List Price
12-110	1/4" x 1/8"	0.55	0.07	4.12
12-111	5/16" x 1/8"	0.51	0.08	5.15
12-112	3/8" x 1/4"	0.68	0.10	6.62

MALE RUN TEE

SAE# 040424



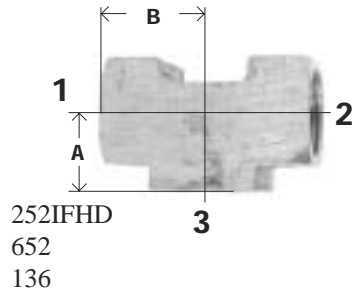
251IFHD
752
550
151

Part #	Inv. Flare x Male NPTF (1&3)x2	A	B	C	Approx. Wt. Lbs.	List Price
12-118	3/16" x 1/8"	0.53	0.72	0.39	0.06	10.72
12-119	1/4" x 1/8"	0.56	0.75	0.42	0.08	6.62
12-120	5/16" x 1/8"	0.62	0.85	0.45	0.10	10.33
12-121	3/8" x 1/4"	0.75	1.08	0.56	0.14	14.14



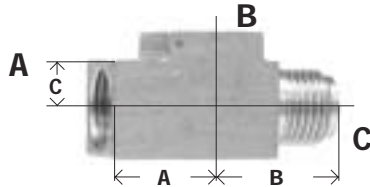
FEMALE BRANCH TEE

SAE# 040427



Part #	Inv. Flare x Female NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
12-127	3/16" x 1/8"	0.39	0.55	0.06	7.56
12-129	5/16" x 1/8"	0.45	0.63	0.12	10.33
12-130	3/8" x 1/4"	0.56	0.74	0.17	11.03

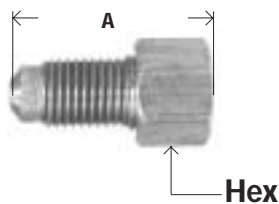
TOWED TRAILER BRAKE TEE



Part #	A	B	C	Reference #	Approx. Wt. Lbs.	List Price
12-144	3/16" (9/16-20) 0.82	3/16" (3/8-24) 0.94	3/16" (9/16-20) 0.47	7905	0.18	8.53
12-145	3/16" (1/2-20) 0.68	3/16" (3/8-24) 0.94	3/16" (1/2-20) 0.47	7906	0.17	8.45
12-146	3/16" (7/16-24) 0.54	3/16" (3/8-24) 0.78	1/4" (7/16-24) 0.42	7914	0.08	6.84
12-147	3/16" 0.57	3/16" 0.76	3/16" 0.42	7900	0.08	6.32
12-149	1/4" (9/16-18) 0.81	3/16" (3/8-24) 0.93	1/4" (9/16-18) 0.50	7904	0.10	8.67
12-150	1/4" 0.56	3/16" 0.77	1/4" 0.43	7901	0.10	6.69
12-151	1/4" 0.56	1/4" 0.77	1/4" 0.43	7898	0.12	9.11

INVERTED FLARE AUTO FITTINGS

DUAL MASTER CYLINDER ADAPTER



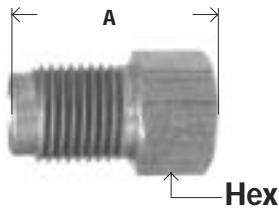
Part #	Male Flare x Female Inv.	A	Hex	Reference #	Approx. Wt. Lbs.	List Price
12-200	3/16" x 3/16"	1.00	0.50	1441	0.03	2.21
12-202	5/16" x 3/16"	0.96	0.68	7897	0.07	3.90

Excessive fear is always powerless.

- Aeschylus



DUAL MASTER CYLINDER ADAPTER

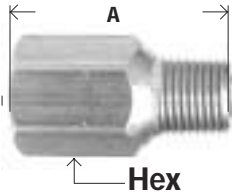


Part #	Male Inv. x Female Inv.	A	Hex	Reference #	Approx. Wt. Lbs.	List Price
12-210	3/16" x 1/4"	0.84	0.56	7828	0.03	2.72
12-212	1/4" x 3/16"	0.84	0.50	7818	0.04	2.94
12-214*	7/16-20 x 1/4"	0.87	0.68	7732	0.06	4.63
12-216	5/16" x 3/16"	0.94	0.50	7909	0.04	2.72
12-218*	5/16" x 1/4"	0.93	0.62	7727	0.06	3.75
12-220	5/16" x 1/4"	0.95	0.68	7829	0.07	3.01
12-222*	5/16" x 5/16"	0.95	0.68	1074	0.06	4.70
12-224	3/8" MPT x 5/16"	0.87	0.75	7771	0.08	6.84

* Seals on hex face

47W

CARBURETOR TO FUEL LINE ADAPTER - FORD

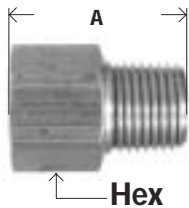


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-230	1/4"(1/2-20) x 1/8"MPT	1.06	0.56	0.04	8.89

1513

RESTRICTION PIPE ADAPTER

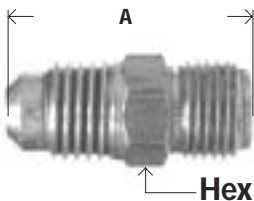
(.0625 ORIFICE)



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-310	1/8"	0.75	0.50	0.02	3.75

1510

SAE FLARE X INVERTED FLARE



Part #	SAE Flare x Inv. Flare	A	Hex	Approx. Wt. Lbs.	List Price
12-250	1/4" x 3/16"	1.03	0.43	0.02	10.00
12-252	1/4" x 1/4"	1.03	0.43	0.03	4.41
12-254	3/8" x 5/16"	1.34	0.63	0.08	13.89
12-256	3/8" x 3/8"	1.37	0.63	0.09	12.20
12-257	3/8" x 7/16"	1.40	0.68	0.10	9.92

4205

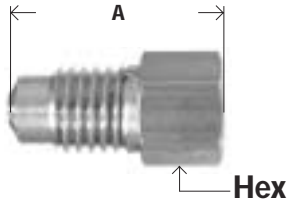
Dimension data can change without notice.
Please call us when dimensions are critical.



METRIC HYDRAULIC BRAKE FITTINGS

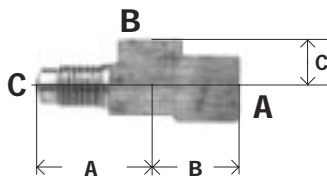
BRASS

METRIC ADAPTER



Part #	Male	O.D.	A	Hex	Approx. Wt. Lbs.	List Price
12-335	M10x1.0	3/16"(3/8-24)	1.02	0.50	0.02	2.06
12-326	M11x1.5	3/16"(M10x1.0)	1.06	0.50	0.02	9.78
12-327	M12x1.0	3/16"(M10x1.0)	1.02	0.53	0.04	9.78
12-328	M16x1.5	3/16"(M10x1.0)	1.02	0.56	0.06	9.78

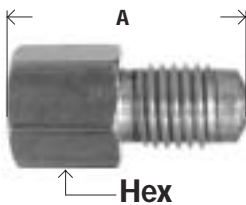
METRIC TOWED TRAILER BRAKE TEE



Part #	A	B	C	Approx. Wt. Lbs.	List Price
12-333	3/16" (M12x1.0) 1.03	3/16" (3/8-24) 0.75	3/16" (M12x1.0) 0.49	0.16	20.80

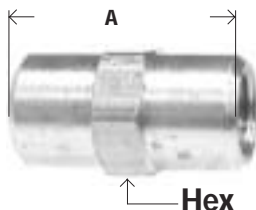
* Bubble flare type

ADAPTER STANDARD TO METRIC BUBBLE



Part #	Female	Male	A	Hex	Reference #	Approx. Wt. Lbs.	List Price
12-337	3/16" (3/8-24)	4.762(3/16") (10x1.25)	1.00	0.50	7970	0.02	8.09
12-339	3/16" (3/8-24)	13x1.5	1.03	0.56	7972	0.04	10.07
12-341	3/16" (3/8-24)	12x1.0	1.02	0.53	7974	0.04	9.85

METRIC UNION



Part #	Size	A	Hex	Reference #	Approx. Wt. Lbs.	List Price
12-343	3/16"(10.0MM)	1.04	0.56	7975	0.04	9.56



SPACE HEATER

BRASS FITTINGS

BRASS SPACE HEATER FITTINGS

FEMALE ADAPTER

NUT

#M-80SH



Part #	Size	Min Pkg. Qty.	List Price
14-001	3/8	25	2.67

CAP

#M-80SH-C



Part #	Size	Min Pkg. Qty.	List Price
14-006	3/8	25	0.99

MALE ADAPTER

#M-83SH



Part #	Size	Min Pkg. Qty.	List Price
14-016	3/8 x 3/8	25	1.21
14-017	3/8 x 1/2	25	2.41



Part #	Size	Min Pkg. Qty.	List Price
14-018	3/8 x 3/8	5	2.84
14-025	3/8 x 1/2	5	3.40

UNION

#M-82SH



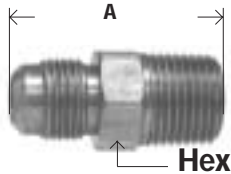
Part #	Size	Min Pkg. Qty.	List Price
14-011	3/8	5	6.25

You can observe a lot by just watching.

- Yogi Berra

BRASS GAS RANGE FITTINGS

BRASS MALE ADAPTERS



Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
35-132	1/2" x 1/2" (3/8" FIP TAP)	1.88	0.87	0.16	4.62
35-134	15/16" x 1/2"	1.90	0.94	0.14	4.45
35-135	15/16" x 3/4"				5.87

BRASS FEMALE ADAPTERS

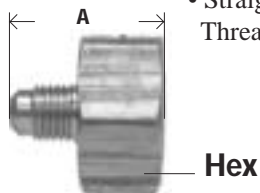


Part #	Flare x FIP	A	Hex	Approx. Wt. Lbs.	List Price
35-136	5/16" x 1/2"				7.66
35-142	5/16 x 3/4"				9.54

DRUM ADAPTERS

SAE# 010165

RD
IF
K1



• Straight Thread

Part #	Male Flare x FIP	A	Hex	Approx. Wt. Lbs.	List Price
50-011	1/4" x 1/2"	1.12	1.12	0.12	12.82
50-001	1/4" x 3/4"	1.16	1.25	0.14	10.48



BRASS FITTINGS

Thread Chart	
Size	JIC Thread
1/8	3/16-24
3/16	3/8-24
1/4	7/16-20
5/16	1/2-20
3/8	9/16-18
1/2	3/4-16
5/8	7/8-14
3/4	1-1/6-12
1	1-5/16-12

STRAIGHT



Part #	JIC Thread	Pipe Size	List Price
28-701	7/16-20	1/8	1.75
28-702	7/16-20	1/4	3.43
28-703	7/16-20	3/8	5.49
28-704	1/2-20	1/8	18.20
28-705	1/2-20	1/4	3.99
28-706	9/16-18	1/8	5.32
28-707	9/16-18	1/4	2.80
28-708	9/16-18	3/8	3.50
28-709	9/16-18	1/2	6.58
28-710	3/4-16	1/4	9.94
28-711	3/4-16	3/8	6.51
28-712	3/4-16	1/2	6.72
28-713	3/4-16	3/4	17.01
28-714	7/8-14	3/8	21.70
28-715	7/8-14	1/2	11.34
28-716	7/8-14	3/4	22.19
28-717	1-1/16-12	3/4	13.30
28-718	1-5/16-12	1	22.28

45° FORGED ELBOW



Part #	JIC Thread	Pipe Size	List Price
28-722F	7/16-20	1/8	5.49
28-724F	7/16-20	1/4	8.06
28-728F	1/2-20	1/4	6.91
28-729F	9/16-18	1/8	22.68
28-731F	9/16-18	1/4	6.19
28-733F	9/16-18	3/8	7.75
28-734F	9/16-18	1/2	10.64
28-736F	3/4-16	3/8	9.32
28-738F	3/4-16	1/2	21.91
28-740F	7/8-14	1/2	13.87
28-742F	1-1/16-12	3/4	34.93

BULKHEAD TUBE UNION



Part #	JIC Thread	List Price
28-797	9/16-18	43.19
28-955	1-1/16-12	45.08

90° FORGED ELBOW



Part #	JIC Thread	Pipe Size	List Price
28-760F	7/16-20	1/8	7.42
28-762F	7/16-20	1/4	10.08
28-766F	1/2-20	1/4	11.13
28-768F	9/16-18	1/8	22.68
28-770F	9/16-18	1/4	10.03
28-772F	9/16-18	3/8	12.32
28-773F	9/16-18	1/2	22.54
28-774F	3/4-16	3/8	16.8
28-777F	3/4-16	1/2	20.58
28-778F	3/4-16	3/4	28.07
28-780F	7/8-14	1/2	20.16
28-781F	1-1/16-12	1/2	45.50
28-783F	1-1/16-12	3/4	35.49
28-784F	1-5/16-12	3/4	43.61
28-786F	1-5/16-12	1	45.99

Rise Early.
Work Late.
Strike Oil.

- Josh Lizotte

JIC 37° FLARE

STRAIGHT



Part #	JIC Thread	Pipe Size	List Price
28-753	9/16-18	1/4	6.37
28-754	9/16-18	3/8	12.81
28-756	3/4-16	1/2	22.19

FEMALE STRAIGHT ADAPTER



Part #	JIC Thread	Pipe Size	List Price
28-957	7/16-20	1/8	5.74
28-958	7/16-20	1/4	10.22
28-959	9/16-18	1/4	11.48
28-960	9/16-18	3/8	11.83
28-961	3/4-16	3/8	7.28
28-962	3/4-16	1/2	17.43
28-963	7/8-14	1/2	18.06
28-964	1-1/16-12	3/4	26.74

STRAIGHT TUBE UNION



Part #	JIC Thread	List Price
28-966	7/16-20	5.32
28-969	9/16-18	9.03
28-970	3/4-16	13.23
28-971	1-1/16-12	18.97
28-972	1-5/16-12	35.14

TUBE TEE



Part #	JIC Thread	List Price
28-981	7/16-20	61.74
28-982	9/16-18	58.10

FEMALE ELBOW (FORGED BODY)



Part #	JIC Thread	Pipe Size	List Price
28-973	7/16-20	1/8	7.56
28-974	7/16-20	1/4	11.83
28-975	9/16-18	1/4	11.83

BRASS



POL (BOTTLE GAS)

**POL BRASS FITTINGS
(BOTTLE GAS)**

Used for making connections in LP gas systems

POL Thread 880 - 14LH

Note: All bottle fittings are UL listed.

TEE CHECK



POL-T1
2000
1000

Part #	Pipe Size	List Price
34-001	M2000	22.86

TAILPIECE WITH FLATS

1001AUL
21605



POL-LPT
POL-LTPH
M-2001-A

Part #	Pipe Size	List Price
34-011	2-9/16 w/ wrench Flats	5.91
34-012	2-9/16 w/ Hex	4.34

STANDARD NUT

7/8" Hex



1001BUL
POL-N
21601
M-2001-B

Part #	Pipe Size	List Price
34-016	.880-14 LH	3.17

TAILPIECE & NUT ASSEMBLY



2002AB

Part #	Pipe Size	List Price
34-022	1/4	8.75

SMILE!

BRASS FITTINGS

POL CAP



POL-N5
2004
1004A
M-2004

Part #	Pipe Size	List Price
34-031	.880-14LH	9.87

POL PLUG



1014A
POL-P2
2014
M-2014

Part #	Pipe Size	List Price
34-036	.880-14LH	13.30

ADAPTERS

POL 2005
POL 2006
POL 2007



21607
POL-U2
1015

Part #	Pipe Size	List Price
34-041	3/8 Flare x .880-14LH	10.10
34-046	1/2 Flare x .880-14LH	9.00
34-051	5/8 Flare x .880-14LH	9.89

POL X 1/4 FPT



2008
POL-U3B

Part #	Pipe Size	List Price
34-056	.880-14LH POL x 1/4 FPT	18.96

TAILPIECE & NUT ASSEMBLY



Part #	Pipe Size	List Price
34-025	POLX 1/4 Barb	10.69

CAP ORIFICE

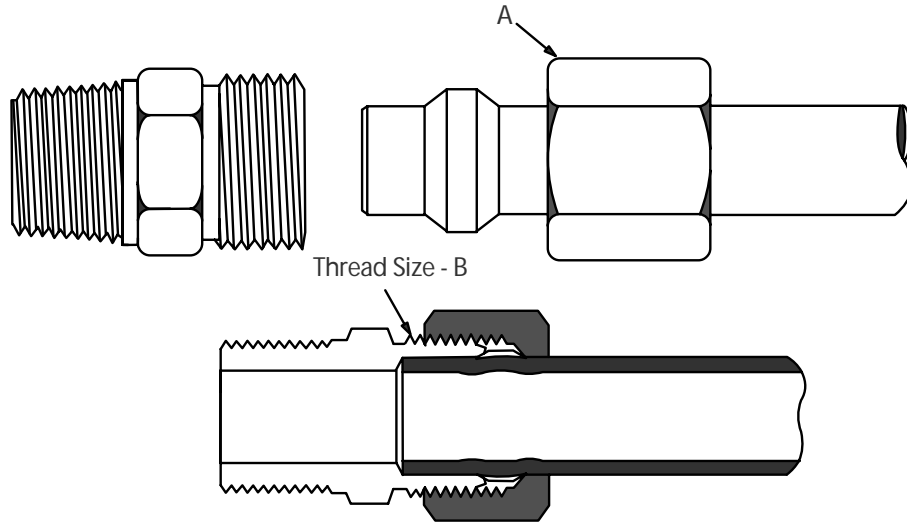


GF6
OH

Part #	Pipe Size	List Price
34-032	72	1.71
34-033	80	2.95



Compression Fittings



Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1
Thread Size-B	5/16-24	3/8-24	7/16-24	1/2-24	9/16-24	5/8-24	11/16-20	13/16-18	1-18	1-1/4-18

•Typical Application

Instrumentation, hydraulic and pneumatic systems.

•Pressure

Working pressure up to 2000 PSI with a 4:1 safety factor depending on tube size. When using plastic tubing, use the working pressure for type used.

•Vibration

Fair resistance - use long nut when greater vibration resistance is needed.

•Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures. (Refer to tubing temperature range.)

•Material

CA360 Brass for barstock fittings.
CA377 Brass for forged fittings.

•Used With

Aluminum, copper, brass and plastic tubing. Plastic tubing requires insert. Not recommended for steel tubing.

•Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

• Conformance

Meets specifications and standards of ASA, ASME and SAE.

•Assembly Instructions

- 1- Cut tubing to desired length.
- 2- Slide nut and then sleeve on tube. Threaded end "A" of nut must face toward fitting.
- 3- Insert tubing into fitting body. Be sure tubing is bottomed on fitting shoulder.
- 4- Lubricate threads and assemble nut to fitting body.
- 5- Tighten nut hand tight. From that point, tighten with a wrench the number of turns indicated in the chart below.

Tube Size	Additional Turns From Hand Tight
1/8" thru 1/4"	1-1/4
5/16"	1-3/4
3/8" thru 1"	2-1/4

Actual Profile of Compression Threads

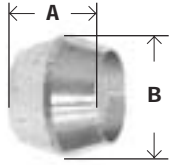
5/16"-24 3/8"-24 7/16"-24 1/2"-24 9/16"-24 11/16"-20 13/16"-18 1"-18 1-1/8"-18
75 PSI

1/8" 3/16" 1/4" 5/16"

BRASS SLEEVE

SAE# 060115

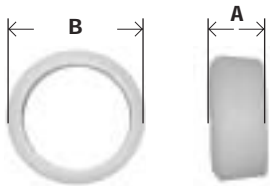
• FERRULES



60
260

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-001	1/8"	0.19	0.19	0.01	0.17
18-002	3/16"	0.22	0.27	0.01	0.11
18-003	1/4"	0.25	0.34	0.01	0.12
18-004	5/16"	0.25	0.41	0.01	0.20
18-005	3/8"	0.25	0.47	0.02	0.14
18-006	7/16"	0.31	0.53	0.02	0.37
18-007	1/2"	0.38	0.59	0.02	0.42
18-008	5/8"	0.38	0.71	0.03	0.36
18-009	3/4"	0.44	0.87	0.03	0.99
18-010	7/8"	0.41	0.99	0.03	0.55

DELTRIN SLEEVE

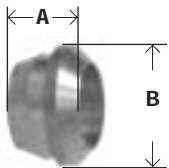


60-P

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-015	1/4"	0.19	0.37	0.01	0.11
18-016	5/16"	0.19	0.43	0.01	0.60
18-017	3/8"	0.19	0.50	0.02	0.18
18-018	1/2"	0.25	0.63	0.02	0.07
18-019	5/8"	0.22	0.74	0.02	0.07
18-020	3/4"	0.25	0.93	0.03	2.00

SELF-ALIGN SLEEVE

601



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
27-001	1/8"	0.19	0.25	0.01	0.10
27-002	3/16"	0.20	0.31	0.01	0.15
27-003	1/4"	0.21	0.37	0.02	0.37
27-005	3/8"	0.23	0.50	0.03	0.59
27-006	1/2"	0.35	0.62	0.03	1.31

* Note: To buy compression fittings with self-align sleeve, simply delete the 18- prefix on the same size compression fitting and substitute 27- prefix. Pricing available upon request.

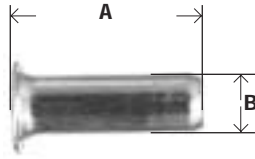
I love deadlines. I especially like the whooshing sound they make as they go flying by.

- Douglas Adams



BRASS INSERT

• SLEEVE

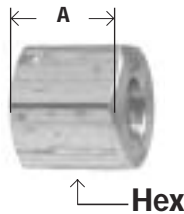


63-BI
60AE
2030
63PT

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
22-008	1/8"	0.46	0.080	0.01	0.33
22-009	3/16"	0.45	0.135	0.01	0.39
22-009A	3/16"	0.52	0.095	0.01	0.31
22-010	1/4"	0.50	0.163	0.02	0.24
22-010A	1/4"	0.59	0.125	0.02	0.59
22-010B	1/4"	0.53	0.172	0.02	0.96
22-011A	5/16"	0.50	0.232	0.02	1.32
22-011	5/16"	0.53	0.187	0.02	0.40
22-012	3/8"	0.56	0.250	0.03	0.33
22-013	1/2"	0.72	0.372	0.03	0.47
22-014	5/8"	0.72	0.483	0.03	1.11
22-015	3/4"	1.03	0.563	0.03	2.14

BRASS NUT

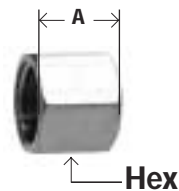
SAE# 060110



61
261

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-033	1/8"	0.38	0.37	0.01	0.48
18-034	3/16"	0.41	0.43	0.01	0.34
18-035	1/4"	0.44	0.50	0.02	0.40
18-036	5/16"	0.44	0.56	0.02	0.42
18-037	3/8"	0.47	0.62	0.04	0.51
18-038	7/16"	0.50	0.68	0.04	1.77
18-039	1/2"	0.62	0.81	0.04	1.47
18-040	5/8"	0.62	0.94	0.06	1.85
18-041	3/4"	0.68	1.12	0.08	3.10
18-042	7/8"	0.62	1.25	0.10	3.52

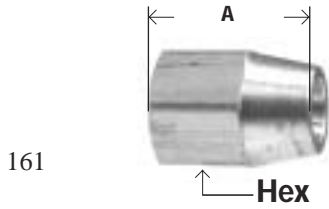
CHROME PLATED NUT



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-054	1/4"	0.44	0.50	0.02	0.31
18-055	3/8"	0.45	0.62	0.02	0.28
18-056	1/2"	0.56	0.75	0.04	0.59
18-057	5/8"	0.56	0.94	0.04	0.62



LONG NUT COMPRESSION



161

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
24-003	1/4"	0.75	0.50	0.02	1.16
24-004	5/16"	0.84	0.56	0.02	0.90
24-005	3/8"	0.97	0.62	0.04	1.39
24-006	1/2"	1.06	0.81	0.06	3.09

* Note: To buy compression fittings with long nut, simply delete the 18- prefix on the same size compression fitting and substitute a 24- prefix. Pricing available upon request.

CAPTIVE SLEEVE NUT

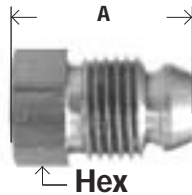


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
26-001	1/8"	0.38	0.37	0.02	2.13
26-002	3/16"	0.40	0.43	0.02	1.68
26-003	1/4"	0.40	0.50	0.04	0.66
26-004	5/16"	0.44	0.56	0.04	2.18
26-005	3/8"	0.46	0.62	0.06	1.24
26-007	1/2"	0.50	0.75	0.08	1.47
26-008	5/8"	0.51	0.87	0.10	2.00

* Note: To buy compression fittings with captive sleeve, simply delete the 18- prefix on the same size compression fitting and substitute a 26- prefix. Pricing available upon request.

BREAK-AWAY NUT

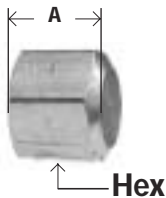
181-BA
21604
99LB
81LB



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
16-010	1/4"	0.62	0.43	0.02	1.16
16-090	3/16"	0.57	0.37	0.02	3.75

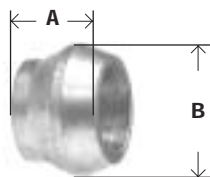
CAP

61-CC
N5CT



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-047	1/4"	0.44	0.50	0.02	0.58
18-048	3/8"	0.40	0.62	0.04	0.77
18-049	1/2"	0.48	0.75	0.06	1.93
18-050	5/8"	0.56	0.94	0.10	1.67

COMPRESSION PLUG



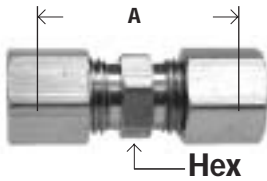
CSP

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-029	3/8"	0.31	0.47	0.04	0.45
18-030	1/2"	0.34	0.59	0.06	1.30



UNION

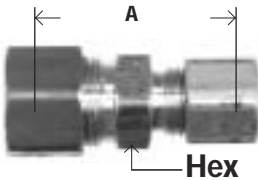
SAE# 060101BA



M-62

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-062	1/8"	0.64	0.31	0.03	1.83
18-063	3/16"	0.75	0.37	0.04	1.58
18-064	1/4"	0.81	0.43	0.06	1.63
18-065	5/16"	0.88	0.50	0.06	1.73
18-066	3/8"	0.98	0.56	0.10	2.21
18-067	7/16"	1.02	0.62	0.12	11.59
18-068	1/2"	1.09	0.68	0.16	5.15
18-069	5/8"	1.25	0.81	0.26	6.25
18-070	3/4"	1.41	1.00	0.35	12.50
18-071	7/8"	1.00	1.12	0.36	10.03

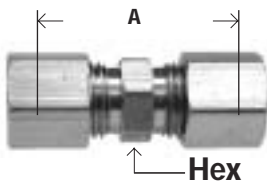
REDUCING UNION



62-R

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-076	1/4" x 1/8"	0.73	0.44	0.04	2.90
18-077	1/4" x 3/16"	0.78	0.44	0.06	4.60
18-078	5/16" x 1/4"	0.81	0.50	0.06	2.77
18-079	3/8" x 1/4"	0.90	0.56	0.10	3.05
18-080	3/8" x 5/16"	0.94	0.56	0.10	5.37
18-081	1/2" x 3/8"	1.03	0.68	0.12	4.36
18-082	5/8" x 3/8"	1.03	0.81	0.15	3.72
18-083	5/8" x 1/2"	1.10	0.81	0.15	6.35
18-084	7/8" x 5/8"	1.23	1.18	0.20	19.64

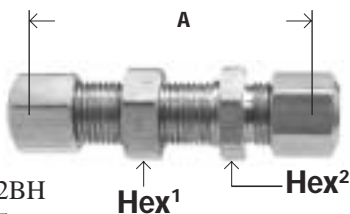
DRILLED THRU COMP. UNION



Part #	Size	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
18-066D	3/8"					5.81
18-069D	5/8"					8.13
18-071D	7/8"					10.52

BULKHEAD UNIONS

SAE# 060101



62BH
75
274

Part #	Size	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
18-088	1/4"	1.58	0.56	0.56	0.10	6.24
18-090	3/8"	1.76	0.68	0.68	0.14	15.51

To have courage for whatever comes in life-everything lies in that.

- Mother Teresa

Dimension data can change without notice.
Please call us when dimensions are critical.



COMPRESSION

BRASS FITTINGS

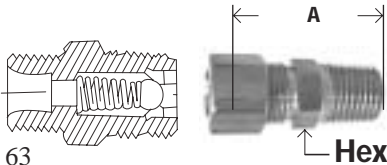
BULKHEAD NUTS



20102

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-097	1/4"	0.25	0.56	0.02	2.06
18-099	3/8"	0.25	0.68	0.04	2.73
18-100	1/2"	0.38	0.94	0.06	3.82

BALL CHECK VALVE - Min. Working pressure 3 psi.

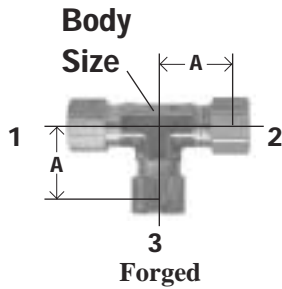


63
263
63A

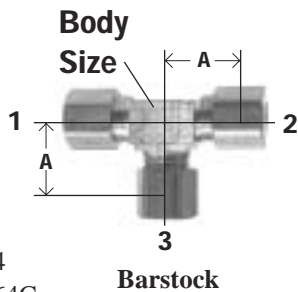
Part #	Tube OD x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-092	1/8" x 1/8"	0.78	0.44	0.04	8.69
18-094	1/4" x 1/8"	0.88	0.44	0.04	6.35
18-096	3/8" x 1/4"	1.16	0.56	0.08	7.75

TEE

SAE# 060401



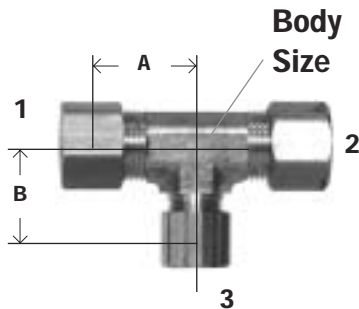
64
264C



Part #	Size	A	Body Size	Approx. Wt. Lbs.	List Price
18-101	1/8"	0.61	0.37	0.04	8.63
18-101B*	1/8"	0.62	0.33	0.04	4.34
18-102	3/16"	0.59	0.36	0.08	4.60
18-102B*	3/16"	0.60	0.38	0.08	5.81
18-103	1/4"	0.63	0.36	0.10	3.72
18-103B*	1/4"	0.62	0.49	0.10	4.04
18-104	5/16"	0.72	0.50	0.13	5.67
18-104B*	5/16"	0.60	0.50	0.14	7.72
18-105	3/8"	0.75	0.50	0.16	4.83
18-105B*	3/8"	0.73	0.59	0.16	3.75
18-106	1/2"	0.94	0.59	0.22	9.03
18-106B*	1/2"	0.94	0.69	0.24	10.22
18-107	5/8"	1.06	0.69	0.28	11.54
18-108	3/4"	1.22	0.88	0.32	29.77
18-109	7/8"	1.25	0.94	0.34	26.15

* Barstock

FORGED REDUCING TEE



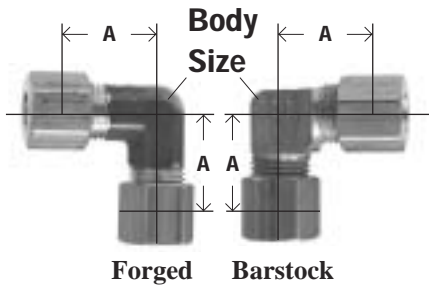
64-R

Part #	Size	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-114	1/4" x 1/4" x 1/8"	0.62	0.59	0.38	0.09	7.06
18-110	1/4" x 1/4" x 3/8"	0.69	0.75	0.50	0.14	7.18
18-111	3/8" x 1/4" x 1/4"	0.75	0.69	0.50	0.12	8.60
18-115	3/8" x 3/8" x 1/4"	0.75	0.69	0.50	0.14	4.88
18-116	1/2" x 1/2" x 1/4"	0.94	0.81	0.59	0.16	11.66
18-117	1/2" x 1/2" x 3/8"	0.94	0.81	0.59	0.24	12.29
18-118	5/8" x 5/8" x 3/8"	1.06	0.94	0.69	0.28	16.07
18-119	5/8" x 5/8" x 1/2"	1.06	1.06	0.69	0.30	16.68



UNION ELBOW

SAE# 060201

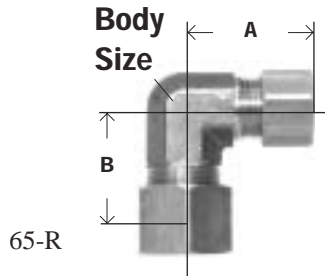


65
BSE2
165C
265C

Part #	Size	A	Body Size	Approx. Wt. Lbs.	List Price
18-122B*	1/8"	0.62	0.35	0.04	3.60
18-123	3/16"	0.61	0.37	0.06	4.66
18-123B*	3/16"	0.62	0.41	0.06	3.90
18-124	1/4"	0.66	0.38	0.08	2.94
18-124B*	1/4"	0.60	0.48	0.08	3.31
18-125	5/16"	0.69	0.47	0.09	4.47
18-125B*	5/16"	0.62	0.52	0.09	4.48
18-126	3/8"	0.72	0.43	0.12	3.05
18-127	1/2"	0.94	0.59	0.19	6.46
18-127B*	1/2"	0.94	0.71	0.19	7.35
18-128	5/8"	1.06	0.72	0.26	7.88
18-129	3/4"	1.19	0.94	0.48	21.42
18-130	7/8"	1.25	0.94	0.44	20.11

* Barstock

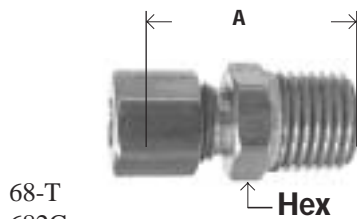
REDUCING ELBOW - Forged



65-R

Part #	Size	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-135	3/8" x 1/4"	0.69	0.75	0.47	0.12	6.11
18-136	1/2" x 3/8"	0.88	0.94	0.59	0.15	10.22
18-137	5/8" x 3/8"	0.88	0.97	0.56	0.18	8.21

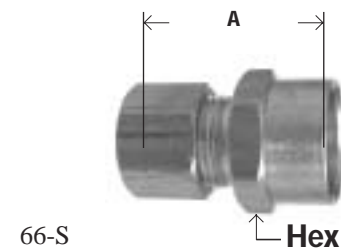
TANK ADAPTER DRILLED THRU (NO STOP)



68-T
682C
80F

Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-208	1/4" x 1/8"	0.88	0.43	0.04	1.70
18-209	1/4" x 1/4"	0.99	0.56	0.05	1.76
18-210	3/8" x 1/4"	1.16	0.56	0.05	2.79
18-211	3/8" x 3/8"	1.09	0.68	0.08	2.90
18-212	3/8" x 1/2"	1.19	0.87	0.10	2.77
18-213	1/2" x 3/8"	1.22	0.68	0.12	4.70
18-214	1/2" x 1/2"	1.09	0.81	0.14	5.37
18-215	5/8" x 1/2"	1.12	0.81	0.18	4.78

COMP X SWEAT ADAPTER



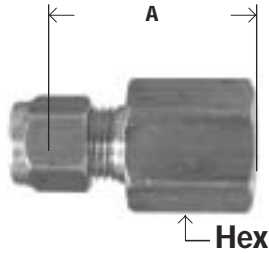
66-S

Part #	Comp. X Sweat Adapter	A	Hex	Approx. Wt. Lbs.	List Price
18-171	3/8" x 1/2" nom.swt.	0.98	0.75	0.08	2.00



FEMALE ADAPTER

SAE# 060103



66

Part #	Comp. X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-142	1/8" x 1/8"	0.75	0.56	0.02	2.50
18-143	3/16" x 1/8"	0.78	0.56	0.04	1.13
18-144	3/16" x 1/4"	0.96	0.68	0.04	7.86
18-145	1/4" x 1/8"	0.78	0.56	0.05	1.73
18-146	1/4" x 1/4"	1.03	0.68	0.09	3.47
18-147	1/4" x 3/8"	1.00	0.81	0.10	2.14
18-148	1/4" x 1/2"	1.02	0.87	0.12	3.05
18-149	5/16" x 1/8"	0.81	0.56	0.05	5.04
18-150	5/16" x 1/4"	0.91	0.62	0.06	2.96
18-152	3/8" x 1/8"	0.88	0.56	0.06	2.02
18-153	3/8" x 1/4"	1.06	0.68	0.08	2.47
18-154	3/8" x 3/8"	1.06	0.81	0.10	4.20
18-155	3/8" x 1/2"	1.12	1.00	0.08	2.52
18-156	3/8" x 3/4"	1.19	1.16	0.14	11.66
18-157	1/2" x 1/4"	1.09	0.68	0.10	4.47
18-158	1/2" x 3/8"	1.12	0.81	0.12	4.28
18-159	1/2" x 1/2"	1.31	1.00	0.12	5.57
18-160	1/2" x 3/4"	1.25	1.16	0.18	14.92
18-161	5/8" x 3/8"	1.03	0.81	0.12	7.56
18-162	5/8" x 1/2"	1.38	1.00	0.18	6.77
18-163	5/8" x 3/4"	1.20	1.12	0.22	7.30
18-164	3/4" x 1/2"	1.25	1.06	0.26	17.79
18-165	3/4" x 3/4"	1.28	1.19	0.28	21.76
18-167	7/8" x 1/2"	1.28	1.19	0.32	15.69
18-166	7/8" x 3/4"	1.31	1.12	0.34	7.10

It takes less than a minute. Work this out as you read.

1. First of all, pick the number of times a week that you would like to PLAY GOLF.(more than 1 less than 10)
2. Multiply this number by 2 (Just to be bold)...
3. Add 5. (for Sunday)...
4. Multiply it by 50 I'll wait while you get the calculator..
5. If you have already had your birthday this year add 1755...If you haven't, add 1754..
6. Now subtract the four digit year that you were born...

You should have a three digit number.

The first digit of this was your original number (Ie., how many times you want to PLAY GOLF each week).

The next two numbers are...

YOUR AGE!!! (OH YES, IT IS!!!)

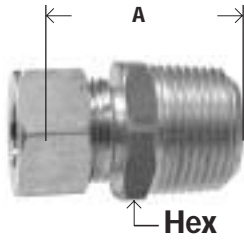
Dimension data can change without notice.

Please call us when dimensions are critical.



MALE ADAPTER

SAE# 060102



68

Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-175	1/8" x 1/16"	0.78	0.37	0.02	5.51
18-176	1/8" x 1/8"	0.78	0.43	0.04	1.64
18-177	3/16" x 1/8"	0.84	0.43	0.04	1.20
18-178	3/16" x 1/4"	0.94	0.56	0.06	1.58
18-179	1/4" x 1/8"	0.88	0.43	0.04	1.16
18-180	1/4" x 1/4"	1.06	0.56	0.06	1.63
18-181	1/4" x 3/8"	1.03	0.68	0.08	1.94
18-182	1/4" x 1/2"	1.09	0.81	0.10	2.50
18-183	5/16" x 1/8"	0.91	0.50	0.05	1.58
18-184	5/16" x 1/4"	1.09	0.56	0.06	1.73
18-185	5/16" x 3/8"	1.06	0.68	0.07	3.15
18-186	5/16" x 1/2"	1.14	0.87	0.10	3.09
18-187	3/8" x 1/8"	0.97	0.56	0.06	2.33
18-188	3/8" x 1/4"	1.16	0.56	0.07	1.58
18-189	3/8" x 3/8"	1.14	0.69	0.08	2.47
18-190	3/8" x 1/2"	1.34	0.87	0.13	3.66
18-191	3/8" x 3/4"	1.29	1.06	0.16	6.68
18-192	7/16" x 1/4"	1.06	0.62	0.10	7.72
18-204	7/16" x 3/8"	1.10	0.68	0.12	5.51
18-193	1/2" x 1/4"	1.22	0.68	0.11	4.86
18-194	1/2" x 3/8"	1.16	0.69	0.12	3.36
18-195	1/2" x 1/2"	1.41	0.87	0.19	4.41
18-196	1/2" x 3/4"	1.38	1.06	0.22	5.61
18-197	5/8" x 3/8"	1.22	0.81	0.24	4.91
18-198	5/8" x 1/2"	1.12	0.81	0.24	3.26
18-199	5/8" x 3/4"	1.31	1.06	0.26	4.66
18-200	3/4" x 1/2"	1.44	1.00	0.26	8.57
18-201	3/4" x 3/4"	1.50	1.06	0.26	8.76
18-202	7/8" x 1/2"	1.18	1.12	0.26	8.56
18-203	7/8" x 3/4"	1.22	1.12	0.28	6.38
18-205	7/8" x 1"	1.67	1.37	0.32	18.08

BRASS

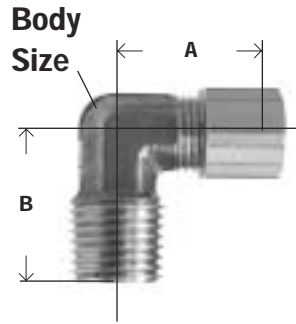
The truth that makes men free is for the most part the truth which men prefer not to hear.

- Herbert Agar

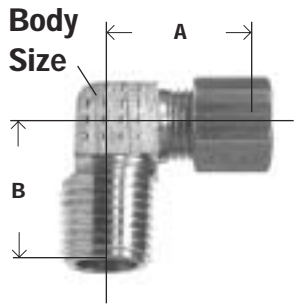


MALE ELBOW

SAE# 060202



Forged



Barstock

69
269C
BSE1
169C

Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-220	1/8" x 1/8"	0.59	0.75	0.34	0.02	3.97
18-220B*	1/8" x 1/8"	0.60	0.67	0.43	0.04	2.21
18-221	3/16" x 1/8"	0.63	0.72	0.34	0.04	3.47
18-221B*	3/16" x 1/8"	0.62	0.69	0.43	0.06	1.98
18-223	3/16" x 1/4"	0.60	0.81	0.39	0.05	3.91
18-224	1/4" x 1/8"	0.60	0.75	0.37	0.06	2.78
18-224B*	1/4" x 1/8"	0.62	0.75	0.43	0.06	2.21
18-225	1/4" x 1/4"	0.65	0.94	0.36	0.08	3.00
18-225B*	1/4" x 1/4"	0.61	0.81	0.56	0.08	2.33
18-226	1/4" x 3/8"	0.75	0.91	0.47	0.08	3.36
18-227	1/4" x 1/2"	0.81	1.13	0.56	0.12	6.36
18-228	5/16" x 1/8"	0.66	0.75	0.47	0.06	3.91
18-228B*	5/16" x 1/8"	0.62	0.75	0.42	0.06	2.43
18-229	5/16" x 1/4"	0.66	0.81	0.47	0.07	3.84
18-229B*	5/16" x 1/4"	0.69	0.84	0.57	0.08	2.72
18-230	5/16" x 3/8"	0.75	0.91	0.47	0.10	3.83
18-231	5/16" x 1/2"	0.84	1.12	0.56	0.12	8.75
18-232	3/8" x 1/8"	0.72	0.66	0.39	0.06	2.84
18-232B*	3/8" x 1/8"	0.69	0.69	0.57	0.06	3.36
18-233	3/8" x 1/4"	0.75	0.82	0.46	0.08	3.11
18-233B*	3/8" x 1/4"	0.75	0.94	0.57	0.08	3.23
18-234	3/8" x 3/8"	0.81	0.94	0.46	0.10	3.15
18-234B*	3/8" x 3/8"	0.71	0.83	0.69	0.10	4.59
18-235	3/8" x 1/2"	0.87	1.12	0.56	0.14	4.10
18-235B*	3/8" x 1/2"	0.88	1.16	0.94	0.14	10.07
18-248	3/8" x 3/4"	1.03	1.19	0.81	0.18	9.26
18-247	7/16" x 1/4"	0.84	1.00	0.56	0.14	8.23
18-236	1/2" x 1/4"	0.88	0.97	0.56	0.14	4.57
18-237	1/2" x 3/8"	0.88	1.03	0.56	0.19	4.94
18-237B*	1/2" x 3/8"	0.94	1.12	0.70	0.19	5.95
18-238	1/2" x 1/2"	0.94	1.13	0.59	0.17	5.46
18-238B*	1/2" x 1/2"	0.94	1.31	0.86	0.17	7.86
18-239	1/2" x 3/4"	1.16	1.25	0.81	0.18	12.57
18-240	5/8" x 3/8"	1.06	1.12	0.68	0.18	7.56
18-241	5/8" x 1/2"	1.06	1.16	0.68	0.20	7.51
18-241B*	5/8" x 1/2"	1.06	1.31	0.86	0.20	8.45
18-242	5/8" x 3/4"	1.16	1.31	0.81	0.24	12.85
18-243	3/4" x 1/2"	1.19	1.31	0.94	0.26	13.36
18-245	3/4" x 3/4"	1.19	1.38	0.94	0.30	16.19
18-246	7/8" x 3/4"	1.25	1.38	0.94	0.35	22.05

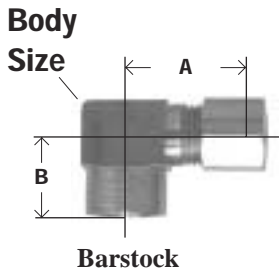
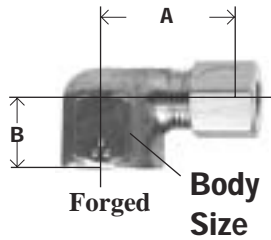
* Barstock

Dimension data can change without notice.
Please call us when dimensions are critical.



FEMALE ELBOW

SAE# 060203

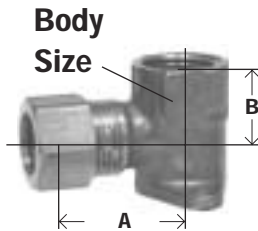


70
270C
BSE3
170C

Part #	Comp. X Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-251	1/8" x 1/8"	0.69	0.56	0.56	0.04	4.78
18-252	3/16" x 1/8"	0.69	0.47	0.56	0.04	4.70
18-253	1/4" x 1/8"	0.69	0.47	0.56	0.06	4.10
18-253B*	1/4" x 1/8"	0.69	0.56	0.56	0.06	3.23
18-254	1/4" x 1/4"	0.75	0.50	0.72	0.08	4.47
18-267	1/4" x 3/8"	0.81	0.58	0.81	0.08	6.69
18-268	1/4" x 1/2"	0.89	0.66	1.00	0.10	7.69
18-255	5/16" x 1/8"	0.72	0.84	0.47	0.08	5.44
18-256	5/16" x 1/4"	0.78	0.50	0.72	0.09	6.25
18-257	3/8" x 1/8"	0.75	0.84	0.47	0.10	5.00
18-258	3/8" x 1/4"	0.84	0.59	0.75	0.10	3.78
18-259	3/8" x 3/8"	0.88	0.58	0.81	0.12	5.42
18-260	3/8" x 1/2"	0.97	0.66	1.00	0.14	5.55
18-250	3/8" x 3/4"	1.09	0.72	1.25	0.18	9.95
18-261	1/2" x 1/4"	1.06	0.70	0.88	0.18	10.73
18-262	1/2" x 3/8"	1.00	0.70	0.88	0.16	7.62
18-263	1/2" x 1/2"	1.03	0.72	1.00	0.20	7.88
18-270	1/2" x 3/4"	1.16	0.72	1.25	0.23	13.01
18-269	5/8" x 3/8"	1.09	0.77	1.00	0.20	14.19
18-264	5/8" x 1/2"	1.09	0.77	1.00	0.22	9.45
18-265	5/8" x 3/4"	1.22	0.77	1.25	0.24	12.29
18-266	3/4" x 1/2"	1.25	1.25	0.94	0.28	22.93

* Barstock

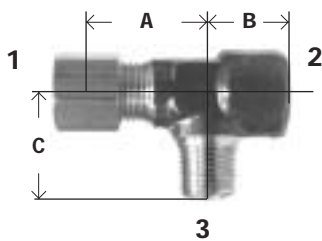
FORGED DROP-EAR ELBOW



BSE3-DE

Part #	Comp. X Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-271	5/8" x 1/2"	1.18	0.72	1.00	0.18	20.51

FORGED TEE

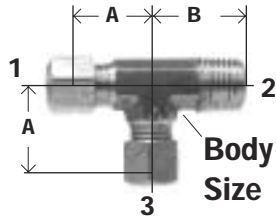


71
171C
BST3

Part #	Comp. X Female NPTF x Male NPTF 1x(2&3)	A	B	C	Approx. Wt. Lbs.	List Price
18-307	1/4" x 1/8"	0.72	0.53	0.72	0.20	6.69



FORGED MALE RUN TEE

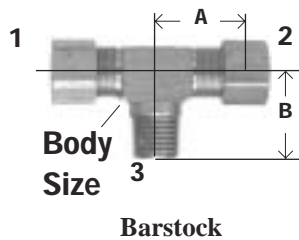
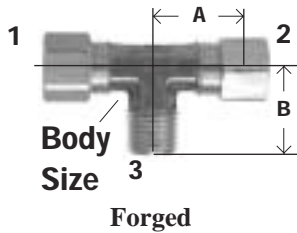


71
171C
BST3

Part #	Comp. X Male NPTF (1&3) X 2	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-272	1/8" x 1/8"	0.63	0.69	0.36	0.06	5.73
18-273	3/16" x 1/8"	0.63	0.69	0.36	0.07	5.29
18-274	1/4" x 1/8"	0.63	0.75	0.36	0.08	3.01
18-275	1/4" x 1/4"	0.69	0.88	0.44	0.10	4.79
18-276	5/16" x 1/8"	0.72	0.75	0.50	0.10	7.72
18-277	5/16" x 1/4"	0.75	0.88	0.44	0.10	7.50
18-278	3/8" x 1/8"	0.75	0.75	0.50	0.14	7.86
18-279	3/8" x 1/4"	0.79	0.87	0.44	0.18	5.86
18-280	3/8" x 3/8"	0.88	1.00	0.47	0.20	8.75
18-281	1/2" x 3/8"	0.94	1.09	0.59	0.24	12.57
18-282	1/2" x 1/2"	0.97	1.19	0.69	0.26	16.54
18-283	5/8" x 1/2"	1.06	1.31	0.69	0.28	18.45
18-284	3/4" x 1/2"	1.22	1.34	0.88	0.30	37.12

MALE BRANCH TEE

SAE# 060203



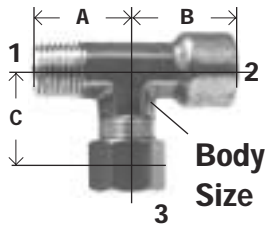
72
BST1
172C

Part #	Comp. X Male NPTF (1&2) X 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-290	3/16" x 1/8"	0.63	0.69	0.36	0.08	5.22
18-291	1/4" x 1/8"	0.62	0.75	0.36	0.10	4.13
18-291B*	1/4" x 1/8"	0.64	0.73	0.45	0.10	5.51
18-292	1/4" x 1/4"	0.69	0.86	0.44	0.10	4.85
18-293	5/16" x 1/8"	0.72	0.75	0.50	0.11	6.03
18-294	5/16" x 1/4"	0.75	0.88	0.44	0.12	5.80
18-295	3/8" x 1/8"	0.75	0.75	0.50	0.14	7.86
18-296	3/8" x 1/4"	0.78	0.88	0.44	0.16	5.67
18-296B*	3/8" x 1/4"	0.78	0.91	0.62	0.16	6.69
18-297	3/8" x 3/8"	0.78	0.97	0.47	0.18	6.93
18-298	3/8" x 1/2"	0.88	1.22	0.69	0.20	14.33
18-304	1/2" x 1/4"	0.94	0.97	0.59	0.22	12.86
18-299B*	1/2" x 3/8"	0.96	1.09	0.70	0.24	14.55
18-299	1/2" x 3/8"	0.94	1.12	0.59	0.24	10.52
18-300	1/2" x 1/2"	0.97	1.19	0.69	0.30	13.42
18-301	5/8" x 1/2"	1.06	1.31	0.69	0.32	15.69
18-302	3/4" x 1/2"	1.22	1.34	0.88	0.50	32.49
18-303	3/4" x 3/4"	1.25	1.50	0.88	0.54	33.30

* Barstock

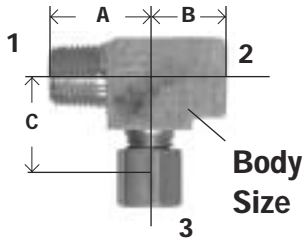


ADAPTER TEE



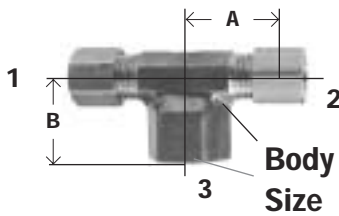
Part #	Male NPTF x Female NPTF x Comp. 3x (1&2)	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
18-312*	1/8" x 1/8"	0.62	0.47	0.62	0.50	0.06	11.76
18-314	1/8" x 1/4"	0.72	0.53	0.72	0.47	0.08	6.10
18-316	3/8" x 1/4"	0.84	0.97	0.81	0.47	0.10	8.82

* Barstock



76
176C

FORGED TEE

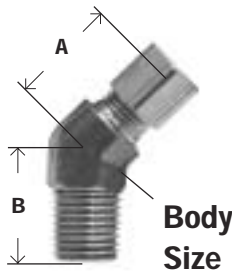


Part #	Comp. X Female NPTF (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-321	1/4" x 1/8"	0.78	0.75	0.45	0.10	6.17
18-328	1/4" x 1/4"	0.78	0.75	0.44	0.12	8.53
18-325	3/8" x 1/8"	0.75	0.63	0.50	0.12	6.68
18-322	3/8" x 1/4"	0.81	0.97	0.47	0.14	8.32
18-323	3/8" x 3/8"	0.97	0.69	1.05	0.16	13.52
18-326	1/2" x 1/8"	0.94	0.75	0.59	0.20	13.67
18-324	1/2" x 3/8"	1.00	0.72	0.88	0.22	16.10
18-327	5/8" x 1/8"	1.06	0.81	0.69	0.26	18.38

78 2908
BST4
77
177C

45° ELBOW

SAE# 060302



Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-329	3/16" x 1/8"	0.40	0.63	0.41	0.04	4.85
18-330	1/4" x 1/8"	0.40	0.61	0.41	0.04	4.56
18-336	1/4" x 1/4"	0.59	0.84	0.53	0.06	6.54
18-331	5/16" x 1/8"	0.59	0.65	0.53	0.06	7.72
18-332	5/16" x 1/4"	0.59	0.83	0.53	0.08	8.16
18-333	3/8" x 1/4"	0.62	0.83	0.53	0.08	5.44
18-338	3/8" x 3/8"	0.75	0.95	0.59	0.10	11.03
18-334	1/2" x 3/8"	0.75	0.88	0.59	0.14	7.50
18-339	1/2" x 1/2"	0.94	1.14	0.75	0.14	15.29
18-335	5/8" x 1/2"	0.78	1.14	0.78	0.14	15.80

6945 273
45BSE1 77
74
179C



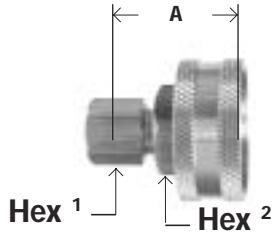
DOUBLE COMPRESSION

BRASS FITTINGS

BRASS

GARDEN HOSE SWIVEL

•WASHER INCLUDED



Part #	Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
30-050	1/4" x 3/4"	1.02	0.50	0.75	0.09	4.60
30-051	3/8" x 3/4"	1.04	0.62	0.75	0.12	5.14

DOUBLE COMPRESSION THREADED SLEEVE FITTINGS

- Use with aluminum and copper tubing or plastic tubing with internal tube support. Not recommended for steel tubing.
- Easy to assemble, no flaring, two piece construction.
- For use on oil, air, water and grease lubrication systems.
- When design makes a dimension critical, contact us for information

Tube OD	1/8	3/16	1/4	5/16	3/8
Thread	5/16-24	3/8-24	7/16-24	1/2-20	9/16-20
Working Pressure	500	500	500	250	250

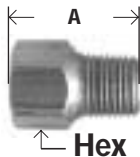
NUT



181
6100
11

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
16-001	1/8"	0.50	0.37	0.02	0.66
16-002	3/16"	0.53	0.43	0.02	1.10
16-003	1/4"	0.56	0.50	0.04	1.32
16-004	5/16"	0.61	0.56	0.04	1.38
16-005	3/8"	0.61	0.62	0.04	2.18

MALE ADAPTER

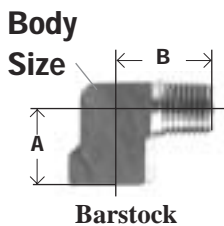


188
6200
12

Part #	THRD Sleeve x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
16-117	1/8" x *	0.62	0.43	0.02	0.71
16-118	1/8" x 1/8"	0.62	0.43	0.02	1.35
16-119	3/16" x 1/8"	0.69	0.43	0.02	1.54
16-121	1/4" x 1/8"	0.75	0.50	0.04	1.54
16-122	5/16" x 1/8"	0.89	0.56	0.04	2.07
16-123	3/8" x 1/4"	0.84	0.62	0.06	3.38

* 1/4 - 28 Male Thread Tapered.

90° ELBOW



189
6400
15

Part #	THRD Sleeve x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
16-127	1/8" x *	0.50	0.52	0.41	0.02	5.07
16-128	1/8" x 1/8"	0.50	0.66	0.43	0.02	6.54
16-129	3/16" x 1/8"	0.56	0.62	0.44	0.02	6.76
16-130	1/4" x 1/8"	0.52	0.62	0.50	0.04	6.76
16-132	3/8" x 1/4"	0.72	0.97	0.72	0.06	5.26

* 1/4 - 28 Male Thread Tapered

**MIDLAND
METAL**

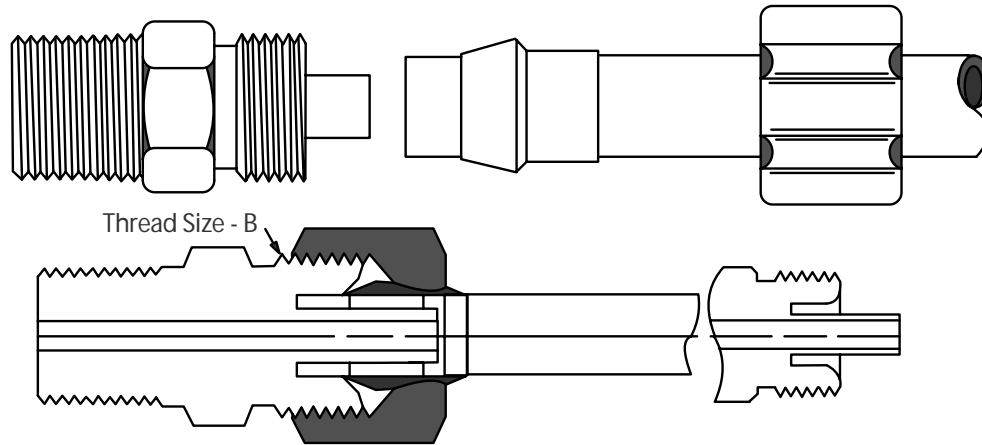
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World Wide**

Flareless

Flareless Brass Tube Fittings are Interchangeable with Poly-Flo®, Poly-Tite® and Poly-Line® and Poly-Fit®



Tube O.D.	1/8	3/16	1/4	1/4	5/16	3/8	1/2
Thread Size-B	5/16-24	3/8-24	3/8-24	3/8-24	7/16-24	1/2-24	1 1/16-20

•Typical Application

Pneumatic instrumentation circuits, lubricant and cooling lines.

•Working Pressure and Temperature Ranges

Up to 150 PSI from 0°F to + 150°F with thermoplastic tubing. Up to 300 PSI from 0°F to + 175°F with soft metal tubing

•Maximum allowable metal tube wall thickness for use with Poly-Tite fittings:

1/8", 3/16" O.D. --no limitation,
1/4" O.D.--.035 5/16", 3/8", 1/2" O.D.--.049

•Vibration

Excellent Resistance.

•Temperature Range

Depends on tubing used. -65°F to +250°F (-53°C to +121°C) with brass sleeve, -40°F to +150°F (-40°C to +66°C) with plastic sleeve. (Refer to tubing temperature range.)

•Material

CA360 Brass body, plastic or brass sleeve.

•Used With

Aluminum & copper tubing. Hard plastic tubing requires brass sleeve. Not recommended for steel tubing.

•Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Advantages

No flaring of tubing required. Easy installation, captive sleeve, pre-assembled for installation and can be reassembled. Nuts rotate around the sleeve during tightening, preventing twisting of tubing.

•Assembly Instructions

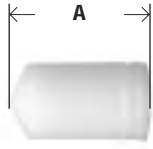
- 1- Cut tubing to desired length.
- 2- Slide nut/sleeve assembly on tube. Threaded end "A" of nut must face toward fitting.
- 3- Bottom tubing into fitting.
- 4- Plastic sleeve - Tighten nut hand tight.
Brass Sleeve - Tighten nut hand tight, then an additional 3/4 turn.

"Since we cannot change reality, let us change the eyes which see reality."

- Nikos Kazantzakis



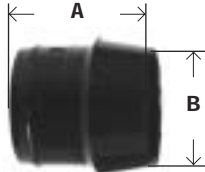
PLASTIC CAP



1229
59P
259P

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-201	1/4"	0.50	0.01	0.93
20-203	3/8"	0.56	0.01	1.01
20-204	1/2"	0.59	0.01	1.48

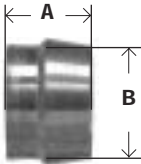
PLASTIC SLEEVE



260FF
1260
60P
260P

Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-205	1/4"	0.34	0.26	0.01	0.22
20-206	5/16"	0.39	0.32	0.01	0.29
20-207	3/8"	0.41	0.38	0.01	0.15
20-208	1/2"	0.44	0.51	0.01	0.29

BRASS SLEEVE



260FB

Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-380	1/8"	0.19	0.12	0.01	1.34
20-381	3/16"	0.30	0.19	0.01	1.86
20-382	1/4"	0.32	0.25	0.01	0.53
20-384	3/8"	0.37	0.38	0.02	1.27
20-385	1/2"	0.40	0.51	0.02	0.89

NUT AND PLASTIC SLEEVE ASSEMBLY



261PF
1261
61PN
261U

Part #	Tube O.D.	A	Hex (Dia.)	Approx. Wt. Lbs.	List Price
20-211	1/4"	0.43	0.43	0.02	0.80
20-212	5/16"	0.45	0.50	0.02	1.52
20-213	3/8"	0.49	0.56	0.04	1.25
20-214	1/2"	0.42	0.81	0.04	2.72

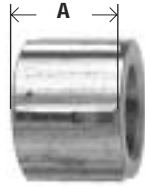
He who is not contented with what he has, would not be contented with what he would like to have.

- Socrates



NUT

61PN
1261
261FPN



Part #	Tube O.D.	A	Hex Dia.	Thread	Approx. Wt. Lbs.	List Price
20-218	1/8"	0.37	0.37	5/16-24	0.01	1.09
20-219	3/16"	0.41	0.44	3/8-24	0.01	1.09
20-220	1/4"	0.34	0.44	3/8-24	0.02	0.84
20-221	5/16"	0.34	0.50	7/16-24	0.02	1.09
20-222	3/8"	0.38	0.56	1/2-24	0.04	0.96
20-223	1/2"	0.42	0.81	11/16-20	0.06	2.33

UNIVERSAL NUT AND BRASS SLEEVE ASSEMBLY

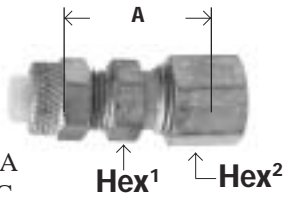
261PFB
1261B
61PB
261UB



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-227	1/8"	0.37	0.37	0.02	1.86
20-228	3/16"	0.41	0.44	0.02	1.55
20-229	1/4"	0.34	0.43	0.02	1.53
20-230	5/16"	0.34	0.50	0.02	1.86
20-231	3/8"	0.37	0.56	0.04	1.66
20-232	1/2"	0.42	0.81	0.04	3.81

UNION TUBE #M62C

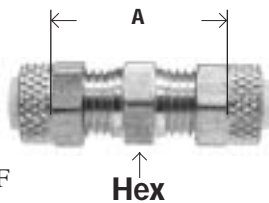
262S
62PCA
262PC



Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
20-235	1/4"	0.75	0.44	0.50	0.04	7.77
20-237	3/8"	0.84	0.62	0.62	0.08	9.40

UNION

262PF
1262
62P
262P



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-240	1/8"	0.66	0.31	0.02	7.46
20-241	3/16"	0.75	0.37	0.04	8.55
20-242	1/4"	0.69	0.37	0.04	3.08
20-243	5/16"	0.69	0.44	0.04	10.02
20-244	3/8"	0.72	0.50	0.10	8.70
20-200	3/8" x 1/4"	0.72	0.50	0.08	8.76
20-245	1/2"	0.84	0.69	0.14	11.39

Dimension data can change without notice.
Please call us when dimensions are critical.

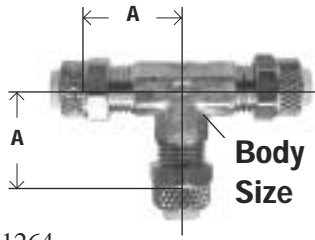


FLARELESS

BRASS FITTINGS

UNION TEE

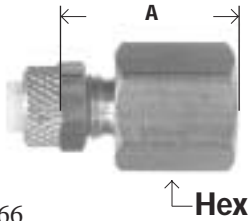
BRASS



1264
164P
264P

Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-248	1/8"	0.62	0.31	0.02	12.12
20-249	3/16"	0.62	0.31	0.04	12.51
20-250	1/4"	0.73	0.44	0.06	7.23
20-251	5/16"	0.62	0.37	0.08	10.64
20-252	3/8"	0.86	0.56	0.08	8.97
20-330	3/8" x 1/4"	0.72	0.44	0.08	10.96
20-253	1/2"	0.81	0.62	0.24	20.44

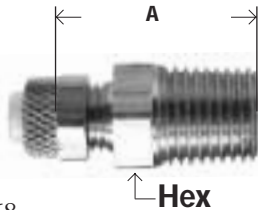
FEMALE CONNECTOR



1266
66P
266P

Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-256	1/8" x 1/8"	0.75	0.56	0.03	6.92
20-257	3/16" x 1/8"	0.78	0.56	0.05	6.99
20-258	3/16" x 1/4"	0.97	0.69	0.05	7.46
20-259	1/4" x 1/8"	0.76	0.50	0.04	5.60
20-260	1/4" x 1/4"	1.08	0.62	0.05	5.60
20-261	5/16" x 1/8"	0.75	0.50	0.03	6.76
20-264	5/16" x 1/4"	0.90	0.62	0.04	7.56
20-265	3/8" x 1/8"	0.77	0.56	0.05	14.87
20-262	3/8" x 1/4"	0.94	0.62	0.05	7.46
20-263	1/2" x 3/8"	1.00	0.81	0.12	10.26

MALE CONNECTOR



1268
68P
268P

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-266	1/8" x 1/16"	0.78	0.34	0.02	10.80
20-267	1/8" x 10-32*	0.59	0.37	0.02	6.37
20-268	1/8" x 1/8"	0.80	0.34	0.04	3.89
20-269	3/16" x 1/8"	0.86	0.44	0.04	3.57
20-280	1/4" x 1/16"	0.81	0.43	0.03	8.82
20-270	1/4" x 10-32*	0.75	0.37	0.02	5.83
20-271	1/4" x 1/8"	0.82	0.44	0.03	2.52
20-272	1/4" x 1/4"	1.00	0.56	0.05	3.11
20-273	1/4" x 3/8"	1.03	0.69	0.08	5.59
20-274	5/16" x 1/8"	0.81	0.44	0.04	3.50
20-275	5/16" x 1/4"	1.00	0.56	0.05	5.05
20-276	3/8" x 1/8"	0.84	0.50	0.06	4.34
20-277	3/8" x 1/4"	1.03	0.56	0.08	6.68
20-278	3/8" x 3/8"	1.03	0.69	0.10	7.46
20-279	1/2" x 3/8"	1.09	0.69	0.16	5.91
20-282	1/2" x 1/2"	1.33	0.88	0.18	10.07

* Furnished with gasket.

**MIDLAND
METAL**

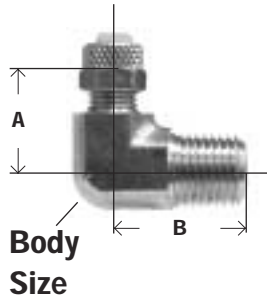
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MALE ELBOW

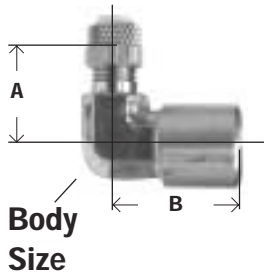


1269
169P
269P

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-287	1/8" x 1/8"	0.62	0.69	0.31	0.02	4.97
20-288	3/16" x 1/8"	0.62	0.69	0.37	0.04	5.21
20-285	1/4" x 1/16"	0.62	0.69	0.37	0.04	5.36
20-289*	1/4" x 1/8"	0.53	0.73	0.50	0.04	3.77
20-290	1/4" x 1/4"	0.66	0.94	0.37	0.06	6.25
20-291	1/4" x 3/8"	0.75	1.03	0.50	0.10	8.16
20-292	5/16" x 1/8"	0.62	0.75	0.41	0.04	5.52
20-293	3/8" x 1/8"	0.91	0.81	0.56	0.08	5.10
20-294	3/8" x 1/4"	0.72	0.94	0.44	0.10	8.87
20-295	3/8" x 3/8"	0.78	1.03	0.50	0.14	10.02
20-296	1/2" x 3/8"	1.09	1.10	0.73	0.16	9.78

* Barstock

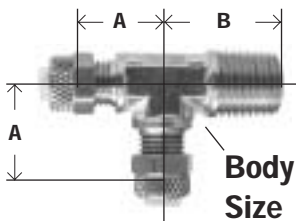
FEMALE ELBOW



1270
170P
270P

Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-300	1/8" x 1/8"	0.69	0.55	0.56	0.02	8.24
20-301	3/16" x 1/8"	0.72	0.55	0.56	0.02	8.31
20-302	1/4" x 1/8"	0.62	0.75	0.37	0.08	8.24
20-303	1/4" x 1/4"	0.72	0.88	0.50	0.10	7.93
20-304	3/8" x 1/4"	0.72	0.88	0.50	0.12	8.47
20-305	1/2" x 3/8"	0.91	0.94	0.63	0.16	13.29

MALE RUN TEE



1271
171P
271P

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-308	1/8" x 1/8"	0.62	0.69	0.31	0.04	10.80
20-309	3/16" x 1/8"	0.62	0.69	0.31	0.04	10.57
20-310	1/4" x 1/8"	0.62	0.75	0.37	0.08	8.70
20-311	1/4" x 1/4"	0.66	0.94	0.37	0.10	13.21
20-312	5/16" x 1/8"	0.62	0.75	0.37	0.08	10.96
20-313	3/8" x 1/4"	0.66	0.94	0.44	0.10	11.73
20-314	1/2" x 3/8"	0.81	1.06	0.63	0.16	18.88

Dimension data can change without notice.
Please call us when dimensions are critical.

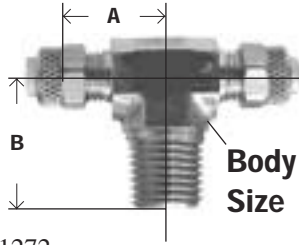


FLARELESS

BRASS FITTINGS

MALE BRANCH TEE

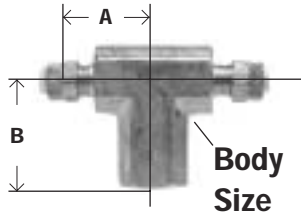
BRASS



1272
172P
272P

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-317	1/8" x 1/8"	0.63	0.69	0.31	0.04	10.88
20-318	3/16" x 1/8"	0.63	0.69	0.31	0.04	11.19
20-319	1/4" x 1/8"	0.63	0.75	0.37	0.07	8.94
20-320	1/4" x 1/4"	0.66	0.94	0.37	0.09	10.26
20-321	5/16" x 1/8"	0.63	0.75	0.37	0.10	11.19
20-322	3/8" x 1/8"	0.63	0.75	0.44	0.08	12.20
20-323	3/8" x 1/4"	0.66	0.94	0.44	0.11	12.51
20-324	1/2" x 3/8"	0.81	1.06	0.63	0.21	18.88

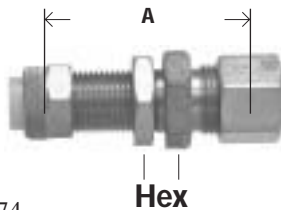
FEMALE BRANCH TEE



1277
177P
277P

Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-327	1/4" x 1/8"	0.66	0.94	0.37	0.12	9.87
20-328	1/4" x 1/4"	0.84	1.16	0.56	0.16	13.68

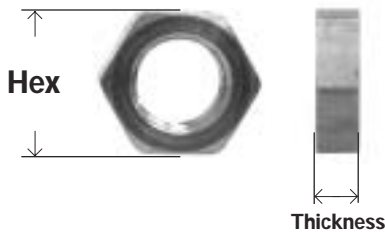
BULKHEAD UNION - FLARELESS X COMPRESSION



1274

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-333	1/4"	1.31	0.56	0.07	10.02
20-334	3/8"	1.44	0.69	0.12	12.20

BULKHEAD NUT



Part #	Tube O.D.	Hex	Thickness	Approx. Wt. Lbs.	List Price
20-370	1/8"	0.31	0.25	0.01	0.67
20-372	5/16"	0.62	0.19	0.02	2.38
20-373	3/8"	0.68	0.19	0.04	2.41

Dimension data can change without notice.
Please call us when dimensions are critical.

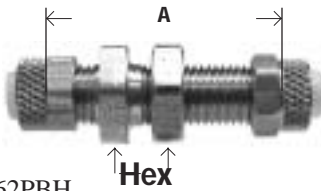
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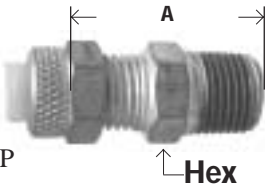
BULKHEAD UNION



62PBH
329P
282P

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-337	1/4"	1.25	0.56	0.06	9.71
20-338	5/16"	1.25	0.62	0.08	10.41
20-339	3/8"	1.31	0.69	0.10	12.04

QUICK DISCONNECT FITTING

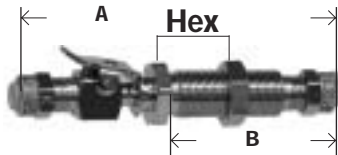


292P

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-344	1/4" x 1/8"	0.87	0.44	0.06	23.60

QUICK DISCONNECT COUPLERS

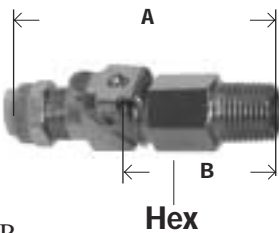
TUBE X TUBE



349P

Part #	Tube O.D.	A	B	Hex	Approx. Wt. Lbs.	List Price
20-401	1/4"	3.00	1.72	0.62	0.06	84.69
20-403	3/8"	3.56	1.92	0.81	0.10	80.07

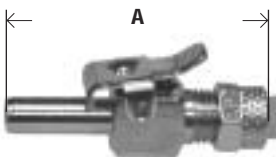
TUBE TO MALE THREAD



398P

Part #	Tube O.D. x Male Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
20-409	1/4" x 1/8"	2.31	1.28	0.50	0.12	48.88
20-411	1/4" x 1/4"	2.31	1.28	0.56	0.14	58.12
20-413	3/8" x 1/4"	2.63	1.42	0.62	0.18	65.91

INSERT ONLY - Single End Shut-Off



393P

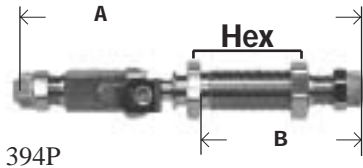
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-417	1/4"	1.69	0.04	22.38
20-419	3/8"	1.93	0.06	26.41



FLARELESS

BRASS FITTINGS

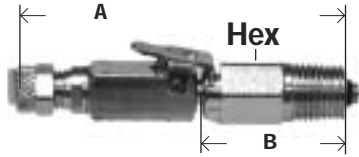
TUBE TO TUBE - Double end Shut-Off Type.



394P

Part #	Tube O.D.	A	B	Hex	Approx. Wt. Lbs.	List Price
20-425	1/4"	3.67	1.79	0.62	0.18	79.85
20-427	3/8"	3.82	1.97	0.81	0.26	96.64

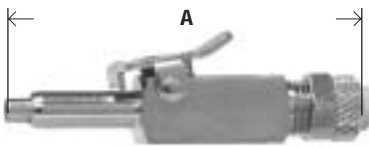
TUBE X MALE PIPE



398PD

Part #	Tube O.D. x Male Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
20-435	1/4" x 1/8"	2.89	1.28	0.50	0.14	85.94
20-437	1/4" x 1/4"	2.91	1.27	0.56	0.18	81.36
20-439	3/8" x 1/4"	3.02	1.40	0.62	0.24	75.94

INSERT ONLY - Double End Shut-Off



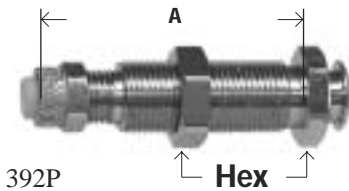
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-445	1/4"	2.40	0.08	38.62

CHROME PLATED NUT AND PLASTIC SLEEVE



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-451	1/4"	0.34	0.43	0.01	2.10
20-453	3/8"	0.38	0.56	0.01	2.64

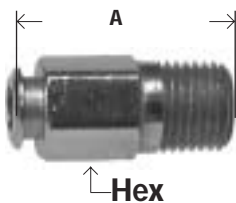
TUBE CONNECTION - Single end or Double end Shut-Off Type body only.



392P

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-455	1/4"	1.79	0.62	0.10	48.55
20-457	3/8"	1.97	0.81	0.16	57.17

MALE PIPE CONNECTION



391P

Part #	Tube O.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
20-461	1/4" x 1/8"	1.28	0.50	0.06	31.13
20-463	1/4" x 1/4"	1.27	0.56	0.08	36.95
20-465	3/8" x 1/4"	1.40	0.62	0.08	39.45

Socrates

An unexamined life is not worth living.

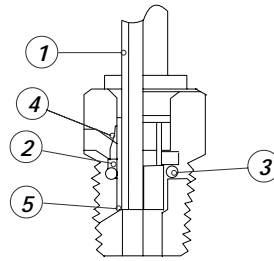
MIDLAND
METAL

BRASS PUSH-IN FITTINGS

PAGES 89-94

ENGINEERING AND DESIGN

- **QUICK CONNECT**, simply push tubing in, no tools. Saves up to 75% of assembly time of standard compression fittings.
- **QUICK DISCONNECT**, hold two fingers on insert and pull tubing out, no tools required.
- **REUSEABLE**, connect and disconnect numerous times.
- **FULL FLOW DESIGN**, provides up to 60% more flow area than conventional fittings with internal tube supports.
- **POSITIVE SEAL**, no leaks. After tubing is inserted, seal is made.
- **VERSATILE**, BunaN "O" rings standard. Other materials of "O" rings available.
- **SECURE TUBE RETENTION**, pulling on tubing only serves to tighten the connection.
- **SELF CONTAINED ASSEMBLY**, no loose parts, brass body and insert.
- **BRASS CONSTRUCTION**, elbows and tees are forged brass.
- **CHOICE** of convenient swivel of economical stationary elbows and tees.
- **STRAIGHT CONNECTORS** have interior hex for Allen key tightening where space is limited...no need to use a wrench.
- **PRE-APPLIED TEFLON®** based pipe sealant on all male pipe threads, saving customer additional labor.
- **METRIC SIZES AVAILABLE**: Metric tube sizes from 2mm through 12mm in both standard NPT and metric pipe sizes are available on a special order basis.
- **WORKING PRESSURE**:
The fitting is suitable for use up to the maximum working pressure of the plastic tubing used. For soft copper tube, a maximum working pressure of 750 PSI is recommended. Also suitable for vacuum service.
- **WORKING TEMPERATURE**:
-10°F to 200°F (other ranges available on request).
- **PIPE THREAD**: NPTF with Teflon® based sealant pre-applied.



When tubing (1) is inserted into the fitting, it first passes through the gripping teeth (2). Just beyond the gripping teeth is the o-ring (3) which provides the leak proof seal against the OD of the tube. The gripping teeth grab the tube, which

expands the insert. Pulling back on the tube only tightens the grip as the insert moves onto the camming surface (4). Pressure through the tube also serves to tighten the grip. The tube bottoms against a positive tube stop (5) in a cavity providing tube support to prevent leakage.

- **Tolerance**
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

BRASS

NICKEL PLATED PUSH-IN FITTINGS

PAGES 95-98

Component Parts and Materials	
Body	Brass - Nickel Plated
Thrust Ring	Plastic
Sleeve	Brass - Nickel Plated
Gripper Collet	Stainless Steel
Safety Ring	PA66
Lip Seal (1/8 O-Ring Seal)	NBR 70
Thread Seal	NBR 70

Max Operating Pressure: 0-250 psi (17 bar) Vacuum service.
Min Temperature: 0°F (-18°C)
Max Temperature: 160°F (+70°C)
Tubing: Nylon, Polyethylene, Polyurethane.
 - For best results use 95 Durometer
Media: Compressed air, water

- **Tolerance**
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

GLOBAL THREAD
Works With Inch or Metric Threads



Look for this
Logo

"Global Thread" fittings can be assembled with female threads produced to the following standards:

- Tapered NPTF
- Parrallel (BSPP, BSP, ISO 7)
- Tapered (BSPT, PT, ISO 7, ISO 228)



BRASS PUSH - IN FITTINGS

BRASS FITTINGS

BRASS

DOUBLE MALE UNION



AQ34

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-004	1/8"	1.28	0.01	4.12
20-005	5/32"	1.28	0.01	8.31
20-006	1/4"	1.40	0.02	4.56
20-007	5/16"	1.59	0.02	5.15
20-008	3/8"	1.81	0.02	6.03
20-000	1/2"	1.89	0.03	10.14

(For polyurethane or other soft plastic tubing)

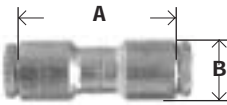
PLASTIC PLUG



284PP 6900
 AQ59 639PL
 209-OF 12-004
 1129 50-526

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-009	5/32"	1.16	0.01	1.10
20-010	1/4"	1.40	0.01	1.38
20-011	3/8"	1.40	0.02	2.44
20-013	1/2"	1.50	0.02	3.28

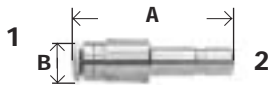
UNION CONNECTOR



AQ62 KQH 1162
 6580 12-020 262PP
 3106 50-562
 63PL 262-OF

Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-017	1/8"	1.07	0.38	0.03	6.98
20-018	5/32"	1.07	0.38	0.03	6.76
20-019	1/4"	1.50	0.44	0.05	6.24
20-022	3/8" x 1/4"	1.46	0.56	0.05	11.78
20-020	3/8"	1.44	0.56	0.06	7.81
20-021	1/2"	1.63	0.81	0.18	12.86

REDUCER - NICKEL PLATED



67PPL
 286PP

Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	List Price
20-510	1/8" x 1/4"	1.38	0.39	0.02	8.97
20-511	5/32" x 1/4"	1.33	0.35	0.02	8.31
20-512	1/4" x 3/8"	1.50	0.51	0.04	9.38

Friendship is the only cement that will ever hold the world together.

- Woodrow Wilson

MIDLAND
METAL

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 RUBBER PRODUCTS INC.

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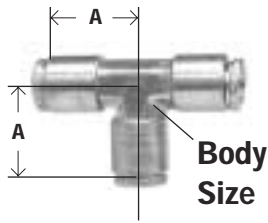
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BRASS FITTINGS

BRASS PUSH - IN FITTINGS

BRASS

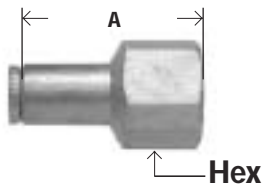
UNION TEE



KQT
12-060 AQ64
50-564 6540
264OF 3140
264PP 164PL

Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-025	1/8"	0.65	0.31	0.04	11.97
20-026	5/32"	0.67	0.31	0.04	10.73
20-027	3/16"	0.75	0.37	0.06	12.04
20-028	1/4"	0.92	0.37	0.09	10.77
20-031	5/16"	0.89	0.49	0.10	14.19
20-029	3/8"	0.98	0.50	0.13	13.92
20-030	1/2"	1.16	0.62	0.24	26.26

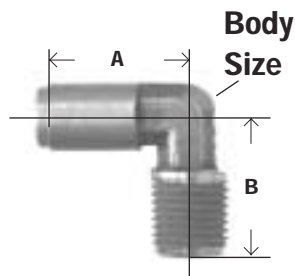
FEMALE CONNECTOR



266PP
AQ66 12-426
6463 50-566
3114 266-OF
66PL 1166

Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-032	1/8" x 1/8"	0.96	0.56	0.04	8.86
20-038	1/8" x 1/4"	1.04	0.67	0.04	15.62
20-034	1/4" x 1/8"	1.23	0.56	0.06	8.70
20-035	1/4" x 1/4"	1.42	0.75	0.09	9.01
20-036	3/8" x 1/4"	1.32	0.75	0.09	10.96
20-037	3/8" x 3/8"	1.31	0.87	0.12	13.75

FIXED MALE ELBOW



269PP 12-445
AQ69-P 1169
6500
169PLNS

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-065	1/8" x 1/8"	0.69	0.69	0.31	0.03	7.07
20-066	5/32" x 1/8"	0.68	0.68	0.31	0.03	6.92
20-067	3/16" x 1/8"	0.75	0.71	0.37	0.04	7.86
20-068	1/4" x 1/8"	0.89	0.75	0.37	0.06	5.67
20-069	1/4" x 1/4"	0.95	0.96	0.37	0.08	6.05
20-070	1/4" x 3/8"	1.00	0.98	0.50	0.10	10.80
20-071	3/8" x 1/8"	0.99	0.80	0.50	0.06	10.49
20-072	3/8" x 1/4"	0.98	0.98	0.50	0.09	7.37
20-073	3/8" x 3/8"	0.97	0.98	0.50	0.12	8.51
20-074	1/2" x 1/4"	1.15	1.05	0.62	0.15	14.53
20-075	1/2" x 3/8"	1.18	1.05	0.62	0.22	14.53
20-064	1/2" x 1/2"	1.16	1.66	0.62	0.20	16.01

Dimension data can change without notice.
Please call us when dimensions are critical.

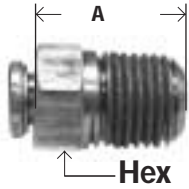


BRASS PUSH - IN FITTINGS

BRASS FITTINGS

BRASS

MALE CONNECTOR

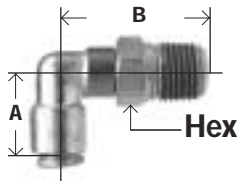


Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-047	1/8" x 10-32"*	0.69	0.37	0.02	5.59
20-048	1/8" x 1/8"	0.61	0.43	0.02	4.70
20-023	1/8" x 1/4"	0.98	0.56	0.04	5.00
20-049	5/32" x 10-32"*	0.67	0.37	0.02	5.59
20-050	5/32" x 1/8"	0.67	0.43	0.03	4.85
20-046	5/32" x 1/4"	0.85	0.56	0.05	7.46
20-051	3/16" x 10-32"*	0.80	0.37	0.02	6.37
20-052	3/16" x 1/8"	0.93	0.43	0.03	6.14
20-053	1/4" x 10-32"*	0.87	0.43	0.03	5.29
20-054	1/4" x 1/8"	0.93	0.43	0.06	3.33
20-055	1/4" x 1/4"	0.93	0.56	0.10	4.00
20-056	1/4" x 3/8"	0.94	0.68	0.08	6.74
20-530	5/16" x 1/8"	1.07	0.56	0.05	13.88
20-531	5/16" x 1/4"	0.98	0.56	0.10	12.49
20-532	5/16" x 3/8"	1.06	0.75	0.08	11.61
20-057	3/8" x 1/8"	1.10	0.56	0.06	5.24
20-058	3/8" x 1/4"	1.11	0.56	0.05	4.84
20-059	3/8" x 3/8"	1.02	0.68	0.08	6.55
20-062	3/8" x 1/2"	1.02	0.87	0.08	11.17
20-060	1/2" x 1/4"	1.36	0.81	0.11	11.58
20-061	1/2" x 3/8"	1.30	0.81	0.12	9.53
20-063	1/2" x 1/2"	1.23	0.87	0.14	10.33

268PP KQH
 AQ68 12-425
 6510 50-568
 3115 268-OF
 68PL 1168

* Furnished with gaskets

SWIVEL MALE ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-079	1/8" x 1/8"	0.69	0.98	0.43	0.07	8.01
20-535	1/8" x 1/4"	0.76	0.87	0.56	0.06	11.69
20-080	5/32" x 1/8"	0.68	0.89	0.43	0.05	9.33
20-076	5/32" x 10-32"*	0.67	0.71	0.37	0.04	8.47
20-077	5/32" x 1/4"	0.68	1.08	0.56	0.07	10.88
20-081	1/4" x 1/8"	0.90	0.93	0.37	0.08	6.99
20-078	1/4" x 10-32"*	0.86	0.79	0.31	0.05	10.07
20-082	1/4" x 1/4"	0.90	0.99	0.56	0.10	8.32
20-086	1/4" x 3/8"	0.98	1.14	0.68	0.09	14.37
20-538	5/16" x 1/4"	0.91	0.85	0.56	0.07	14.33
20-539	5/16" x 3/8"	0.91	0.87	0.75	0.08	19.11
20-087	3/8" x 1/8"	0.94	1.08	0.50	0.09	11.73
20-083	3/8" x 1/4"	0.99	1.15	0.56	0.10	9.20
20-084	3/8" x 3/8"	1.00	1.24	0.68	0.20	10.02
20-088	3/8" x 1/2"	1.00	1.54	0.87	0.19	14.26
20-085	1/2" x 3/8"	1.16	1.34	0.62	0.18	15.29
20-092	1/2" x 1/2"	1.16	1.61	0.62	0.24	20.07

AQ69-PS 12-447
 56520 50-579
 3109 269-OFS
 169PL 11695
 KQL

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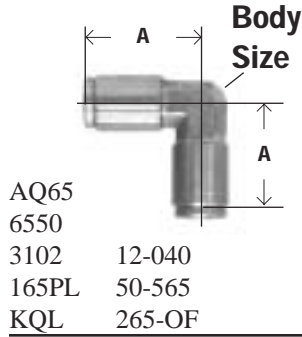
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BRASS FITTINGS

BRASS PUSH - IN FITTINGS

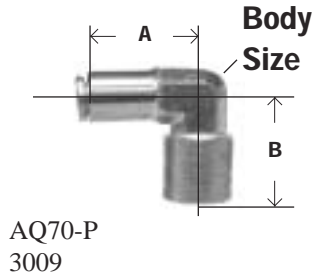
BRASS

UNION ELBOW



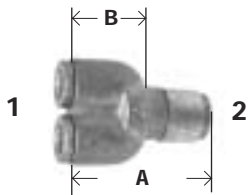
Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-150	1/8"	0.65	0.31	0.02	9.01
20-151	5/32"	0.67	0.31	0.04	9.01
20-152	1/4"	0.87	0.37	0.06	7.88
20-155	5/16"	0.91	0.47	0.08	17.49
20-153	3/8"	0.97	0.50	0.09	10.32
20-154	1/2"	1.15	0.62	0.18	19.04

FEMALE ELBOW



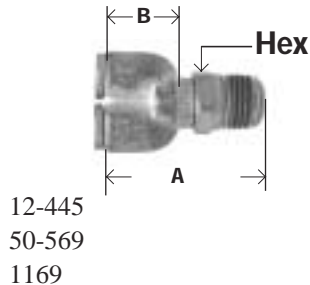
Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-094	5/32" x 1/8"	0.68	0.82	0.37	0.02	7.69
20-089	1/4" x 1/8"	0.91	0.75	0.37	0.06	8.24
20-090	1/4" x 1/4"	1.03	1.03	0.50	0.11	9.87
20-091	3/8" x 1/4"	0.98	0.95	0.50	0.16	11.03

UNION "Y"



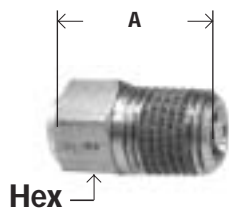
Part #	Tube O.D. x 1 x 2	A	B	Approx. Wt. Lbs.	List Price
20-552	1/4" x 1/8"	1.61	1.06	0.12	23.85
20-553	1/4" x 1/4"	1.81	1.06	0.14	21.45

MALE "Y"



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-557	1/4" x 1/4"	1.90	1.06	0.56	0.20	25.25

QUICK DISCONNECT When tube is disconnected, flow shuts off automatically.



AQ92-P
6500
169PLNS

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-133	1/4" x 1/8"	0.92	0.43	0.10	12.90
20-134	1/4" x 1/4"	0.92	0.56	0.12	13.36

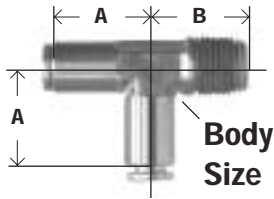


BRASS PUSH - IN FITTINGS

BRASS FITTINGS

BRASS

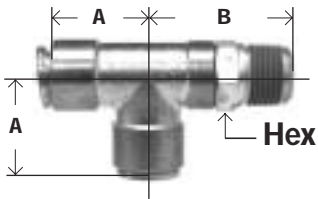
FIXED MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-095	1/8" x 1/8"	0.65	0.72	0.31	0.04	10.18
20-097	3/16" x 1/8"	0.75	0.73	0.37	0.06	12.59
20-098	1/4" x 1/8"	0.92	0.74	0.37	0.08	12.04
20-093	1/4" x 1/4"	0.92	0.92	0.43	0.10	13.97
20-099	3/8" x 1/8"	0.94	0.82	0.50	0.14	15.54
20-100	3/8" x 1/4"	0.98	0.98	0.50	0.12	17.64
20-101	3/8" x 3/8"	1.05	1.05	0.62	0.10	17.72
20-102	1/2" x 3/8"	1.14	1.05	0.62	0.18	24.09

AQ71-P

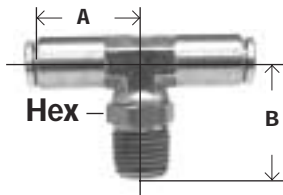
SWIVEL MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-162	1/4" x 1/8"	0.92	1.04	0.44	0.09	13.75
20-163	1/4" x 1/4"	0.92	1.13	0.56	0.11	14.22
20-165	3/8" x 3/8"	0.96	1.24	0.50	0.12	22.24
20-174	1/2" x 1/4"	1.12	1.18	0.51	0.16	34.27
20-166	1/2" x 3/8"	1.14	1.31	0.68	0.14	27.27

AQ70-PS 12-468
 56440 50-571
 3103 271-OFS
 171PL 11715
 KQY

SWIVEL MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-103	1/8" x 1/8"	0.65	0.81	0.31	0.04	13.60
20-104	5/32" x 10-32"*	0.65	0.71	0.31	0.04	13.99
20-109	5/32" x 1/8"	0.67	0.94	0.37	0.06	11.34
20-105	1/4" x 1/8"	0.92	0.97	0.37	0.08	11.09
20-106	1/4" x 1/4"	0.92	1.09	0.37	0.10	14.04
20-107	3/8" x 1/4"	0.96	1.14	0.56	0.18	17.25
20-108	3/8" x 3/8"	0.96	1.23	0.69	0.16	18.10
20-110	1/2" x 3/8"	1.16	1.34	0.69	0.24	26.26
20-111	1/2" x 1/2"	1.16	1.64	0.87	0.28	30.23

KQT AQ64
 12-060 6540
 50-564 3140
 264OF 64PL

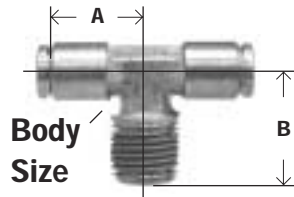
* Furnished with gaskets



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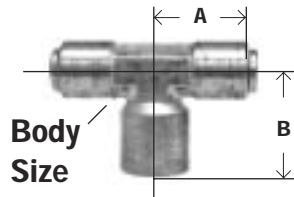
FIXED MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-112	1/8" x 1/8"	0.69	0.72	0.31	0.04	11.34
20-113	5/32" x 1/8"	0.69	0.65	0.31	0.04	11.03
20-114	3/16" x 1/8"	0.74	0.78	0.37	0.06	14.22
20-115	1/4" x 1/8"	0.92	0.74	0.37	0.12	12.04
20-116	1/4" x 1/4"	0.91	0.93	0.37	0.10	13.01
20-117	3/8" x 1/8"	0.98	0.80	0.50	0.08	15.38
20-118	3/8" x 1/4"	0.98	0.97	0.50	0.12	15.38
20-119	3/8" x 3/8"	0.98	0.97	0.50	0.14	16.71
20-120	1/2" x 3/8"	1.16	1.05	0.62	0.18	24.09

AQ72-P

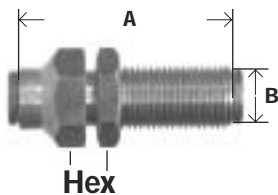
FEMALE BRANCH TEE



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-130	1/4" x 1/8"	0.89	0.75	0.43	0.06	14.22
20-131	1/4" x 1/4"	0.89	0.98	0.50	0.08	15.19
20-132	3/8" x 1/4"	0.96	0.98	0.50	0.12	17.17

AQ77-P
3008
177PL

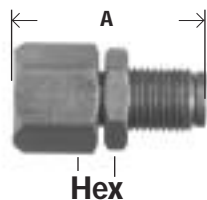
BULKHEAD UNION



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
20-126	3/16"	1.27	0.50	0.68	0.04	17.64
20-127	1/4"	1.69	0.50	0.68	0.06	13.44
20-128	3/8"	1.69	0.62	0.81	0.13	15.70
20-129	1/2"	1.85	0.75	1.12	0.16	24.32

AQ82-P 12-029
6590 50-582
62PLBH 282-OF
KQE 1174

FEMALE BULKHEAD UNION



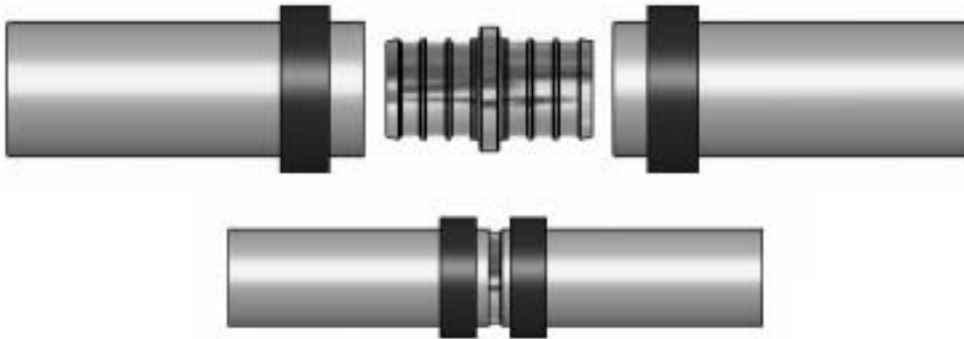
Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-170	1/4" x 1/8"	1.19	0.68	0.08	12.35
20-171	1/4" x 1/4"	1.36	0.75	0.10	13.45
20-172	3/8" x 1/4"	1.71	0.75	0.14	14.45

AQ86-P

Dimension data can change without notice.
Please call us when dimensions are critical.



Pex Fittings



•Use With

Pex Tubing in accordance with ASTM F-876 and F-877

•Pressure ad Temperature

160 PSI @ 73°F
 100 PSI @ 180°F
 80 PSI @ 210°F

•Vibration

Excellent resistance

•Material

Forged brass CA36500
 (Low lead)

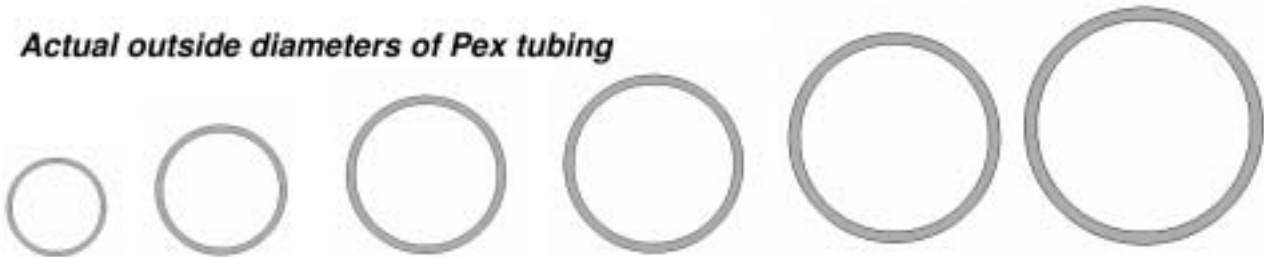
•Typical Applications

Potable cold and hot domestic water, hydronic heating systems radiant heating systems.

•Conformance

Produced to ASTM F1807
 ASNI/ NSF61/ 14 Certified
 IAPMO Listed (UPC)
 CSA B 137.5 Listed
 Adapter threads to ANSIB1.20.1
 Adapter solder ends to ANSI B16.18
 All CNC machined ends.

Actual outside diameters of Pex tubing



Actual size Pex ends



3/8"

1/2"

5/8"

3/4"

1

1 1/4"



BRASS FITTINGS

Pex x Tee Pex x Pex



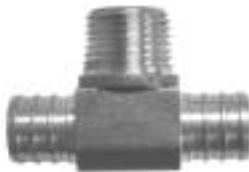
Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
8401040404	3/8"	0.079	25	500	2.99
8401050505	1/2"	0.058	50	500	2.36
8401060606	5/8"	0.100	50	500	4.49
8401070707	3/4"	0.107	25	250	4.46
8401080808	1"	0.291	15	120	10.89
8401090909	1-1/4"	0.397	10	100	12.63

Tee Pex x FPT



Part #	Size	Wgt.	Quantity		List Price
			Inner	Master	
8435040402	3/8"x3/8"x1/8"	0.062	50	200	8.59
8435050502	1/2"x1/2"x1/8"	0.064	25	175	10.00

Tee Pex x MPT



Part #	Size	Wgt.	Quantity		List Price
			Inner	Master	
8425050505	1/2"x1/2"x1/2"	0.202	50	500	7.63
8425070505	3/4"x3/4"x1/2"	0.188	25	175	9.54

PEX FITTINGS

Tee Pex (Reducing)



Part #	Size	Wgt.	Quantity		List Price
			Inner	Master	
8401040405	3/8"x3/8"x1/2"	0.075	50	500	2.82
8401050404	1/2"x3/8"x3/8"	0.075	50	500	2.82
8401050405	1/2"x3/8"x1/2"	0.070	50	500	2.66
8401050504	1/2"x1/2"x3/8"	0.075	50	500	2.82
8401050507	1/2"x1/2"x3/4"	0.082	25	250	2.98
8401070404	3/4"x3/8"x3/8"	0.181	25	250	6.81
8401070504	3/4"x1/2"x3/8"	0.174	25	250	6.55
8401070505	3/4"x1/2"x1/2"	0.088	25	250	4.23
8401070507	3/4"x1/2"x3/4"	0.111	25	250	4.42
8401070704	3/4"x3/4"x3/8"	0.187	25	250	7.05
8401070705	3/4"x3/4"x1/2"	0.091	25	250	4.32
8401070708	3/4"x3/4"x1"	0.304	15	120	11.45
8401080507	1"x1/2"x3/4"	0.248	15	120	11.87
8401080508	1"x1/2"x1"	0.292	15	120	12.63
8401080705	1"x3/4"x1/2"	0.312	15	120	14.59
8401080707	1"x3/4"x3/4"	0.241	15	120	14.59
8401080708	1"x3/4"x1"	0.225	15	120	14.59
8401080805	1"x1"x1/2"	0.264	15	120	9.89
8401080807	1"x1"x3/4"	0.295	15	120	11.04
8401090908	1-1/4"x1-1/4"x1	0.377	10	80	12.63

Coupling Pex x Pex



Part #	Size	Wgt.	Quantity		List Price
			Inner	Master	
81010404	3/8"	0.018	25	2000	0.98
81010504	1/2"x3/8"	0.029	50	1000	1.08
81010505	1/2"	0.029	50	1000	1.20
81010606	5/8"	0.040	25	500	1.77
81010705	3/4"x1/2"	0.044	25	500	2.00
81010707	3/4"	0.044	25	500	2.00
81010807	1"x3/4"	0.055	15	120	3.16
81010808	1"	0.057	15	120	3.36
81010907	1-1/4"x3/4"	0.130	10	80	5.72
81010908	1-1/4"x1"	0.130	10	80	6.75
81010909	1-1/4"	0.150	10	80	6.75

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PEX FITTINGS

Elbow Pex x Pex



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
82010404	3/8"	0.074	25	750	2.80
82010504	1/2"x3/8"	0.071	50	750	2.68
82010505	1/2"	0.044	50	750	1.75
82010606	5/8"	0.070	50	750	2.96
82010705	3/4"x1/2"	0.185	25	300	6.91
82010707	3/4"	0.079	25	300	7.76
82010808	1"	0.166	15	150	6.36
82010909	1-1/4"	0.325	10	100	6.42

Elbow Pex x F Sweat



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
80730405	3/8"x1/2"	0.102	25	250	4.61
80730505	1/2"	0.038	50	1000	6.59
80730607	5/8"x3/4"	0.150	15	120	7.15
80730707	3/4"	0.084	15	120	7.48
80730808	1"	0.163	15	120	8.86

Elbow Pex x M Sweat



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
80700405	3/8"x1/2"	0.076	25	300	4.61
80700505	1/2"	0.034	50	1000	5.80
80700607	5/8"x3/4"	0.128	15	120	6.17
80700707	3/4"	0.066	15	120	7.33
80700808	1"	0.151	15	120	8.11

Elbow Pex x FPT, Drop Ear (Short)



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
80950405	3/8"x1/2"	0.174	50	200	7.05
80950505	1/2"x1/2"		50	200	7.66
80950705	3/4"x1/2"		25	100	7.41
80950707	3/4"x3/4"		25	100	9.42

BRASS FITTINGS

Elbow Pex x FPT, Drop Ear (Long)



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
80750405	3/8"x1/2"	0.216	50	200	8.13
80750505	1/2"x1/2"	0.178	50	200	7.50
80750705	3/4"x1/2"	0.227	25	100	8.54
80750707	3/4"x3/4"	0.287	25	100	10.83

Elbow Pex x MPT



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
82020404	3/8"x3/8"	0.138	10	200	6.09
82020405	3/8"x1/2"	0.173	50	250	6.52
82020504	1/2"x3/8"	0.167	50	250	6.27
82020505	1/2"x1/2"	0.179	50	250	6.72
82020507	1/2"x3/4"	0.213	25	250	8.02
82020707	3/4"x3/4"	0.207	25	250	7.76
82020708	3/4"x1"	0.352	15	120	13.28

Swivel Elbow F (Straight Thread) Plastic/Brass Nut x Pex



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
82240505 (B)	1/2"	0.105	50	200	4.88
82250505 (P)	1/2"	0.097	50	200	7.09

Adapter Pex x F Sweat



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
80300505	1/2"x1/2"	0.038	50	1000	2.26
80300605	5/8"x1/2"	0.059	50	1000	2.76
80300607	5/8"x3/4"	0.080	25	500	3.32
80300707	3/4"x3/4"	0.084	25	500	3.44
80300808	1"x1"	0.163	15	120	6.17



BRASS FITTINGS

Adapter Pex x M Sweat



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
80400505	1/2"x1/2"	0.034	50	1000	1.55
80400605	5/8"x1/2"	0.050	50	1000	2.97
80400707	3/4"x3/4"	0.066	25	500	3.40
80400808	1"x1"	0.151	15	120	6.28
80400909	1-1/4"x1-1/4"	0.212	10	100	7.66

Adapter-Combo Pex x M Sweat x F Sweat



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
8050040504	3/8"x1/2"x3/8"	0.031	50	1000	1.51
8050040403	3/8"x3/8"x1/4"	0.026	50	1000	1.43
8050050504	1/2"x1/2"x3/8"	0.033	25	500	1.57
8050050403	1/2"x3/8"x1/4"	0.033	15	120	1.81
8050070705	3/4"x3/4"x1/2"	0.098	15	120	4.37
8050080807	1"x1"x3/4"	0.183	15	120	7.57

Adapter Pex to PB (with crimp rings)



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
81210505	1/2"	0.053	30	240	3.08
81210707	3/4"	0.084	10	80	4.94
81210808	1"	0.105	10	80	5.23

Crimp Rings



Part # Pex	Part # PB	Size	Weight (approx.)	Quantity		List Price
				Inner	Master	
810504	-	3/8"	0.011	100	3000	0.49
810505	811505	1/2"	0.013	100	3000	0.59
810506	-	5/8"	0.015	100	3000	0.65
810507	811507	3/4"	0.018	100	3000	0.78
810508	811508	1"	0.025	100	2000	0.88
810509	-	1-1/4"	0.036	100	1000	1.31

PEX FITTINGS

Adapter Pex x MPT



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
81020405	3/8"x1/2"	0.101	50	500	3.82
81020505	1/2"x1/2"	0.084	50	500	2.86
81020605	5/8"x1/2"	0.110	50	500	4.03
81020507	1/2"x3/4"	0.132	25	250	4.95
81020705	3/4"x1/2"	0.088	25	250	3.29
81020607	5/8"x3/4"	0.115	25	250	6.15
81020707	3/4"x3/4"	0.135	25	250	4.65
81020708	3/4"x1"	0.233	25	250	8.80
81020807	1"x3/4"	0.220	15	120	8.24
81020808	1"x1"	0.242	15	120	9.04
81020909	1-1/4"x1-1/4"	0.447	10	80	26.01

Adapter Pex x FPT



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
81030402	3/8"x1/8"	0.025	50	500	1.28
81030502	1/2"x1/8"	0.036	50	500	1.58
81030405	3/8"x1/2"	0.094	25	200	3.50
81030505	1/2"x1/2"	0.100	50	500	6.59
81030605	5/8"x1/2"	0.125	50	500	6.05
81030507	1/2"x3/4"	0.143	25	250	5.35
81030607	5/8"x3/4"	0.149	25	250	7.57
81030707	3/4"x3/4"	0.152	25	250	8.08
81030708	3/4"x1"	0.232	15	120	9.31
81030808	1"x1"	0.260	15	120	10.41
81030909	1-1/4"x1-1/4"	0.315	10	80	30.25

Clamps



Part #	Size	Inches		List Price
		Close	Open	
812-505	1/2"			0.61
812-507	3/4"			0.76

BRASS



PEX FITTINGS

Plug - Pex



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
810904	3/8"	0.016	25	2000	0.62
810905	1/2"	0.022	50	1500	1.22
810906	5/8"	0.035	50	1500	1.81
810907	3/4"	0.040	25	1000	1.86
810908	1"	0.091	15	120	3.39
810909	1-1/4"	0.162	15	120	6.93

Crimp Gauge



Part #	For Sizes	Quantity		List Price
		Inner	Master	
820507	3/8", 1/2" & 3/4"	1	1000	8.84
820508	1"	1	1000	8.84

Economy Crimp Tool



Part #	Size	Quantity		List Price
		Inner	Master	
830505	1/2"	1	10	31.18
830507	3/4"	1	10	37.47

Crimp Tool



Part #	Pkg	List Price
830605	1	125.00

BRASS FITTINGS

Swivel Adapter F(Straight Thread) Plastic/ Brass Nut x Pex



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
81130505(P)	1/2"x1/2"	0.160	25	250	2.62
81140705(B)	3/4"x1/2"	0.163	25	250	4.85
81140707(B)	3/4"x3/4"	0.165	25	250	7.55

Copper Water Heater Connector Pex x FIP



Part #	Size	Length	Quantity	List Price
HPX-518-718-12	3/4"	12"	25	19.52
HPX-518-718-15	3/4"	15"	25	21.18
HPX-518-718-18	3/4"	18"	25	23.31
HPX-518-718-24	3/4"	24"	25	28.10

Pex x Sweat Ball Valve



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
2060-05	1/2"	0.25	10	100	18.31
2030-07	3/4"	0.37	10	100	26.58

Plug Ball x Pex Valve



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
2040-05	1/2"	0.265	10	120	18.88
2040-07	3/4"	0.385	10	120	27.01
2040-08	1"	0.681	10	120	37.61

BRASS FITTINGS

Icemaker Valve Pex x Pex x 1/4" Compression Outlet



Part #	Size	Weight (approx.)	Quantity		List Price
			Inner	Master	
IMK-3	3/8"	0.145	1	50	13.48
IMK-4	1/2"	0.142	1	50	13.48

CHROME

PEX X COMPRESSION



Part #	Size	Pkg	List Price
930-441	1/2 PEX x 3/8 O.D. Comp	1	8.05

PEX X COMPRESSION



Part #	Size	Pkg	List Price
930-442	1/2 PEX x 3/8 O.D. Comp	1	5.05

1/4 TURN

SWEAT X COMPRESSION



Part #	Size	Pkg	List Price
930-671	1/2 SWT x 3/8 O.D. Comp	1	10.06

SWEAT X COMPRESSION



Part #	Size	Pkg	List Price
930-672	1/2 SWT x 3/8 O.D. Comp	1	10.06

PEX FITTINGS

Supply Tubes

PEX-C SUPPLY TUBES

Replaces
Polybutylene

CLOSET

LAVATORY



(PEX-C) has a cross-linked polyethylene electron beam technology. It features a one-piece construction and is flexible, easy to install water line connection, durable and attractive grey color. Approved under NSF Standard 14 & 6.

1/4" ID x 3/8" OD FOR LAVATORY / SINK / BASIN

Part #	Description	Box	List Price
932-250	12"	100	1.31
932-252	20"	100	1.49
932-253	30"	100	2.47
932-254	36"	100	3.14

FOR CLOSET/ TANK

932-135	12"	100	1.41
932-137	20"	100	1.49

**MIDLAND
METAL
FG. CO.**

PEX

Fittings & Accessories

BRASS

**MIDLAND
METAL**

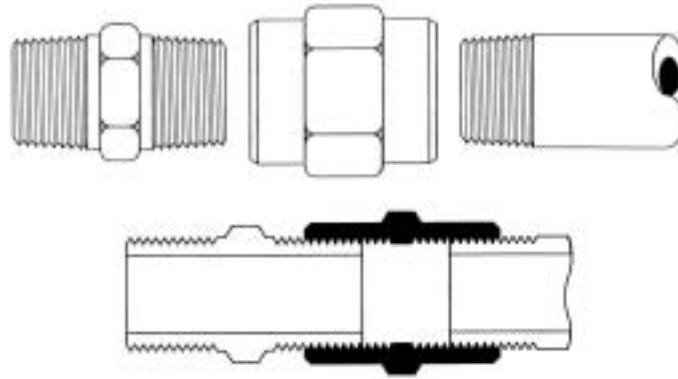
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Pipe



Pipe Size	1/16	1/8	1/4	3/8	1/2	3/4	1
Thread Size	1/16-27	1/8-27	1/4-18	3/8-18	1/2-14	3/4-14	1-11 1/2
Working Pressure	1200	1200	1200	1200	1200	1000	1000
Thread OD	1/4	3/8	1/2	5/8	3/4	1	1-1/4

•Typical Application

Grease, fuels, LP and Natural gas (available on special order), refrigeration, instrumentation and hydraulic systems.

•Pressure

Operating pressure up to 1200 PSI.

•Vibration

Fair resistance.

•Temperature Range

-65°F to +250°F (-53°C to +121°C).

•Material

CA360 Brass for Barstock fittings
CA377 Brass for forged fittings

•Used With

Brass, bronze, copper, steel, aluminum and iron pipe

•Tolerance

+/- .02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

•Conformance

Meets specifications and standards of ASA, ASME and SAE.

•“L” at the end of a Part# means Light Pattern

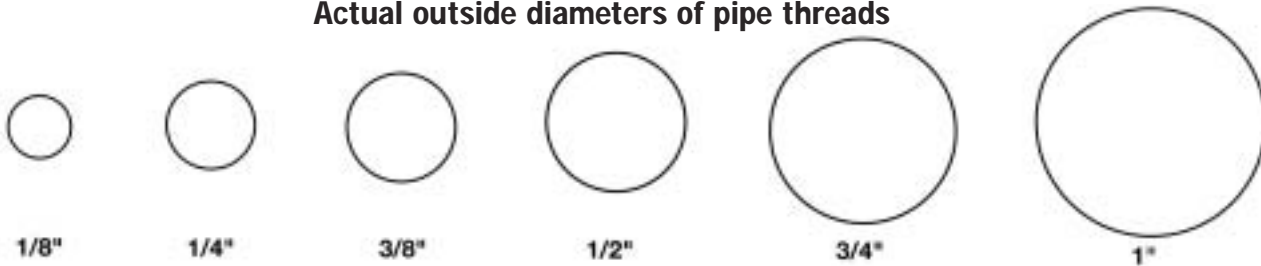
- these fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

•Assembly Instructions

- 1- Tighten approximately 2-1/2 turns past hand tight.
- 2- Fittings with Everseal tighten two turns past hand tight. Brittle materials require special cautions.

- for larger sizes see bronze fittings on page 200
- see page 140 for plastic pipe fittings.

Actual outside diameters of pipe threads

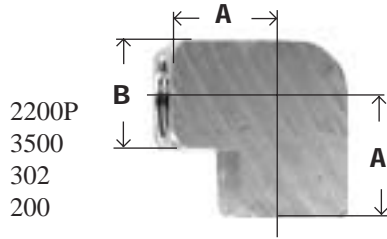


Actual Male Thread Profiles



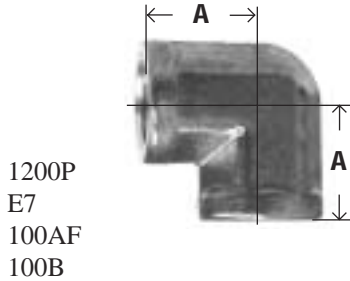
90° FEMALE ELBOW

SAE# 130238



Part #	Thread Size NPTF	A	B	Weight per piece Lbs	List Price
28-001	1/8"	0.55	0.56	0.09	2.26
28-002	1/4"	0.78	0.68	0.13	3.28
28-003	3/8"	0.84	0.81	0.16	4.16
28-004	1/2"	1.09	1.00	0.34	7.34
28-005	3/4"	1.16	1.25	0.60	21.55

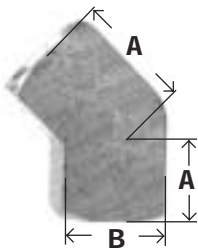
90° FORGED FEMALE ELBOW



Part #	Thread size NPTF	A	Body Width	Weight per piece. Lbs	List Price
28-009	1/8"	0.57	0.50	0.04	2.34
28-010	1/4"	0.70	0.68	0.10	3.89
28-011	3/8"	0.81	0.81	0.12	5.48
28-012	1/2"	1.00	1.00	0.23	7.55
28-013	3/4"	1.13	1.25	0.42	19.57
28-014	1/4" x 1/8"	0.72	0.69	0.12	6.61
28-015	3/8" x 1/4"	0.81	0.81	0.15	7.36
28-016	1/2" x 3/8"	1.00	1.00	0.28	15.39

45° FEMALE ELBOW

129
2201P
205
23355
45EZ
105
100-45A

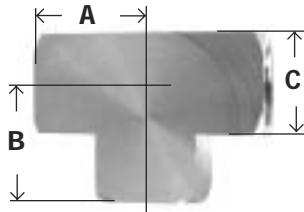


Part #	Thread size NPTF	A	B	Weight per piece. Lbs	List Price
28-018	1/8"	0.45	0.56	0.06	4.19
28-019	1/4"	0.66	0.68	0.12	7.79

UNION TEE

SAE# 130438

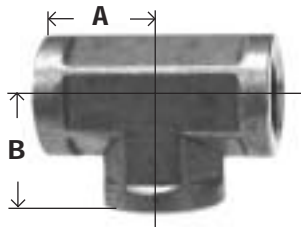
311
101A
322
2203P
3700
203



Part #	Thread size NPTF	A	B	C	Weight per piece. Lbs	List Price
28-024	1/8"	0.55	0.55	0.56	0.08	2.42
28-025	1/4"	0.78	0.78	0.68	0.17	4.22
28-026	3/8"	0.84	0.84	0.81	0.22	4.99
28-027	1/2"	1.09	1.09	1.00	0.43	7.24
28-028	3/4"	1.16	1.16	1.25	0.64	23.18

UNION FORGED TEE

1203P
LT7
101AF
101B



Part #	Thread size NPTF	A & B	Body Width	Weight per piece. Lbs	List Price
28-032	1/8"	0.56	0.50	0.06	2.95
28-033	1/4"	0.71	0.68	0.13	3.29
28-034	3/8"	0.81	0.81	0.16	6.26
28-035	1/2"	1.00	1.00	0.27	8.26
28-036	3/4"	1.16	1.25	0.53	23.81

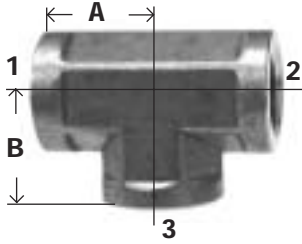


PIPE

BRASS FITTINGS

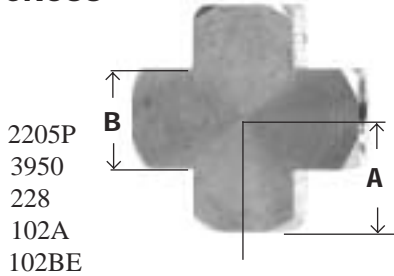
BRASS

REDUCING FORGED TEES



Part #	1 NPT	2 NPT	3 NPT	A & B	Body Width	Weight per piece. Lbs	List Price
28-029	1/8"	1/8"	1/4"	0.72	0.69	0.16	7.59
28-030	1/4"	1/4"	1/8"	0.72	0.69	0.14	8.54
28-031	1/4"	1/4"	3/8"	0.81	0.81	0.21	13.98
28-037	3/8"	3/8"	1/8"	0.81	0.81	0.19	13.89
28-038	3/8"	1/4"	3/8"	0.81	0.81	0.18	12.49
28-039	3/8"	3/8"	1/4"	0.81	0.81	0.18	11.66
28-046	1/2"	1/2"	3/8"	1.00	1.00	0.30	17.43
28-047	3/4"	1/2"	3/4"	1.16	1.25	0.56	30.55
28-048	3/4"	3/4"	1/2"	1.16	1.25	0.59	31.10

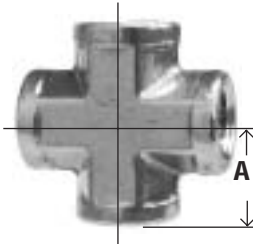
CROSS



- 2205P
- 3950
- 228
- 102A
- 102BE

Part #	Thread size NPTF	A	B	Weight per piece. Lbs	List Price
28-041	1/8"	0.55	0.56	0.10	6.69
28-042	1/4"	0.78	0.68	0.21	6.87
28-043	3/8"	0.84	0.81	0.25	9.58
28-044	1/2"	1.09	1.00	0.51	15.59
28-045	3/4"	1.16	1.25	0.75	26.68

FORGED CROSS

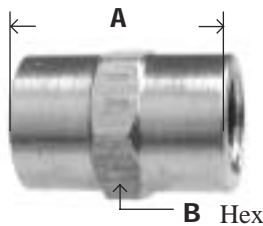


- C7
- 105
- 102AF
- 102B

Part #	Thread size NPTF	A	Body Width	Weight per piece. Lbs	List Price
28-049	1/8"	0.56	0.50	0.06	5.10
28-050	1/4"	0.72	0.69	0.15	7.15
28-051	3/8"	0.81	0.81	0.18	13.79
28-052	1/2"	1.00	1.00	0.34	19.11

COUPLING

SAE# 130238



- 207P
- 371
- 3300
- 103AH
- 103B

Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-058L	1/8"	0.75	0.50	0.02	0.75
28-058	1/8"	0.75	0.56	0.03	1.50
28-059L	1/4"	0.88	0.625	0.03	1.15
28-059	1/4"	1.12	0.75	0.09	2.20
28-060L	3/8"	1.00	0.81	0.06	1.74
28-060	3/8"	1.12	0.87	0.10	3.03
28-061L	1/2"	1.19	0.93	0.09	3.00
28-061	1/2"	1.50	1.06	0.19	4.49
28-062L	3/4"	1.19	1.25	0.18	5.13
28-062	3/4"	1.53	1.25	0.24	7.58

Dimension data can change without notice.
Please call us when dimensions are critical.

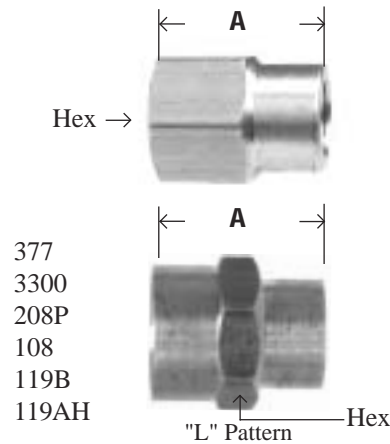


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REDUCING COUPLING

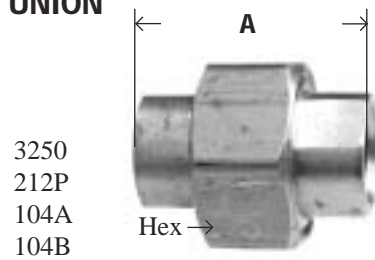
SAE# 130138



Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-181L	1/4" x 1/8"	0.83	0.62	0.04	1.47
28-181	1/4" x 1/8"	0.97	0.75	0.08	2.58
28-182	3/8" x 1/8"	0.94	0.87	0.10	2.71
28-183L	3/8" x 1/4"	1.00	0.81	0.06	2.66
28-183	3/8" x 1/4"	1.16	0.87	0.12	3.68
28-180*	1/2" x 1/8"	1.19	0.93	0.15	5.58
28-184L	1/2" x 1/4"	1.11	1.00	0.10	4.68
28-184	1/2" x 1/4"	1.28	1.06	0.20	6.03
28-185L	1/2" x 3/8"	1.19	0.93	0.10	3.59
28-185	1/2" x 3/8"	1.38	1.06	0.20	3.59
28-188*	3/4" x 3/8"	1.32	1.37	0.20	17.33
28-189*	3/4" x 1/2"	1.19	1.18	0.14	7.74

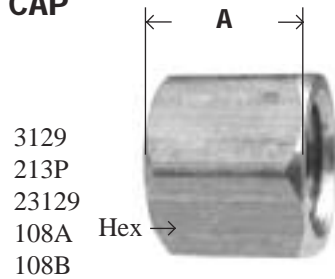
*Not to SAE specs

UNION



Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-067	1/8"	1.19	0.94	0.13	13.09
28-068	1/4"	1.31	1.06	0.18	13.61
28-069	3/8"	1.75	1.25	0.33	40.40
28-070	1/2"	1.79	1.56	0.50	25.58

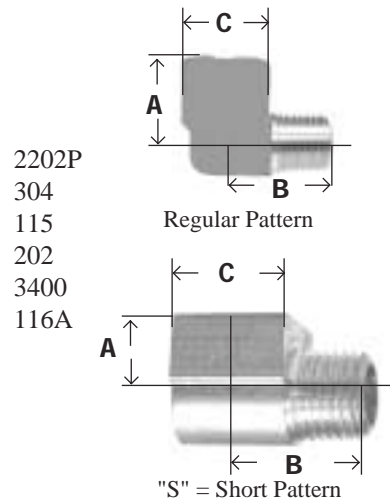
CAP



Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-075	1/8"	0.47	0.56	0.03	0.95
28-076	1/4"	0.60	0.68	0.04	1.15
28-077	3/8"	0.69	0.81	0.06	2.00
28-078	1/2"	0.78	0.93	0.08	2.72
28-079	3/4"	0.94	1.25	0.16	7.36

90° STREET ELBOW

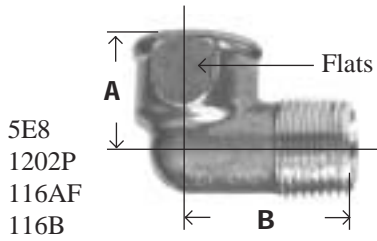
SAE# 130239



Part #	Thread size NPTF	A	B	C	Weight per piece. Lbs	List Price
28-156	1/8"	0.48	0.66	0.56	0.05	1.47
28-156S	1/8" short	0.34	0.57	0.50	0.03	1.16
28-157	1/4"	0.72	0.91	0.68	0.09	2.10
28-157S	1/4" short	0.45	0.78	0.68	0.07	1.79
28-158	3/8"	0.78	0.97	0.81	0.16	3.00
28-159	1/2"	1.03	1.25	1.00	0.33	6.51
28-160	3/4"	1.12	1.38	1.25	0.52	10.03

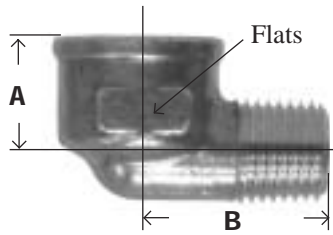


FORGED 90° STREET ELBOW



Part #	Thread size NPTF	A	B	Wrench Flats	Weight per piece. Lbs	List Price
28-165	1/8"	0.61	0.85	0.62	0.06	3.02
28-166	1/4"	0.50	0.86	0.72	0.08	3.08
28-167	3/8"	0.70	1.00	0.88	0.10	4.34
28-168	1/2"	0.96	1.43	1.00	0.20	6.44
28-169	3/4"	0.90	1.40	1.25	0.25	8.72

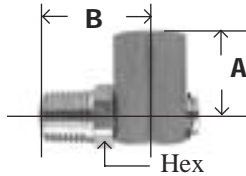
FORGED REDUCING 90° STREET ELBOW



Part #	Thread size NPTF FxM	A	B	Wrench flats	Weight per piece. Lbs	List Price
28-260	1/8" x 1/4"	0.50	0.87	0.71	0.08	4.75
28-261B*	1/4" x 1/8"	0.53	0.72	0.69	0.07	3.90
28-261	1/4" x 1/8"	0.50	0.81	0.72	0.06	4.70
28-262	1/4" x 3/8"	0.93	1.06	0.59	0.12	7.99
28-263	3/8" x 1/4"	0.58	0.94	0.81	0.07	6.08
28-264	3/8" x 1/2"	0.97	1.36	1.00	0.28	12.53
28-265	1/2" x 3/8"	0.96	1.37	1.00	0.22	11.15

*Barstock

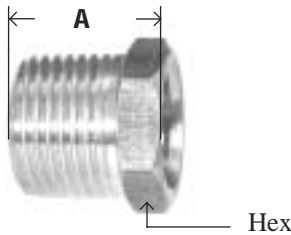
PIPE SWIVEL 90° STEET ELBOW



Part #	Thread size NPTF	A	B	Hex	Weight per piece. Lbs	List Price
28-430	1/4"	1.18	1.25	.625	0.22	26.60

HEX BUSHING

SAE# 130140

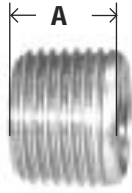


Part #	Thread size NPTF MxF	A	Hex	Weight per piece. Lbs	List Price
28-102L	1/4" x 1/8"	0.62	0.56	0.02	0.65
28-102	1/4" x 1/8"	0.75	0.56	0.04	0.80
28-103	3/8" x 1/8"	0.75	0.68	0.05	1.15
28-104L	3/8" x 1/4"	0.69	0.68	0.03	0.84
28-104	3/8" x 1/4"	0.75	0.75	0.05	1.12
28-105L	1/2" x 1/8"	0.81	0.81	0.08	1.89
28-105	1/2" x 1/8"	1.00	0.87	0.10	2.21
28-106L	1/2" x 1/4"	0.81	0.81	0.08	1.24
28-106	1/2" x 1/4"	1.00	0.87	0.11	2.16
28-107L	1/2" x 3/8"	0.81	0.81	0.05	1.18
28-107	1/2" x 3/8"	1.00	0.87	0.10	1.70
28-108	3/4" x 1/8"	0.94	1.06	0.20	4.97
28-109L	3/4" x 1/4"	0.94	1.06	0.18	3.54
28-110L	3/4" x 3/8"	0.94	1.06	0.15	3.31
28-111L	3/4" x 1/2"	0.94	1.06	0.11	2.55
28-111	3/4" x 1/2"	1.00	1.12	0.14	2.78
28-112	1" x 1/4"	1.15	1.37	0.32	6.25
28-113	1" x 3/8"	1.12	1.37	0.30	7.35
28-114	1" x 1/2"	1.31	1.44	0.29	5.71
28-115	1" x 3/4"	1.31	1.37	0.20	4.89

373
3220
209P
110A
110B

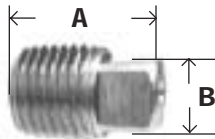


FACE BUSHING



Part #	Thread size NPTF MxF	A	Weight per piece. Lbs	List Price
28-121	1/4" x 1/8"	0.48	0.01	1.03
28-122	3/8" x 1/8"	0.50	0.03	1.85
28-116	3/8" x 1/4"	0.50	0.02	1.37
28-090	1/2" x 1/8"	0.56	0.06	3.07
28-128	1/2" x 1/4"	0.56	0.05	2.10
28-117	1/2" x 3/8"	0.56	0.03	1.80
28-129	3/4" x 1/4"	0.62	0.11	4.54
28-130	3/4" x 3/8"	0.62	0.08	4.26
28-118	3/4" x 1/2"	0.62	0.03	2.55

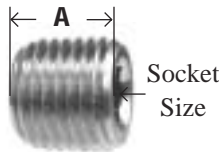
SQUARE HEAD PLUG



3151
211P
109A
109B

Part #	Thread size NPTF	A	B	Weight per piece. Lbs	List Price
28-084	1/8"	0.58	0.27	0.02	0.53
28-085	1/4"	0.70	0.37	0.03	0.77
28-086	3/8"	0.73	0.43	0.06	1.28
28-087	1/2"	1.07	0.55	0.13	2.13
28-088	3/4"	1.11	0.61	0.20	3.80
28-089	1"	1.33	0.81	0.35	9.74

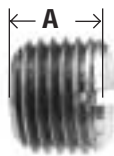
COUNTERSUNK HEX HEAD PLUG



3155
219P
109CS
118

Part #	Thread size NPTF	A	Socket size	Weight per piece. Lbs	List Price
28-092	1/16"	0.30	0.12	0.01	0.77
28-093	1/8"	0.30	0.18	0.01	0.57
28-094	1/4"	0.45	0.26	0.02	0.66
28-095	3/8"	0.45	0.31	0.03	0.73
28-096	1/2"	0.61	0.39	0.05	1.39
28-097	3/4"	0.62	0.52	0.10	3.33

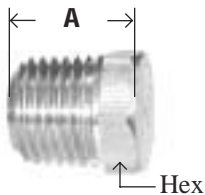
SLOTTED-HEAD PLUG



220P
3150
117A
117B

Part #	Thread size NPTF	A	Weight per piece. Lbs	List Price
28-174	1/8"	0.31	0.01	0.76
28-175	1/4"	0.42	0.02	0.96
28-176	3/8"	0.45	0.05	1.25

CORED HEX PLUGS

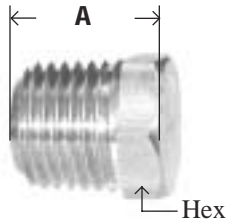


218P
3152
121A
103
121B
PPH
218P

Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-201	1/8"	0.55	0.43	0.01	0.68
28-202	1/4"	0.62	0.56	0.02	0.68
28-203	3/8"	0.72	0.68	0.06	1.45
28-204	1/2"	0.81	0.87	0.09	1.45
28-205	3/4"	0.94	1.06	0.16	3.50
28-206	1"	1.16	1.37	0.28	11.93



SOLID HEX HEAD PLUGS



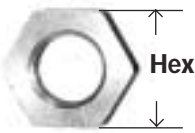
121AS

Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-201S	1/8"	0.55	0.43	0.02	1.18
28-202S	1/4"	0.62	0.56	0.05	1.38
28-203S	3/8"	0.66	0.68	0.07	2.37
28-204S	1/2"	0.81	0.87	0.12	3.46
28-205S	3/4"	0.92	1.06	0.24	5.27
28-206S	1"	1.00	1.31	0.38	11.93

LOCKNUT

- Jam Nuts
- Straight pipe thread

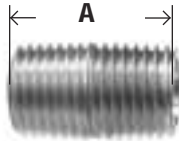
210P
21102
111A
111B



Part #	Thread size NPSM	Hex	Thickness	Weight per piece. Lbs	List Price
28-123	1/8"	0.68	0.19	0.02	0.89
28-124	1/4"	0.87	0.25	0.04	1.51
28-125	3/8"	1.00	0.31	0.04	1.42
28-126	1/2"	1.125	0.25	0.04	2.89

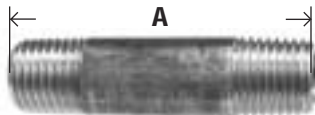
CLOSE NIPPLE

165
215PN
3326
112A
112B



Part #	Thread size NPTF	A	Weight per piece. Lbs	List Price
28-131	1/8"	0.75	0.01	0.56
28-132	1/4"	0.88	0.02	0.78
28-133	3/8"	1.00	0.05	1.01
28-134	1/2"	1.12	0.06	1.93
28-135	3/4"	1.31	0.11	2.00

LONG NIPPLE



113B
113A
166
3327
3331
215PNL

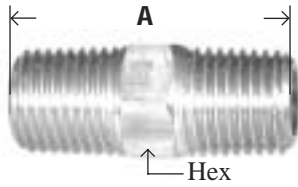
Part #	Thread size NPTF	A Length	Weight per piece. Lbs	List Price
28-140	1/8"	1.50	0.03	1.00
28-141	1/8"	2.00	0.04	1.45
28-142	1/8"	2.50	0.06	2.05
28-143	1/8"	3.00	0.06	2.23
28-144	1/4"	1.50	0.03	1.34
28-145	1/4"	2.00	0.05	1.64
28-146	1/4"	2.50	0.08	2.16
28-147	1/4"	3.00	0.10	3.00
28-148	3/8"	1.50	0.06	1.73
28-149	3/8"	2.00	0.10	2.50
28-150	3/8"	2.50	0.10	3.79
28-151	3/8"	3.00	0.13	4.13
28-152	1/2"	1.50	0.08	2.49
28-153	1/2"	2.00	0.12	3.50
28-154	1/2"	2.50	0.16	4.94
28-155	1/2"	3.00	0.20	6.42

Dimension data can change without notice.
Please call us when dimensions are critical.



HEX NIPPLE

SAE# 130137

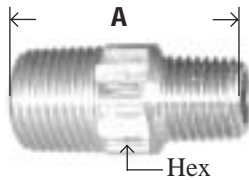


- 216P
- 3325
- 379
- 122AH
- 122B

Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-211L	1/8"	0.91	0.43	0.02	0.73
28-211	1/8"	0.97	0.43	0.03	0.80
28-212L	1/4"	1.12	0.56	0.04	1.00
28-212	1/4"	1.38	0.56	0.06	1.25
28-213L	3/8"	1.25	0.68	0.07	1.58
28-213	3/8"	1.41	0.68	0.07	2.07
28-214L	1/2"	1.50	0.87	0.11	2.30
28-214	1/2"	1.81	0.87	0.17	3.39
28-215	3/4"	1.96	1.125	0.23	3.69
28-216	1"	2.30	1.37	0.43	9.98

REDUCING HEX NIPPLE

SAE# 130137

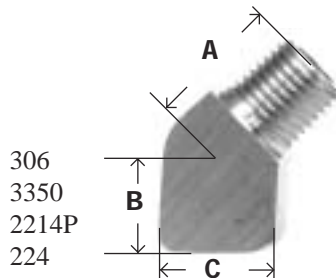


- 216P
- 3325
- 379
- 122AH
- 122B

Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-220L	1/4" x 1/8"	1.00	0.56	0.04	1.00
28-220	1/4" x 1/8"	1.19	0.56	0.04	1.62
28-221L	3/8" x 1/8"	1.11	0.68	0.06	2.79
28-221	3/8" x 1/8"	1.22	0.68	0.07	3.42
28-222L	3/8" x 1/4"	1.19	0.68	0.06	1.46
28-222	3/8" x 1/4"	1.41	0.68	0.07	2.31
28-223L	1/2" x 1/4"	1.34	0.87	0.09	2.70
28-223	1/2" x 1/4"	1.62	0.87	0.12	4.32
28-224L	1/2" x 3/8"	1.41	0.87	0.11	2.22
28-224	1/2" x 3/8"	1.62	0.87	0.12	2.69
28-225	3/4" x 1/2"	1.50	1.06	0.15	4.89

45° STREET ELBOW

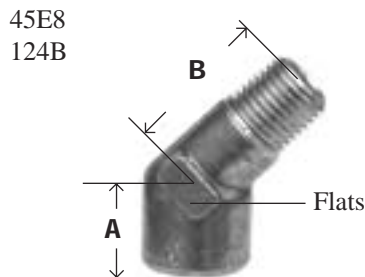
SAE# 130339



- 306
- 3350
- 2214P
- 224

Part #	Thread size NPTF	B	A	C	Weight per piece. Lbs	List Price
28-230	1/8"	0.38	0.50	0.56	0.03	2.18
28-231	1/4"	0.56	0.72	0.68	0.09	3.08
28-232	3/8"	0.56	0.78	0.81	0.12	3.61
28-233	1/2"	0.75	1.00	1.00	0.20	5.20
28-234	3/4"	0.75	1.06	1.25	0.34	20.43

45° FORGED STREET ELBOW



- 45E8
- 124B

Part #	Thread size NPTF	A	B	Wrench flats	Weight per piece. Lbs	List Price
28-238	1/8"	0.63	0.81	0.56	0.05	3.61
28-239	1/4"	0.63	1.06	0.81	0.11	5.02
28-240	3/8"	0.72	1.06	0.93	0.17	7.42



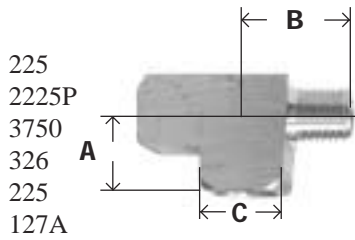
PIPE

BRASS FITTINGS

BRASS

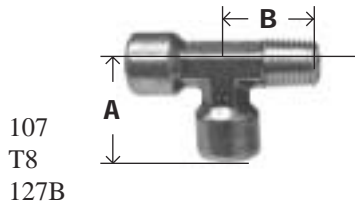
STREET TEE

SAE# 130424



Part #	Thread size NPTF	A	B	C	Weight per piece. Lbs	List Price
28-245	1/8"	0.55	0.66	0.56	0.08	2.46
28-246	1/4"	0.78	0.91	0.68	0.17	4.10
28-247	3/8"	0.84	0.97	0.81	0.22	4.36
28-248	1/2"	1.09	1.25	1.00	0.40	8.61
28-249	3/4"	1.16	1.39	1.25	0.60	21.32

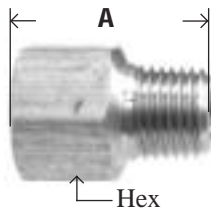
FORGED STREET TEE



Part #	Thread size NPTF	A	B	Body Width	Weight per piece. Lbs	List Price
28-253	1/8"	0.56	0.75	0.50	0.05	3.36
28-254	1/4"	1.03	0.11	0.46	0.13	3.79
28-255	3/8"	1.19	1.09	0.68	0.24	9.08
28-256	1/2"	1.52	1.40	0.88	0.45	20.68
28-257	3/4"	1.34	1.73	1.25	0.65	49.67

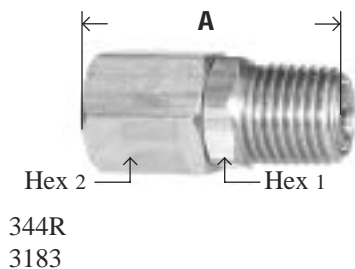
EXTENDER ADAPTER

SAE# 130139



Part #	Thread size NPTF FxM	A	Hex	Weight per piece. Lbs	List Price
28-190L	1/8" x 1/8"	0.83	0.50	0.03	1.33
28-190	1/8" x 1/8"	0.88	0.56	0.04	1.07
28-191L	1/4" x 1/8"	0.94	0.62	0.04	1.30
28-191	1/4" x 1/8"	1.06	0.75	0.07	1.97
28-192L	1/4" x 1/4"	1.00	0.62	0.04	1.32
28-192	1/4" x 1/4"	1.25	0.75	0.07	3.29
28-198	3/8" x 1/8"	1.00	0.81	0.06	3.60
28-193L	3/8" x 1/4"	1.12	0.81	0.08	1.48
28-193	3/8" x 1/4"	1.25	0.87	0.09	2.62
28-194L	3/8" x 3/8"	1.24	0.81	0.10	2.58
28-194	3/8" x 3/8"	1.25	0.87	0.11	3.18
28-199	1/2" x 1/4"	1.46	1.06	0.08	3.83
28-195L	1/2" x 3/8"	1.19	0.93	0.09	3.24
28-195	1/2" x 3/8"	1.47	1.06	0.18	4.38
28-196	1/2" x 1/2"	1.66	1.06	0.12	4.66
28-207	3/4" x 3/8"	1.59	1.25	0.26	15.94
28-208	3/4" x 1/2"	1.69	1.37	0.14	4.70
28-209	3/4" x 3/4"	1.69	1.37	0.34	15.07

PIPE SWIVEL ADAPTER



Part #	Thread size NPTF FxM	A	Hex 1	Hex 2	Weight per piece. Lbs	List Price
28-425	1/4"	1.34	0.56	0.62	0.06	12.25
28-426	3/8"	1.36	0.68	0.75	0.08	27.93

SWIVEL FITTING

- 1/4" Basic size
- Industrial Interchange Plug
- 360° Turning
- Swivels

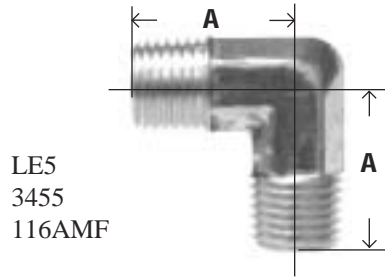


Male NPT x Female NPT

Part #	Size	List Price
320-061	1/4	16.42

MIDLAND METAL

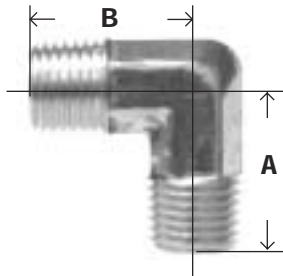
FORGED 90° MALE ELBOW



LE5
3455
116AMF

Part #	Thread size NPTF	A	Body Width	Weight per piece. Lbs	List Price
28-266	1/8"	0.79	0.38	0.04	3.03
28-267	1/4"	0.87	0.45	0.06	3.16
28-268	3/8"	1.00	0.59	0.12	5.56
28-269	1/2"	1.38	0.78	0.21	7.46

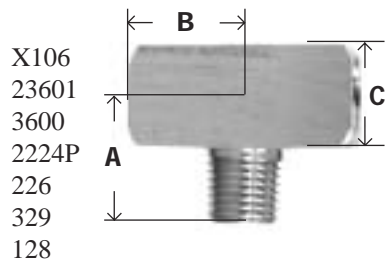
FORGED 90° MALE REDUCING ELBOW



Part #	Thread size NPTF	A	B	Body Width	Weight per piece. Lbs	List Price
28-274	1/4" x 1/8"	0.88	0.78	0.47	0.06	5.84
28-275	3/8" x 1/4"	0.90	0.90	0.46	0.06	6.17
28-276	1/2" x 3/8"	1.12	1.00	0.59	0.12	8.10

MALE BRANCH TEE

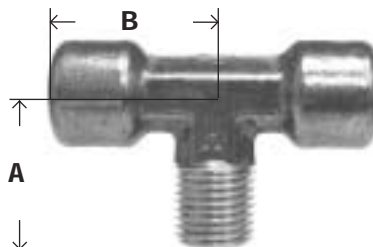
SAE# 130425



X106
23601
3600
2224P
226
329
128

Part #	Thread size NPTF	A	B	C	Weight per piece. Lbs	List Price
28-281	1/8"	0.66	0.55	0.56	0.08	3.36
28-282	1/4"	0.91	0.78	0.68	0.15	5.00
28-283	3/8"	0.97	0.84	0.81	0.22	4.94
28-284	1/2"	1.25	1.09	1.00	0.40	14.30
28-285	3/4"	1.38	1.16	1.25	0.62	24.62

FORGED MALE BRANCH TEE



Part #	Thread size NPTF	A	B	Body Width	Weight per piece. Lbs	List Price
28-281F	1/8"	0.75	0.56	0.50	0.06	4.26
28-282F	1/4"	1.00	1.03	0.46	0.12	7.14

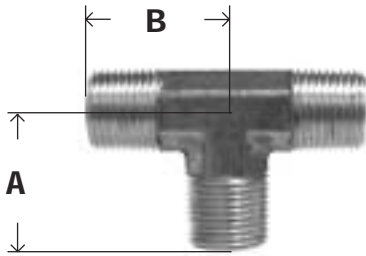
"DON'T YOU WISH THERE WAS A KNOB ON THE TV TO TURN UP THE INTELLIGENCE? THERE'S ONE MARKED 'BRIGHTNESS' BUT IT DOESN'T WORK"

GALLAGHER



BRASS

FORGED ALL MALE TEE

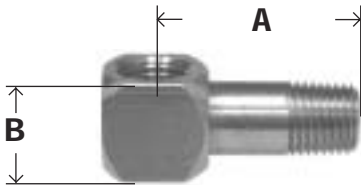


Part #	Thread size NPTF	A	B	Body Width	Weight per piece. Lbs	List Price
28-290	1/8"	0.75	0.75	0.43	0.06	6.22
28-291	1/4"	0.86	0.86	0.43	0.08	4.88
28-292	3/8"	1.09	1.09	0.60	0.16	10.84
28-293	1/2"	1.22	1.22	0.68	0.22	9.84
28-294	3/4"	1.43	1.43	0.87	0.38	31.15

T12
M101

LONG STREET ELLS

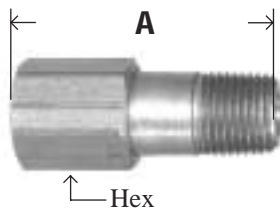
D.O.T. Approved



Part #	Thread size NPTF	A	B	Weight per piece. Lbs	List Price
28-440	1/8"	1-3/16"	0.50	0.06	7.00
28-441	1/8"	1-7/16"	0.50	0.06	7.78
28-442	1/8"	1-11/16"	0.50	0.06	8.53
28-443	1/8"	1-7/8"	0.50	0.16	8.06
28-328	1/4"	1-3/16"	0.75	0.12	9.83
28-329	1/4"	1-7/16"	0.75	0.14	9.83
28-330	1/4"	1-11/16"	0.75	0.15	10.25
28-332	1/4"	2-1/4"	0.75	0.17	14.78
28-333	3/8"	1-3/4"	0.87	0.22	17.39

LONG EXTENSION ADAPTERS

D.O.T. Approved



Part #	Thread size NPTF	A	Hex	Weight per piece. Lbs	List Price
28-335	1/8"	1-1/4"	0.50	0.04	6.08
28-336	1/8"	1-3/4"	0.50	0.05	7.56
28-337	1/8"	3"	0.50	0.09	10.80
28-338	1/4"	1-9/16"	0.62	0.07	5.87
28-339	1/4"	1-13/16"	0.62	0.08	6.08
28-340	1/4"	2-1/16"	0.62	0.10	7.14

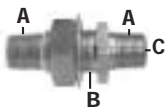
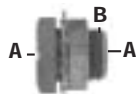
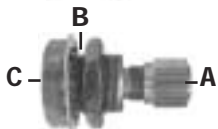
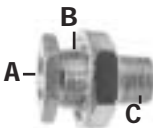
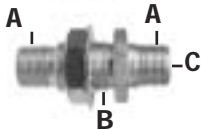
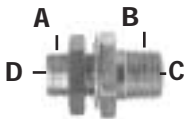
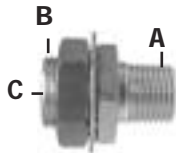
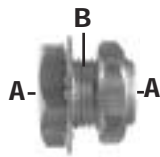
Dimension data can change without notice. Please call us when dimensions are critical.

Whether you believe you can or you can't, you are right.

- Henry Ford



BULKHEAD / ANCHOR / FRAME COUPLINGS



Part #	Terminal Bolts/ Frame			D	Length (in.)	List Price
	A	B	C			

28-300	1/8-27 NPTF	5/8-18 UNS	----	----	1-1/2	9.44
28-303	3/8-18 NPTF	1-14 UNS	----	----	1-5/16	7.43
28-301	1/4-18 NPTF	3/4-16 UNS	----	----	15/16	5.71
28-302	1/4-18 NPTF	3/4-16 UNS	----	----	1-1/2	6.25
28-315	1/4-18 NPTF	3/4-16 UNS	----	----	1-1/2	6.76
		*(same as 28-302 except with larger mounting nut)				
28-304	1/2-14 NPTF	1-1/8-14 UNS	----	----	1-1/2	12.26

28-317	1/2-14 NPTF	1-14 UNS	1/4-18 NPTF	----	2-1/8	30.58
28-318	1/2-14 NPTF	1-14 UNS	3/8-18 NPTF	----	1-11/16	9.11
28-319	1/2-14 NPTF	1-14 UNS	3/8-18 NPTF	----	1-29/32	6.51

28-325	1/2-14 NPTF	3/4 - 16 UNS	1/4-18 NPTF	1/4-18 NPTF	1-11/16	25.04
28-345	1/2-14 NPTF	3/4 - 16 UNS	1/4-18 NPTF	----	2-5/32	18.74

28-313	1/2-14 NPTF	1-14 UNS	1/4-18 NPTF	----	2-7/8	22.64
28-314*	1/2-14 NPTF	1-14 UNS	1/4-18 NPTF	----	2-7/8	23.02
		*(same as 28-313 except with larger mounting nut)				

28-346	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	----	1-7/8	12.43
28-347	1/2-14 NPTF	1-14 UNS	1/2-14 NPTF	----	2-3/8	15.29

28-321	1/2-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	----	1-5/16	10.27
28-322	3/8-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	----	1-3/8	9.17

28-348	3/8-18 NPTF	7/8-20 UNCF	3/8-18 NPTF	----	2-5/16	20.21
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STEEL BULKHEAD FITTINGS

28-306	1/4-18 NPTF	3/4 - 16 UNS		----	0.94	10.36
28-307	1/4-18 NPTF	3/4 - 16 UNS		----	1.50	11.10

28-309	1/2-14 NPTF	3/4 - UNS	1/4-18 NPTF	1/4-18 NPTF	2.16	17.27
28-310	1/2-14 NPTF	3/4 - UNS	1/4-18 NPTF	----	2.53	30.14

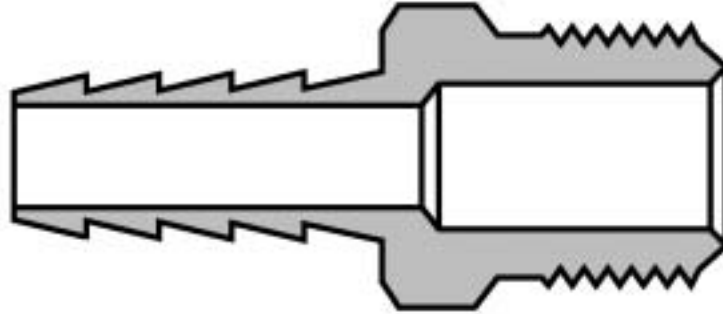
28-312	1/2-14 NPTF	1-14 UNS	1/4-18 NPTF	----	2.94	25.21
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MARINE BULKHEAD FITTINGS

46-540	5/16 Hose ID	----	----	----	2.37	12.20
46-541	3/8 Hose ID	----	----	----	2.37	12.20



Hose Barb Fittings



•Temperature and Working Pressure Ranges

From -40°F to + 160°F at 150 PSI maximum.

• Tolerance

+/- .02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

•Material

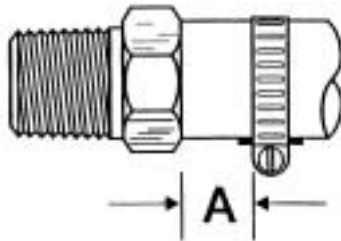
CA360 Brass for Barstock fittings.
CA377 Brass for Forged fittings.

Note: These fittings are intended for use with hose clamp, similar type clamp or a crimped ferrule.

• Assembly Instructions

- 1- Cut hose cleanly and squarely to length.
- 2- Slide clamp on hose.
- 3- Lubricate hose. Push hose on fitting until hose bottoms against stop ring or hex.
- 4- Position hose clamp as shown below and secure with a screwdriver or wrench. Maintain “A” dimension noted below for proper clamp positioning.

See page 233-247 for hose clamps
See page 224-225 for plastic hose barb fittings
See page 25 for stainless steel hose barbs

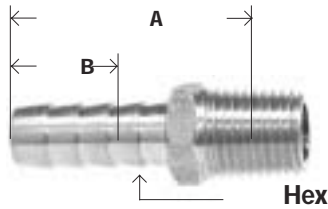


Hose Size	A
3/16"	1/4"
1/4"	1/4"
5/16"	1/4"
3/8"	1/8"
1/2"	1/8"
5/8"	1/8"
3/4"	1/8"

Actual Profile of Hose Barbs



RIGID MALE ADAPTER



PGH
101
102
201A
125HBL
105B-1
KF-PS
MPB

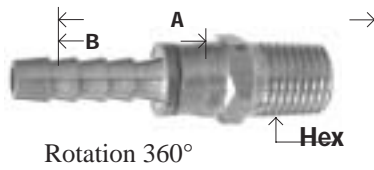
Part #	Hose I.D. x Male NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
32-300	1/8" x 1/16"	1.13	0.60	0.31	0.02	12.53
32-001	1/8" x 1/8"	1.19	0.69	0.43	0.02	1.70
32-027	1/8" x 1/4"	1.16	0.46	0.56	0.02	1.73
32-002	3/16" x 1/8"	1.19	0.75	0.43	0.02	0.80
32-003	3/16" x 1/4"	1.37	0.69	0.56	0.04	1.83
32-301	1/4" x 1/16"	1.44	0.88	0.43	0.02	4.46
32-004	1/4" x 1/8"	1.47	0.97	0.43	0.02	1.28
32-005	1/4" x 1/4"	1.72	0.97	0.56	0.04	1.28
32-006	1/4" x 3/8"	1.72	0.97	0.68	0.05	1.28
32-007	1/4" x 1/2"	1.72	0.81	0.87	0.10	2.27
32-008	5/16" x 1/8"	1.47	0.97	0.43	0.02	1.51
32-009	5/16" x 1/4"	1.72	0.97	0.56	0.04	1.70
32-010	5/16" x 3/8"	1.76	0.97	0.68	0.06	2.28
32-390	5/16" x 1/2"	1.88	0.95	0.87	0.10	3.09
32-011	3/8" x 1/8"	1.53	0.97	0.56	0.03	1.19
32-012	3/8" x 1/4"	1.75	0.97	0.56	0.05	1.22
32-013	3/8" x 3/8"	1.72	0.96	0.68	0.06	2.00
32-014	3/8" x 1/2"	1.97	0.97	0.87	0.09	3.13
32-026	3/8" x 3/4"	1.97	0.97	1.06	0.16	5.36
32-333	7/16" x 1/4"	1.76	0.97	0.56	0.04	3.48
32-302	1/2" x 1/8"	1.57	0.95	0.56	0.06	1.37
32-015	1/2" x 1/4"	1.72	0.97	0.56	0.04	1.73
32-016	1/2" x 3/8"	1.76	0.97	0.68	0.07	1.93
32-017	1/2" x 1/2"	1.87	0.96	0.87	0.11	2.53
32-018	1/2" x 3/4"	1.94	0.97	1.06	0.16	2.89
32-303	1/2" x 1"	2.31	0.99	1.37	0.33	9.11
32-304	5/8" x 1/4"	1.67	0.92	0.68	0.06	4.51
32-019	5/8" x 3/8"	1.76	0.97	0.68	0.08	2.17
32-020	5/8" x 1/2"	1.87	0.96	0.87	0.11	3.36
32-021	5/8" x 3/4"	1.87	0.96	1.06	0.14	5.54
32-305	5/8" x 1"	2.31	0.96	1.37	0.36	6.56
32-306	3/4" x 3/8"	1.65	0.87	0.81	0.12	5.27
32-022	3/4" x 1/2"	1.87	0.96	0.87	0.14	3.47
32-023	3/4" x 3/4"	1.87	0.96	1.06	0.15	3.89
32-316	3/4" x 1"	2.55	1.15	1.37	0.38	9.93
32-307	1" x 1/2"	1.80	0.87	1.06	0.24	5.92
32-024	1" x 3/4"	2.19	1.19	1.06	0.32	5.26
32-025	1" x 1"	2.48	1.19	1.37	0.39	5.13
32-028	1-1/4" x 1"	2.55	1.19	1.37	0.46	11.26

* See Bronze insert fittings on page 268 for larger sizes.

Dimension data can change without notice.
Please call us when dimensions are critical.



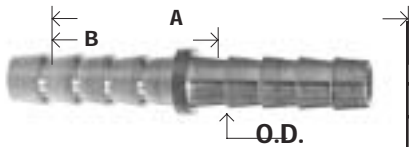
SWIVEL MALE ADAPTER



SMS
103

Part #	Hose I.D. x Male NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
32-200	1/4" x 1/4"	2.12	0.97	0.56	0.04	3.55
32-201	3/8" x 1/4"	2.12	0.97	0.56	0.07	4.77
32-202	3/8" x 3/8"	2.12	0.97	0.68	0.08	3.72
32-355	1/2" x 3/8"	2.12	0.97	0.68	0.10	5.89
32-356	1/2" x 1/2"	2.33	0.97	0.87	0.14	5.44
32-357	3/4" x 3/4"	2.33	0.97	1.06	0.20	9.58

MENDER/ SPLICER

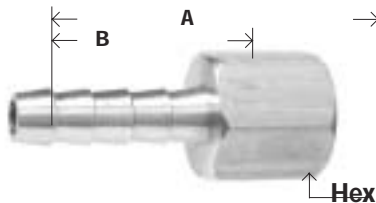


MSB
122HBL
HM
129
178
73
108

Part #	Hose I.D. x Hose I.D.	A	B	O.D.	Weight per Piece. Lbs	List Price
32-091	1/8"	0.98	0.45	0.31	0.01	1.93
32-092	3/16"	1.62	0.77	0.36	0.02	1.27
32-093	1/4"	2.00	0.96	0.37	0.02	1.07
32-094	5/16"	2.00	0.96	0.39	0.02	1.16
32-095	3/8"	2.00	0.94	0.51	0.04	1.00
32-096	1/2"	2.00	0.96	0.62	0.06	1.56
32-097	5/8"	2.05	0.96	0.75	0.08	2.39
32-098	3/4"	2.50	1.15	0.87	0.10	3.64

See Bronze insert fittings on page 268 for larger sizes.
See Hose Clamps on page 233-247 .

RIGID FEMALE ADAPTER



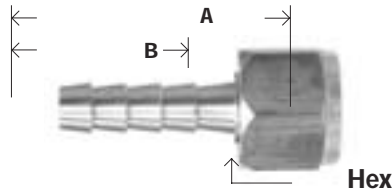
209A FPB
128 105B-2
29A KF-RS
29F 104
126HB
126

Part #	Hose I.D. x Female NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
32-050	1/8" x 1/8"	0.96	0.46	0.50	0.02	1.58
32-317	1/8" x 1/4"	1.15	0.46	0.62	0.04	3.22
32-051	3/16" x 1/8"	1.10	0.68	0.50	0.02	2.29
32-062	3/16" x 1/4"	1.44	0.75	0.62	0.04	2.90
32-052	1/4" x 1/8"	1.35	0.93	0.50	0.02	1.37
32-053	1/4" x 1/4"	1.60	0.97	0.62	0.06	1.54
32-054	1/4" x 3/8"	1.65	1.03	0.75	0.04	2.46
32-055	5/16" x 1/8"	1.47	0.97	0.56	0.04	2.21
32-056	5/16" x 1/4"	1.66	0.97	0.62	0.04	1.94
32-318	5/16" x 3/8"	1.66	0.97	0.75	0.06	3.69
32-320	5/16" x 1/2"	1.67	0.96	0.93	0.08	2.33
32-057	3/8" x 1/8"	1.47	0.97	0.56	0.04	1.76
32-058	3/8" x 1/4"	1.61	0.97	0.62	0.06	1.59
32-059	3/8" x 3/8"	1.63	1.00	0.81	0.08	1.78
32-063	3/8" x 1/2"	1.72	0.94	0.93	0.12	3.41
32-064	1/2" x 1/4"	1.66	0.69	0.62	0.08	1.80
32-060	1/2" x 3/8"	1.66	0.97	0.75	0.08	2.93
32-061	1/2" x 1/2"	1.76	0.96	0.93	0.12	3.34
32-065	3/4" x 3/4"	2.19	1.21	1.18	0.22	8.25
32-049	1" x 3/4"	2.19	1.19	1.18	0.26	13.28

Dimension data can change without notice.
Please call us when dimensions are critical.



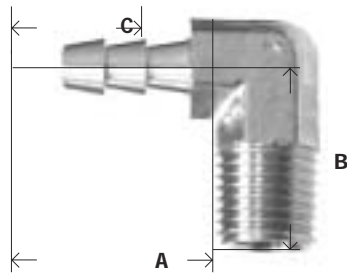
SWIVEL FEMALE ADAPTER - With Gasket



- 130
- 126
- 29FSG
- KF-RN
- NPSM Gasket

Part #	Hose I.D. x Female NPSM	A	B	Hex	Weight per Piece. Lbs	List Price
32-120	1/4" x 1/8"	1.41	0.97	0.50	0.02	6.10
32-121	1/4" x 1/4"	1.50	0.97	0.62	0.02	2.73
32-129	1/4" x 3/8"	1.63	0.97	0.75	0.04	6.22
32-130	5/16" x 1/4"	1.50	0.97	0.62	0.04	4.66
32-122	3/8" x 1/4"	1.54	1.00	0.62	0.06	3.82
32-123	3/8" x 3/8"	1.60	0.97	0.75	0.06	5.36
32-354	3/8" x 1/2"	1.66	0.97	0.93	0.10	7.54
32-124	1/2" x 3/8"	1.60	0.97	0.75	0.08	6.17
32-125	1/2" x 1/2"	1.66	0.97	0.93	0.12	6.84
32-117	1/2" x 3/4"	1.82	1.19	1.18	0.16	7.69
32-118	5/8" x 3/4"	1.82	1.19	1.18	0.18	8.47
32-119	3/4" x 3/4"	1.82	1.19	1.18	0.14	6.04

FORGED HOSE BARB 90° ELBOW



- 129
- HBE1
- KF-PS90
- HE-1
- 29E
- 139

Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Weight per Piece. Lbs	List Price
32-308	3/16" x 1/8"	0.95	0.70	0.66	0.37	0.02	2.42
32-391	3/16" x 1/4"	1.00	0.84	0.63	0.46	0.10	3.68
32-038	1/4" x 1/8"	1.01	0.81	0.71	0.47	0.06	2.50
32-039	1/4" x 1/4"	1.01	0.87	0.63	0.47	0.06	2.51
32-309*	1/4" x 3/8"	1.08	0.97	0.73	0.69	0.12	5.07
32-036	5/16" x 1/8"	1.01	0.81	0.63	0.47	0.04	3.05
32-040	5/16" x 1/4"	1.01	0.87	0.63	0.47	0.06	2.96
32-310	5/16" x 3/8"	1.06	0.94	0.63	0.50	0.06	6.25
32-046	3/8" x 1/8"	1.01	0.81	0.63	0.47	0.06	2.95
32-041	3/8" x 1/4"	1.02	0.88	0.65	0.47	0.06	2.59
32-042	3/8" x 3/8"	1.09	0.93	0.68	0.50	0.08	2.95
32-047	3/8" x 1/2"	1.11	1.09	0.63	0.59	0.10	3.45
32-048	1/2" x 1/4"	1.06	1.00	0.68	0.59	0.10	3.99
32-043	1/2" x 3/8"	1.06	1.09	0.69	0.59	0.10	3.89
32-311	1/2" x 1/2"	1.31	1.19	0.87	0.87	0.22	5.88
32-044	5/8" x 3/8"	1.12	1.06	0.61	0.56	0.12	3.70
32-045	5/8" x 1/2"	1.12	1.12	0.66	0.59	0.14	4.53
32-312	5/8" x 3/4"	1.46	1.26	0.93	1.06	0.32	6.69
32-313	3/4" x 1/2"	1.31	1.28	0.87	0.85	0.22	12.78
32-314	3/4" x 3/4"	1.46	1.26	0.91	1.06	0.32	13.15
32-330**	3/4" x 1"	1.57	1.64	0.90	1.34	0.64	17.71
32-315	1" x 3/4"	1.48	1.28	0.91	1.06	0.32	21.01

* Barstock
 ** Brazed

See Bronze insert fittings on page 268 for larger sizes.

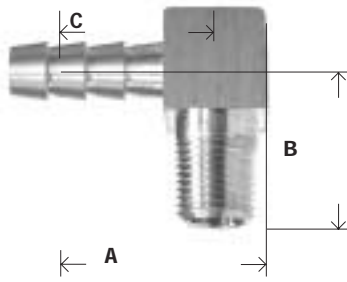
There are two kinds of people in this world; those who think there are two kinds of people and those who are smart enough to know better.

Dimension data can change without notice. Please call us when dimensions are critical.

- Tom Robbins



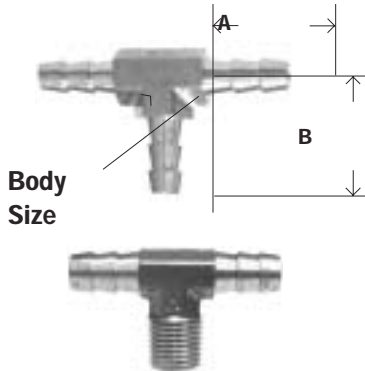
BARSTOCK HOSE BARB 90° ELBOW



Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Weight per Piece. Lbs	List Price
32-308B	3/16" X 1/8"	0.97	0.72	0.75	0.43	0.04	5.52
32-038B	1/4" X 1/8"	1.00	0.75	0.75	0.50	0.02	4.85
32-039B	1/4" X 1/4"	1.02	0.91	0.74	0.56	0.04	6.21
32-041B	3/8" X 1/4"	1.32	0.89	0.97	0.58	0.08	6.99
32-042B	3/8" X 3/8"	1.50	1.06	0.97	0.75	0.14	11.06
32-043B	1/2" X 3/8"	1.53	1.07	0.97	0.72	0.16	10.51

129HB

HOSE BARB TEES

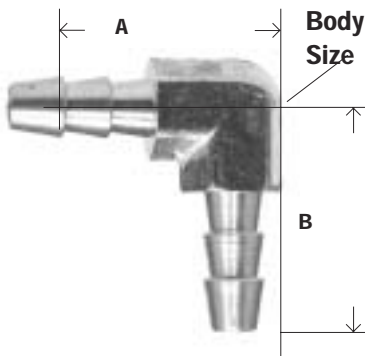


32-128

Part #	Hose Barb Size	A	B	Body Size	Weight per Piece. Lbs	List Price
32-367	1/8"	0.84	0.83	0.25	0.02	2.90
32-365	1/4"	1.00	1.00	0.44	0.06	3.53
32-366	5/16"	1.00	1.00	0.44	0.06	3.89
32-126	3/8"	1.01	1.01	0.43	0.06	3.25
32-400	1/2"	1.02	1.00	0.43	0.08	3.72
32-128	3/8" HB x 1/4" MIP	1.00	0.94	0.43	0.06	8.15

* See Bronze insert fittings on page 268 for larger sizes.

90° HOSE BARB ELBOW



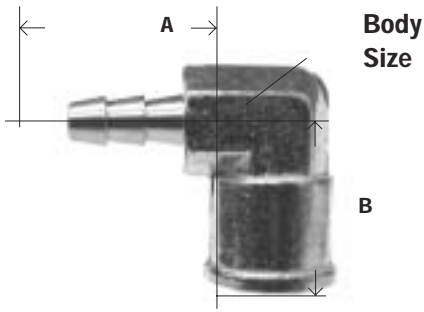
Part #	Hose I.D. x Hose I.D.	A	B	Body Size	Weight per Piece. Lbs	List Price
32-412	1/4" x 1/8"	1.02	1.02	0.44	0.04	2.43
32-413	1/4" x 1/4"	1.01	1.01	0.44	0.04	3.02
32-414	3/8" x 1/8"	1.01	1.01	0.44	0.04	3.22
32-415	3/8" x 1/4"	1.00	1.00	0.44	0.04	3.23
32-416	3/8" x 3/8"	1.02	1.02	0.44	0.04	2.82
32-417	3/8" x 1/2"	1.24	1.10	0.50	0.06	3.97
32-418	1/2" x 1/4"	1.24	1.08	0.50	0.06	4.12
32-419	1/2" x 3/8"	1.22	1.09	0.50	0.06	4.12
32-420	1/2" x 1/2"	1.24	1.24	0.50	0.06	4.12

I believe that every right implies a responsibility;
every opportunity an obligation; every possession,
a duty.

- John D. Rockefeller

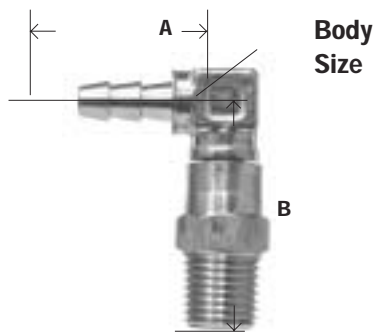


90° FEMALE HOSE BARB ELBOW



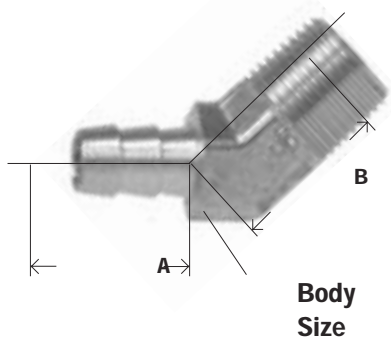
Part #	Hose I.D. x Female NPTF	A	B	Body Size	Weight per Piece. Lbs	List Price
32-401	1/4" x 1/8"	1.01	0.82	0.47	0.06	3.84
32-402	1/4" x 1/4"	1.13	0.91	0.56	0.10	3.89
32-403	3/8" x 1/8"	1.01	0.82	0.47	0.06	3.84
32-404	3/8" x 1/4"	1.15	0.91	0.56	0.10	4.37
32-405	3/8" x 3/8"	1.15	1.11	0.68	0.14	5.46
32-406	3/8" x 1/2"	1.26	1.39	0.75	0.20	7.99
32-407	1/2" x 1/4"	1.26	0.91	0.56	0.10	5.11
32-410	1/2" x 3/8"	1.24	1.11	0.68	0.14	7.42
32-411	1/2" x 1/2"	1.37	1.39	0.75	0.20	7.57

90° HOSE BARB x SWIVEL MALE PIPE



Part #	Hose I.D. x Male NPTF	A	B	Body Size	Weight per Piece. Lbs	List Price
32-421	1/4" x 1/8"	1.00	1.53	0.47	0.08	5.11
32-422	1/4" x 1/4"	1.00	1.54	0.56	0.08	5.11
32-423	3/8" x 1/8"	1.00	1.53	0.47	0.08	6.70
32-424	3/8" x 1/4"	1.00	1.54	0.56	0.08	6.70
32-426	3/8" x 3/8"	0.98	1.46	0.68	0.12	6.99
32-427	3/8" x 1/2"	1.01	1.79	0.87	0.18	7.44
32-428	1/2" x 1/4"	1.07	1.61	0.56	0.12	7.44
32-431	1/2" x 3/8"	1.07	1.53	0.68	0.14	7.75
32-432	1/2" x 1/2"	1.07	1.79	0.87	0.16	8.97

45° ELBOW



Part #	Hose I.D. x Male NPTF	A	B	Body Size	Weight per Piece. Lbs	List Price
32-110	1/4" x 1/8"	0.91	0.62	0.53	0.04	5.20
32-109*	1/4" x 1/4"	1.00	0.62	0.57	0.06	10.88
32-111	3/8" x 1/8"	0.83	0.66	0.53	0.04	5.64
32-112	3/8" x 1/4"	0.82	0.84	0.53	0.06	4.45
32-113	3/8" x 3/8"	0.93	0.87	0.59	0.08	7.14
32-346	1/2" x 1/4"	1.00	0.84	0.59	0.08	9.16
32-114	1/2" x 3/8"	1.00	0.88	0.59	0.08	6.17
32-115	5/8" x 3/8"	0.97	0.88	0.59	0.10	7.86

* Barstock

140
HE145
139HB
KF-PS45
139

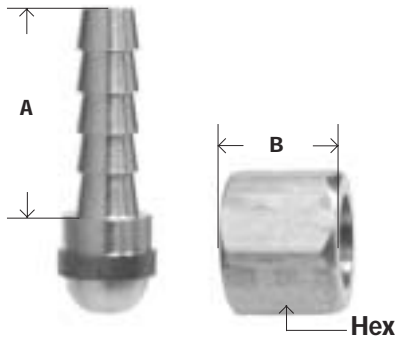
If you plan on being anything less than you are capable of being, you will probably be unhappy all the days of your life.

- Abraham Maslow



BALL END SWIVEL

NPSM - Ball seat type

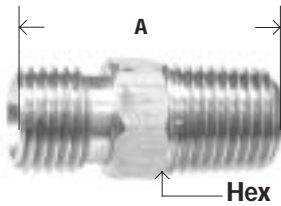


- 128HBLSV
- 29FS
- 209AS
- 124
- 131

Part #	Hose I.D. x NPSM	A	B	Hex	Weight per Piece. Lbs	List Price
32-066	1/8" x 1/8"	0.46	0.44	0.50	0.03	2.94
32-067	3/16" x 1/8"	0.75	0.44	0.50	0.03	2.94
32-068	3/16" x 1/4"	0.75	0.52	0.62	0.04	3.31
32-069	1/4" x 1/8"	0.97	0.44	0.50	0.04	2.71
32-070	1/4" x 1/4"	0.97	0.53	0.62	0.06	2.31
32-078	1/4" x 3/8"	0.97	0.63	0.75	0.06	3.97
32-071	5/16" x 1/4"	0.97	0.52	0.62	0.05	2.49
32-072	3/8" x 1/4"	0.97	0.53	0.62	0.06	2.39
32-073	3/8" x 3/8"	0.97	0.59	0.75	0.08	3.18
32-074	3/8" x 1/2"	0.97	0.69	0.94	0.14	5.81
32-075	1/2" x 3/8"	0.97	0.59	0.75	0.08	3.07
32-076	1/2" x 1/2"	0.97	0.69	0.94	0.10	3.80
32-077	3/4" x 3/4"	0.97	0.70	1.12	0.14	4.52

BALLSEAT MALE ADAPTER

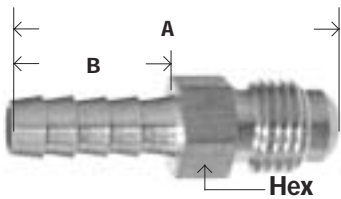
Beveled seat



- 172
- 134
- 127HB
- 122AS

Part #	NPSM x Male NPTF	A	Hex	Weight per Piece. Lbs	List Price
32-359	1/8" x 1/8"	0.94	0.43	0.03	2.25
32-034	1/4" x 1/8"	1.06	0.56	0.04	1.98
32-030	1/4" x 1/4"	1.25	0.56	0.06	2.06
32-362	3/8" x 1/4"	1.28	0.68	0.08	4.22
32-031	3/8" x 3/8"	1.30	0.68	0.08	2.90
32-364	1/2" x 3/8"	1.35	0.87	0.10	5.03
32-032	1/2" x 1/2"	1.53	0.87	0.14	3.74
32-033	3/4" x 3/4"	1.53	1.06	0.20	6.61

45° FLARE ADAPTER



- 142
- 201BF
- KF-MS

Part #	Hose I.D. x 45° Flare	A	B	Hex	Weight per Piece. Lbs	List Price
32-322	3/16" x 1/4"	1.5	0.75	0.43	0.03	2.82
32-081	1/4" x 1/4"	1.72	0.97	0.43	0.03	1.93
32-082	1/4" x 3/8"	1.82	0.97	0.62	0.07	2.95
32-083	5/16" x 5/16"	1.75	0.97	0.50	0.08	4.34
32-084	3/8" x 3/8"	1.82	0.97	0.62	0.08	2.94

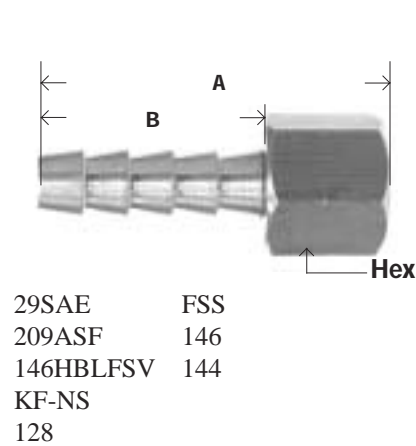
Never give up, for that is just the place and time that the tide will turn.

Dimension data can change without notice. Please call us when dimensions are critical.

- Harriet Beecher Stowe

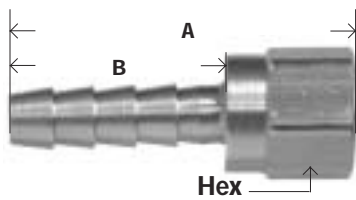


FEMALE 45° FLARE SWIVEL



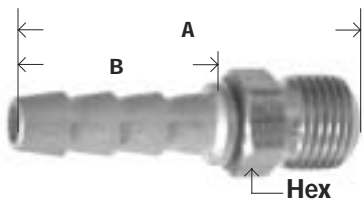
Part #	Hose I.D. x Female 45° Flare	A	B	Hex	Weight per Piece. Lbs	List Price
32-326	3/16" x 3/16"	1.19	0.75	0.43	0.04	3.42
32-107	3/16" x 1/4"	1.34	0.75	0.56	0.04	3.09
32-101	1/4" x 1/4"	1.57	0.97	0.56	0.04	1.68
32-102	1/4" x 5/16"	1.53	0.97	0.62	0.06	2.84
32-103	1/4" x 3/8"	1.64	0.97	0.75	0.08	2.53
32-104	5/16" x 5/16"	1.58	0.97	0.62	0.05	2.94
32-327	5/16" x 3/8"	1.64	0.97	0.75	0.08	2.88
32-105	3/8" x 3/8"	1.64	0.97	0.75	0.08	2.80
32-106	3/8" x 1/2"	1.81	0.97	0.87	0.10	5.83
32-100	1/2" x 1/2"	1.68	0.97	0.87	0.12	4.21

DUAL 45°/ 37° FLARE SWIVEL



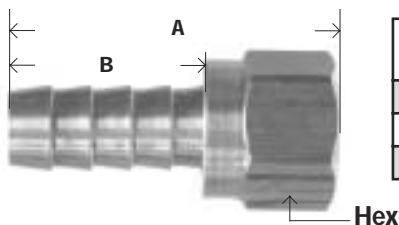
Part #	Hose I.D. x Dual Seat	A	B	Hex	Weight per Piece. Lbs	List Price
32-337	1/4" x 1/4"	1.56	0.97	0.56	0.04	2.49
32-339	5/16" x 5/16"	1.60	0.97	0.62	0.06	2.92
32-340	3/8" x 1/2"	1.68	0.97	0.87	0.10	4.42
32-341	1/2" x 1/2"	1.68	0.97	0.87	0.10	4.45
32-342	1/2" x 5/8"	1.76	0.97	1.00	0.12	6.88

INVERTED FLARE SWIVEL



Part #	Hose I.D. x Inverted Flare	A	B	Hex	Weight per Piece. Lbs	List Price
32-369	1/4" x 1/4"	1.56	0.95	0.43	0.04	7.83
32-370	5/16" x 5/16"	1.67	0.95	0.50	0.04	8.54
32-371	3/8" x 3/8"	1.70	0.96	0.62	0.06	10.34
32-372	1/2" x 1/2"	1.80	0.96	0.75	0.08	6.79
32-373	5/8" x 5/8"	2.05	1.17	0.87	0.15	15.78

FEMALE 37° J.I.C. FLARE SWIVEL

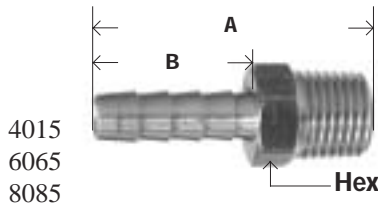


Part #	Hose I.D. x Female 37° JIC	A	B	Hex	Weight per Piece. Lbs	List Price
32-334	1/4" x 3/8"	1.60	0.97	0.68	0.06	3.06
32-335	5/16" x 3/8"	1.60	0.97	0.68	0.06	3.12
32-336	3/8" x 3/8"	1.60	0.97	0.68	0.10	3.07

NEVER LOOK DOWN ON SOMEONE UNLESS
YOU'RE HELPING THEM UP.....



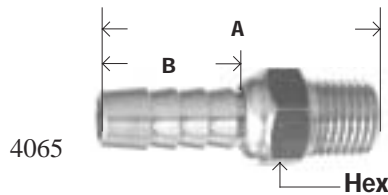
MALE SWIVEL



Part #	Hose I.D. x Male NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
32-765	1/4" x 1/4"	1.64	0.89	0.56	0.06	5.21
32-766	3/8" x 3/8"	1.77	1.00	0.68	0.08	7.34
32-767	1/2" x 1/2"	1.94	0.99	0.87	0.12	24.95

See page 15 for more male swivels.

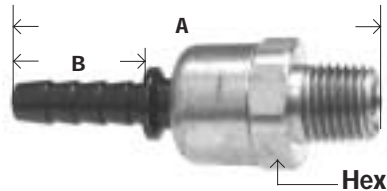
HIGH VOLUME MALE SWIVEL



Part #	Hose I.D. x Male NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
32-781	3/8" x 1/4"	1.83	0.87	0.62	0.07	16.68

HOSE ID x MALE BALL SWIVEL

300 PSI. Max. Working Pressure



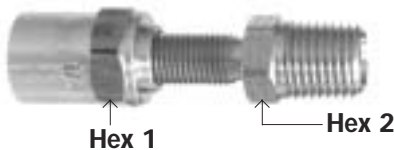
Part #	Hose I.D. x Male ball swivel	A	B	Hex	Weight per Piece. Lbs	List Price
28-415	1/4" x 1/4"	1.30	0.94	0.81	0.14	32.12
28-417	3/8" x 1/4"	1.30	1.00	0.81	0.14	29.62

Many more sizes available.

1/4" MALE THREAD ID x OD

Reusable Hose Couplings

183



Part #	Size 1/4" Male Thread ID x OD	Length	Hex 1	Hex 2	Weight per Piece. Lbs	List Price
32-725	3/8" x 3/4"(23/32)	1.97	7/8"	9/16"	0.14	6.84
32-726	1/4" x 5/8"	1.86	13/16"	9/16"	0.13	6.98
32-727	1/4" x 1/2"	1.86	11/16"	9/16"	0.11	5.88
32-728	1/4" x 9/16"	1.86	3/4"	9/16"	0.12	9.85
32-741	5/16" x 5/8"	1.97	13/16"	9/16"	0.13	5.92
32-742	3/8" x 5/8"	1.97	13/16"	9/16"	0.14	7.57

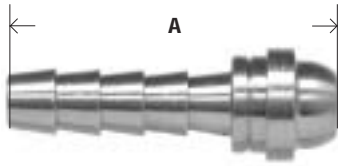
Many more sizes and shapes available...just ask!

Dimension data can change without notice. Please call us when dimensions are critical.

There are three types of people in this world, those who can count and those who can't.



STEM ONLY - WELDING HOSE CONNECTOR

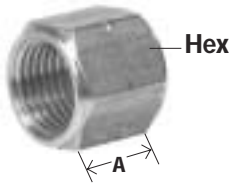


201RWA
WRS
WLS

Part #	Hose I.D.	A	Weight per Piece. Lbs	List Price
30-410	3/16"	1.43	0.02	1.73
30-411	1/4"	1.43	0.02	1.35
30-412	5/16"	1.43	0.03	1.48
30-413	3/8"	1.43	0.04	2.45

Assemble stem & nut together.

RIGHT HAND 9/16 - 18 FOR OXYGEN LINE - WELDING HOSE CONNECTOR

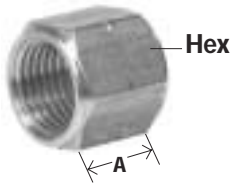


201RWA
WRS
KF-PE
152

Part #	Size	A	Hex	Weight per Piece. Lbs	List Price
30-420	R.H. Nut only	0.63	0.68	0.04	3.77

Assemble with stem above.

LEFT HAND 9/16 - 18 FOR ACETYLENE LINE - WELDING HOSE CONNECTOR

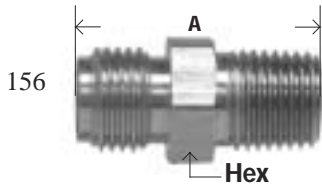


209LWA
WLS
154
KF-RE

Part #	Size	A	Hex	Weight per Piece. Lbs	List Price
30-421	L.H. Nut only	0.63	0.68	0.04	1.35

Assemble with stem above.

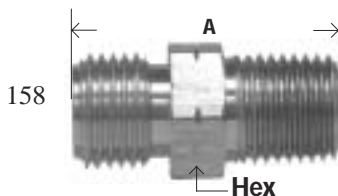
RIGHT HAND 9/16 - 18 #122RWA - WELDING HOSE CONNECTOR



156

Part #	Size	A	Hex	Weight per Piece. Lbs	List Price
30-401	1/4"-18	1.30	0.62	0.06	4.27

LEFT HAND 9/16 - 18 #122LWA - WELDING HOSE CONNECTOR



158

Part #	Size	A	Hex	Weight per Piece. Lbs	List Price
30-406	1/4"-18	1.30	0.62	0.06	4.27

“Life is divided into three terms - that which was, which is, and which will be. Let us learn from the past to profit by the present, and from the present to live better in the future.”

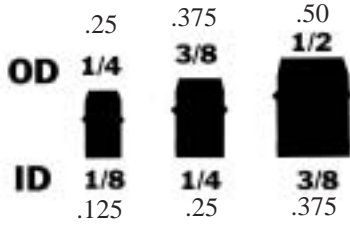
- William Wordsworth



HOSE BARB

BRASS BARBS FOR POLYETHYLENE TUBING

- Quick connecting fittings that do not require tube preparations for hand assembly. Inexpensive with excellent resistance to vibration.
- All sizes are tube O.D. (I.D.)



UNION



1062
962

TUBE O.D. (TUBE I.D.) X TUBE O.D. (TUBE I.D.)

Part #	Size	List Price
21-003	1/4(1/8) x 1/4(1/8)	2.35
21-007	3/8(1/4) x 1/4(1/8)	4.04
21-009	3/8(1/4) x 3/8(1/4)	1.76

MALE ADAPTER



1068
968
688

TUBE O.D. (TUBE I.D.) X MALE PIPE

Part #	Size	List Price
21-021	1/4(1/8) x 1/16	2.72
21-025	1/4(1/8) x 1/4	3.82
21-027	3/8(1/4) x 1/8	2.87

FEMALE ADAPTER



1066
966
26
668

TUBE O.D. (TUBE I.D.) X FEMALE PIPE

Part #	Size	List Price
21-043	1/4(1/8) x 1/8	4.34
21-047	3/8(1/4) x 1/4	6.37

BULKHEAD UNION



1074

TUBE O.D. (TUBE I.D.)

Part #	Size	List Price
21-083	3/8(1/4)	13.16

UNION ELBOW



1065
965

TUBE O.D. (I.D.)

Part #	Size	List Price
21-095	1/4(1/8)	3.53
21-097	3/8(1/4)	5.07
21-099	1/2(3/8)	5.95

MALE 90° ELBOW



1069
969
229

TUBE O.D. (I.D.) X MALE PIPE

Part #	Size	List Price
21-111	1/4(1/8) x 1/16	4.34
21-113	1/4(1/8) x 1/8	3.75
21-115	1/4(1/8) x 1/4	4.70
21-117	3/8(1/4) x 1/8	5.07
21-119	3/8(1/4) x 1/4	8.01
21-121	1/2(3/8) x 3/8	12.20

FEMALE 90° ELBOW



1070
970
230

TUBE X FEMALE PIPE

Part #	Size	List Price
21-133	1/4(1/8) x 1/8	4.56

UNION TEE



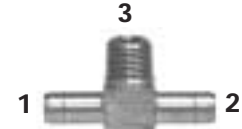
1064
964
224

O.D. (I.D.) X O.D. (I.D.) X O.D. (I.D.)

Part #	Size	List Price
21-151	1/4(1/8)	4.48
21-153	3/8(1/4)X 3/8(1/4)X1/4(1/8)	4.85
21-155	3/8(1/4)	5.15
21-159	1/2(3/8)X1/2(3/8)X3/8(1/4)	6.32
21-161	1/2(3/8)	7.28

BRASS FITTINGS

MALE BRANCH TEE

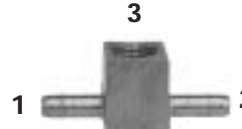


1072
972
232

O.D. (I.D.) X O.D. (I.D.) X MALE PIPE

Part #	Size	List Price
21-193	1/4(1/8) x 1/4(1/8) x 1/8	5.51
21-195	3/8(1/4) x 3/8(1/4) x 1/8	6.39
21-197	3/8(1/4) x 3/8(1/4) x 1/4	7.20

FEMALE BRANCH TEE



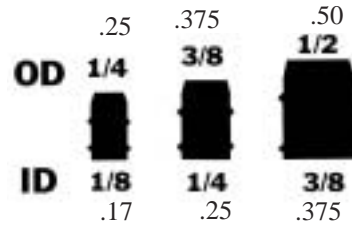
1077
978

O.D. (I.D.) X O.D. (I.D.) X FEMALE PIPE

Part #	Size	List Price
21-207	1/4(1/8) x 1/4(1/8) x 1/8	6.91

TWO BARB FITTINGS

More Sizes Available - Please Ask!



MALE ADAPTER PIPE



Part #	Size	List Price
32-150	1/4(1/8) x 1/8	3.07
32-151	1/4(1/8) x 1/4	6.14
32-153	3/8(1/4) x 1/4	6.29

UNION TEE



Part #	Tube O.D. (I.D.)	List Price
32-159	1/4(1/8 ID)	4.63
32-160	3/8(1/4 ID)	8.94

90° ELBOW



Part #	Tube O.D. (I.D.)	List Price
32-170	1/4(1/8 ID)	5.75
32-171	3/8(1/4 ID)	8.00



BRASS FITTINGS

MINIATURE FITTINGS

FEATURES: O-RING FITTINGS

- Reliability of a metal-to-metal mechanical fit
- Captured O-Ring for superior seal
- Precision machined barb design
- Electroless Nickel Plated Brass



This O-Ring fitting was designed with the superior static sealing qualities of an O-ring plus the reliability of a metal-to-metal mechanical fit.

When properly installed the skirt around the O-ring allows the fitting to mechanically seat on the rim of the female thread and hold the fitting tight. The high quality Buna-N O-ring is captured inside the skirt of the fitting, concealing

it from view and providing a clean looking connection. The result is superior sealing power - the Buna-N O-ring is not pinched but rather compressed within the fitting skirt which ensures a leakproof fit even when mated with a less than perfect sealing surface. When torqued down the mechanical fit keeps the fittings tight and retains its position even under constant vibration. Our captured O-ring design also eases installation, there is no need to replace or reposition the seal - we have eliminated the need for replacement gaskets or washers.

BRASS

STRAIGHT CONNECTORS

Sizes are for Polyurethane Tubing w/ these additional inclusions.

Note	Exception
A	7/64 ID Nylon Tubing
B	9/64 ID Nylon Tubing
C	.170 ID Polyethylene



Part #	Thread x Hose ID	List Price
99-250	10-32 x 1/16	2.31
99-251	10-32 x 1/16 w/ 1/4 Hex	2.31
99-252	10-32 x 1/16	2.38
99-253	10-32 x 5/64 A	2.31
99-254	10-32 x 5/64 w/ 1/4 A	2.38
99-255	10-32 x 1/8 B	2.31
99-256	10-32 x .160 C	2.31
99-257	10-32 x .160 w/ 1/4 Hex C	2.38

RUN TEES



Part #	Thread x Hose ID	List Price
99-258	10-32 x 1/16	10.50
99-259	10-32 x 5/64 A	10.50
99-260	10-32 x 1/8 B	10.50

BRANCH TEES



Part #	Thread x Hose ID	List Price
99-261	10-32 x 1/16	9.10
99-262	10-32 x 5/64 A	9.10
99-263	10-32 x 1/8 B	9.10

CROSSES

Note	Exception
A	7/64 ID Nylon Tubing
B	9/64 ID Nylon Tubing
C	.170 ID Polyethylene



Part #	Thread x Hose ID	List Price
99-264	10-32 x 1/16	11.20
99-265	10-32 x 5/64 A	11.20
99-266	10-32 x 1/8 B	11.20

ELBOWS



Part #	Thread x Hose ID	List Price
99-267	10-32 x 1/16	8.05
99-268	10-32 x 5/64 A	8.05
99-269	10-32 x 1/8 B	8.05

UNIONS



Part #	Hose ID x Hose ID	List Price
99-270	1/16 x 1/16	2.72
99-271	.160 x 1/16 C	2.91
99-272	.160 x .160 C	3.15

More miniature fittings available, just ask!

UNION ELBOWS

Note	Exception
A	7/64 ID Nylon Tubing
B	9/64 ID Nylon Tubing
C	.170 ID Polyethylene



Part #	Hose ID	List Price
99-273	.160 x .160 C	7.07

UNION CROSSES



Part #	Hose ID	List Price
99-274	.160 C	13.09

BARBED TEES



Part #	Hose ID	List Price
99-275	5/64 A	10.10
99-277	1/16	7.84
99-278	.160 x .160 x .160 C	9.17

• All sizes are for polyurethane tubing with additions noted.

When duty calls, that is when character counts.

- William Safire



PUSH ON HOSE BARB

STAINLESS STEEL HOSE BARBS

304 STAINLESS STEEL
HOSE NIPPLES

Part #	Hose I.D. x Male Pipe	List Price
73-951	1/4"	5.37
73-952	3/8"	8.37
73-953	1/2"	8.11
73-954	3/4"	10.54
73-955	1"	13.46
73-956	1-1/4"	23.34
73-957	1-1/2"	24.36
73-958	2"	37.30
73-959	2-1/2"	70.44
73-960	3"	87.28

304 STAINLESS STEEL
REDUCING HOSE NIPPLES

Part #	Hose I.D. x Male Pipe	List Price
73-970	1/4 X 1/8	5.47
73-971	3/8 X 1/4	6.32
73-972	1/2 X 3/8	9.44
73-973	1/2 X 1/4	9.76
73-974	3/4 X 1/2	12.46
73-975	1 X 3/4	14.07
73-976	1 X 1/2	16.26
73-977	1-1/4 X 1	22.67
73-978	1-1/4 X 3/4	23.94
73-979	1-1/2 X 1-1/4	35.63
73-980	1-1/2 X 1	25.67
73-981	2 X 1-1/2	44.27
73-982	2 X 1-1/4	35.40

316 STAINLESS STEEL
HOSE NIPPLES

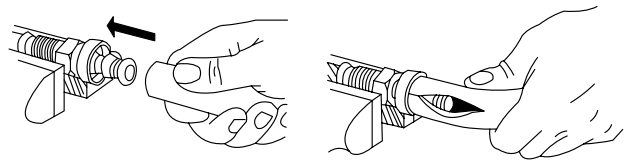
Part #	Hose I.D. x Male Pipe	List Price
973-951	1/4"	6.01
973-952	3/8"	7.71
973-953	1/2"	13.76
973-954	3/4"	12.57
973-955	1"	17.32
973-956	1-1/4"	23.54
973-957	1-1/2"	40.92
973-958	2"	43.59
973-959	2-1/2"	121.53
973-990	3"	149.72
973-991	4"	365.56

Dimension data can change without notice.
Please call us when dimensions are critical.

BRASS FITTINGS

PUSH ON BARB FITTINGS

Starts on next page. ►



Typical Application: Low Pressure Air, Fuel, Lube, and Oil Lines

Material: CA360 Brass

Advantages: Easy assembly. No clamps needed!!

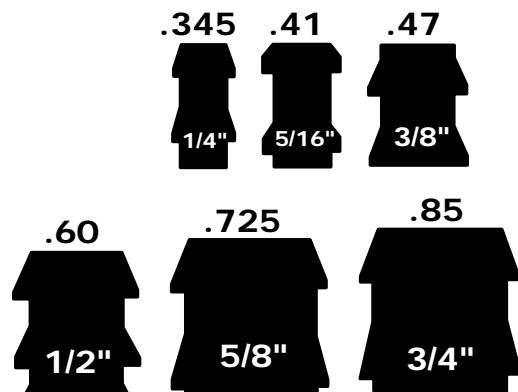
ASSEMBLY INSTRUCTIONS:

- 1- Lubricate insert.
- 2- Hold hose at angle as shown & push on and up over first barb.
- 3- Continue to push straight on until hose is seated under protective plastic cap. Keep hands back from hose end area so that hose can expand.

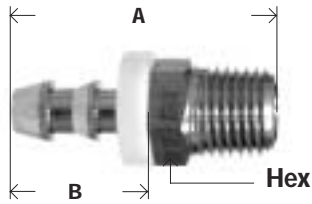
DISASSEMBLING INSTRUCTIONS:

- 1- Split hose as shown above. Do not cut completely through hose. Sealing edge of barb could be damaged.
- 2- Bend hose and remove with a quick pull

ACTUAL PUSH ON BARB PROFILES



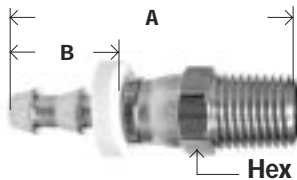
MALE ADAPTER



- 301
- P990A
- HLM
- 100B-1
- KA-MB
- 272
- 29PO
- 725
- 625

Part #	Hose I.D. x Male NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
30-200	1/4" x 1/8"	1.43	0.87	0.50	0.04	1.46
30-201	1/4" x 1/4"	1.66	0.87	0.56	0.06	1.64
30-211	1/4" x 3/8"	1.66	0.87	0.68	0.06	2.33
30-212	5/16" x 1/8"	1.42	0.77	0.43	0.04	3.06
30-213	5/16" x 1/4"	1.66	0.87	0.56	0.06	2.25
30-202	3/8" x 1/8"	1.53	0.97	0.50	0.04	1.85
30-203	3/8" x 1/4"	1.69	0.89	0.56	0.07	1.52
30-204	3/8" x 3/8"	1.76	0.97	0.68	0.08	2.20
30-205	3/8" x 1/2"	1.97	0.97	0.87	0.10	4.06
30-216	1/2" x 1/4"	1.76	0.97	0.68	0.08	3.04
30-206	1/2" x 3/8"	1.76	0.97	0.68	0.09	2.41
30-207	1/2" x 1/2"	1.97	0.97	0.87	0.14	3.63
30-217	1/2" x 3/4"	1.97	0.97	1.06	0.16	6.45
30-219	5/8" x 3/8"	2.34	1.50	0.75	0.12	5.83
30-209	5/8" x 1/2"	2.45	1.45	0.87	0.16	4.60
30-214	5/8" x 3/4"	2.45	1.45	1.06	0.18	7.52
30-215	3/4" x 1/2"	2.45	1.45	0.87	0.21	6.67
30-210	3/4" x 3/4"	2.45	1.45	1.06	0.20	5.95

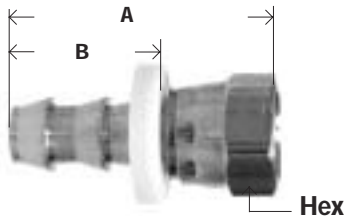
MALE SWIVEL



- HMS
- 285

Part #	Hose I.D. x Male NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
30-385	1/4" x 1/4"	2.02	0.87	0.56	0.06	4.93
30-386	3/8" x 1/4"	2.12	0.97	0.56	0.08	5.15
30-387	3/8" x 3/8"	2.12	0.97	0.68	0.08	6.03
30-388	1/2" x 3/8"	2.12	0.97	0.68	0.10	6.58
30-389	1/2" x 1/2"	2.33	0.97	0.87	0.14	7.67
30-390	3/4" x 3/4"	2.80	1.45	1.06	0.24	11.55

FEMALE SWIVEL

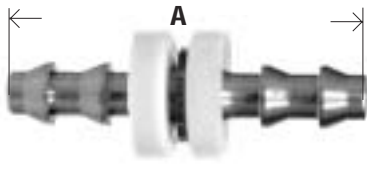


Part #	Hose I.D. x Gasket Swivel	A	B	Hex	Weight per Piece. Lbs	List Price
30-358	1/4" x 1/4"	1.47	0.82	0.68	0.06	6.22
30-360	3/8" x 1/4"	1.61	1.00	0.68	0.06	7.07
30-361	3/8" x 3/8"	1.77	0.97	0.81	0.08	8.82
30-365	5/8" x 3/4"	2.40	1.55	1.18	0.28	18.18
30-366	3/4" x 3/4"	2.36	1.55	1.18	0.32	22.84

Dimension data can change without notice.
Please call us when dimensions are critical.



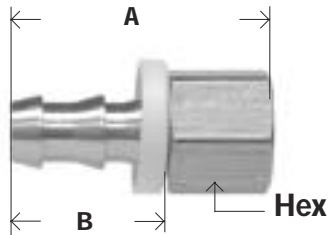
HOSE SPLICER



696 100B-Y
 29SPO KA-RM
 296 MHL
 729 296

Part #	Hose I.D.	A	Weight per Piece. Lbs	List Price
30-300	1/4"	1.87	0.04	1.53
30-305	5/16"	1.80	0.04	2.32
30-301	3/8"	2.00	0.06	2.18
30-302	1/2"	2.01	0.08	3.20
30-303	5/8"	3.03	0.14	6.08
30-304	3/4"	3.03	0.14	7.47

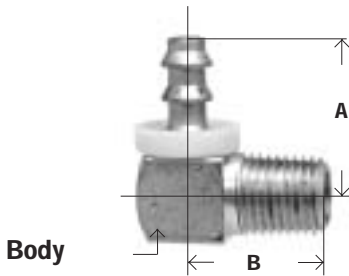
RIGID FEMALE ADAPTER



29FPO 274
 HLF 726
 626

Part #	Hose I.D. x Female NPTF	A	B	Hex	Weight per Piece. Lbs	List Price
30-220	1/4" x 1/8"	1.35	0.87	0.50	0.02	2.27
30-221	1/4" x 1/4"	1.51	0.87	0.62	0.06	2.54
30-222	5/16" x 1/4"	1.51	0.87	0.62	0.06	2.91
30-224	3/8" x 1/4"	1.61	0.97	0.62	0.06	2.95
30-225	3/8" x 3/8"	1.63	0.97	0.75	0.06	3.48
30-223	1/2" x 1/4"	1.76	1.02	0.68	0.08	5.28
30-226	1/2" x 3/8"	1.63	0.97	0.75	0.08	3.84
30-227	1/2" x 1/2"	1.77	0.97	0.93	0.14	5.28

MALE ELBOW



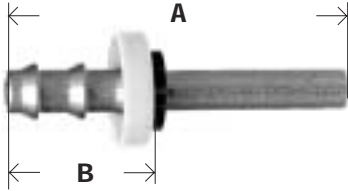
100-C
 29EPO

Part #	Hose I.D. x Male NPTF	A	B	Body Width	Weight per Piece. Lbs	List Price
30-372	1/4" x 1/8"	0.98	0.75	0.50	0.04	6.58
30-373	1/4" x 1/4"	1.04	0.95	0.56	0.06	7.24
30-374	5/16" x 1/8"	1.02	0.94	0.50	0.06	12.20
30-375	5/16" x 1/4"	1.09	0.94	0.56	0.08	13.01
30-370	3/8" x 1/8"	1.11	0.75	0.50	0.10	7.45
30-371	3/8" x 1/4"	1.13	0.90	0.56	0.10	7.65
30-376	3/8" x 3/8"	1.19	0.87	0.70	0.12	7.87
30-377	3/8" x 1/2"	1.30	1.19	0.87	0.22	14.60
30-378	1/2" x 1/2"	1.50	1.19	0.87	0.22	16.65
30-379	5/8" x 1/2"	1.98	1.19	0.87	0.26	20.97
30-380	5/8" x 3/4"	2.07	1.28	1.06	0.32	25.31
30-381	3/4" x 3/4"	2.07	1.28	1.06	0.34	25.36

Time waits for no one.
 Treasure every moment you have.
 You will treasure it even more when
 you can share it with someone special.



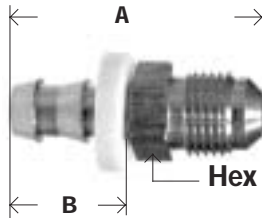
RIGID TUBE ADAPTER



294 303
100B-X 732
KA-RL 694

Part #	Hose I.D. x O.D Tube	A	B	Weight per Piece. Lbs	List Price
30-290	1/4" x 3/16"	1.68	0.77	0.04	4.27
30-291	1/4" x 1/4"	1.88	0.77	0.04	2.28
30-292	1/4" x 5/16"	1.88	0.77	0.04	3.06
30-293	5/16" x 5/16"	1.91	0.79	0.04	8.31
30-294	3/8" x 3/8"	2.03	0.92	0.06	2.94
30-297	1/2" x 1/2"	2.13	1.02	0.06	4.34

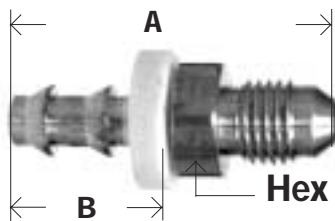
MALE SAE FLARE ADAPTER



100B-3 682
KA-MS 302
727 282

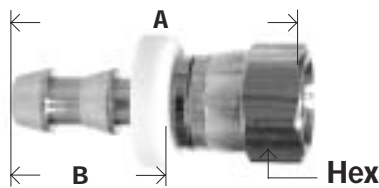
Part #	Hose I.D. x Male Flare	A	B	Hex	Weight per Piece. Lbs	List Price
30-240	1/4" x 1/4"	1.45	0.84	0.43	0.04	3.90
30-241	1/4" x 5/16"	1.59	0.84	0.50	0.04	3.81
30-249	5/16" x 5/16"	1.60	0.80	0.50	0.06	4.63
30-271	3/8" x 5/16"	1.64	0.86	0.50	0.08	9.26
30-243	3/8" x 3/8"	1.83	0.92	0.62	0.08	5.25
30-245	1/2" x 1/2"	2.04	1.05	0.75	0.10	9.16

MALE JIC FLARE ADAPTER



Part #	Hose I.D. x Male JIC	A	B	Hex	Weight per Piece. Lbs	List Price
32-900	1/4" x 1/4"	1.57	0.84	0.50	0.04	4.26
32-901	1/4" x 5/16"	1.60	0.83	0.56	0.04	2.73
32-902	3/8" x 3/8"	1.78	0.97	0.62	0.06	5.07
32-903	1/2" x 1/2"	1.97	0.97	0.75	0.10	7.14

SAE/JIC DUAL 45°/37° FEMALE SWIVEL



29FDS
287
HDF
309
735
690
P990-K
305

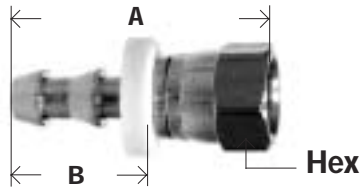
Part #	Hose I.D. x Female 45°/37°	A	B	Hex	Weight per Piece. Lbs	List Price
30-230	1/4" x 1/4"	1.53	0.87	0.56	0.06	2.17
30-231	1/4" x 5/16"	1.57	0.87	0.62	0.04	3.21
30-232	5/16" x 5/16"	1.56	0.87	0.62	0.04	3.12
30-233	3/8" x 1/2"	1.79	0.97	0.87	0.10	4.97
30-234	1/2" x 1/2"	1.77	0.97	0.87	0.10	4.65
30-235	1/2" x 5/8"	1.84	0.97	1.00	0.12	6.79
30-236	5/8" x 1/2"	2.27	1.45	0.87	0.18	7.41
30-237	5/8" x 5/8"	2.33	1.45	1.00	0.14	6.92

Dimension data can change without notice.
Please call us when dimensions are critical.



BRASS

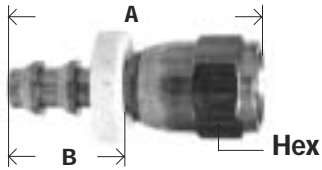
45° SAE FLARE FEMALE SWIVEL



Part #	Hose I.D. x Female Flare	A	B	Hex	Weight per Piece. Lbs	List Price
30-250	1/4" x 1/4"	1.54	0.87	0.56	0.04	2.53
30-251	1/4" x 5/16"	1.57	0.87	0.62	0.04	3.04
30-253	1/4" x 3/8"	1.63	0.87	0.75	0.06	4.02
30-254	5/16" x 5/16"	1.58	0.87	0.68	0.06	7.21
30-260	5/16" x 3/8"	1.63	0.87	0.75	0.08	4.09
30-252	3/8" x 3/8"	1.73	0.97	0.75	0.10	3.66
30-257	3/8" x 1/2"	1.85	0.87	0.87	0.10	11.27
30-261	1/2" x 3/8"	1.92	1.05	0.75	0.10	10.69
30-255	1/2" x 1/2"	1.77	0.97	0.87	0.12	3.98
30-258	5/8" x 5/8"	2.35	1.45	1.00	0.14	7.31
30-259	3/4" x 3/4"	2.42	1.45	1.25	0.22	9.56

728 100S-4
 P990-H KA-MB
 29AEPO HSF
 307 684
 284

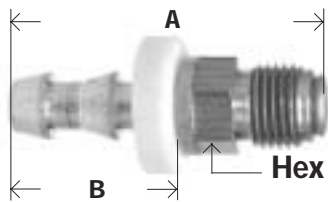
FEMALE 37° JIC FLARE SWIVEL



Part #	Hose I.D. x Female JIC	A	B	Hex	Weight per Piece. Lbs	List Price
30-265	1/4" x 1/4"	1.54	0.87	0.56	0.04	2.67
30-264	1/4" x 3/8"	1.60	0.87	0.68	0.06	3.37
30-266	3/8" x 3/8"	1.70	0.97	0.68	0.08	3.15
30-267	1/2" x 1/2"	1.78	0.97	0.87	0.10	4.91
30-268	5/8" x 5/8"	2.33	1.45	1.00	0.14	7.31
30-269	3/4" x 3/4"	2.40	1.45	1.25	0.22	9.56

29J1CPO 288
 HJF 100B-6
 688 308
 738 P990-F

INVERTED FLARE MALE SWIVEL

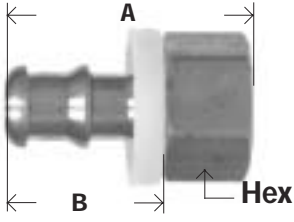


Part #	Hose I.D. x Male INV Flare	A	B	Hex	Weight per Piece. Lbs	List Price
30-275	1/4" x 3/16"	1.52	0.87	0.37	0.04	5.26
30-276	1/4" x 1/4"	1.56	0.87	0.43	0.04	3.65
30-277	1/4" x 5/16"	1.62	0.87	0.50	0.04	4.13
30-278	5/16" x 1/4"	1.56	0.87	0.43	0.06	4.96
30-280	5/16" x 5/16"	1.62	0.87	0.50	0.06	3.90
30-283	5/16" x 3/8"	1.63	0.87	0.62	0.06	6.38
30-284	3/8" x 5/16"	1.72	0.97	0.50	0.06	4.41
30-279	3/8" x 3/8"	1.76	0.97	0.62	0.06	4.42
30-281	1/2" x 3/8"	1.86	1.06	0.62	0.08	14.67
30-282	1/2" x 1/2"	1.84	0.97	0.75	0.10	6.46
30-286	5/8" x 5/8"	2.50	1.57	0.87	0.14	14.37

290
 100B-B
 KA-MF
 1MS



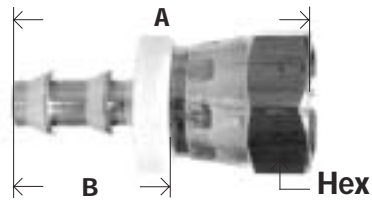
INVERTED FLARE FEMALE ADAPTER



306 P990-J
 100B-A 736
 KA-NG 692
 292

Part #	Hose I.D. x Female INV Flare	A	B	Hex	Weight per Piece. Lbs	List Price
30-310	1/4" x 3/16"	1.12	0.84	0.50	0.02	4.11
30-311	1/4" x 1/4"	1.14	0.84	0.56	0.02	4.04
30-312	1/4" x 5/16"	1.18	0.84	0.62	0.02	4.70
30-316	5/16" x 5/16"	1.25	0.81	0.62	0.04	7.77
30-313	3/8" x 5/16"	1.32	0.87	0.62	0.04	5.37
30-314	3/8" x 3/8"	1.35	0.95	0.75	0.06	4.79
30-315	1/2" x 1/2"	1.73	1.04	0.87	0.12	13.08

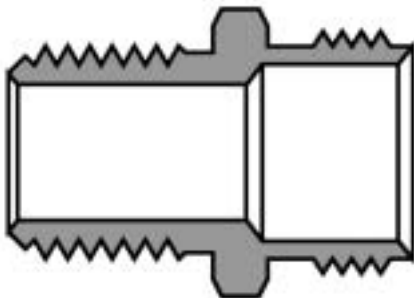
FEMALE BALLSEAT SWIVEL



628
 278
 29SPO
 731
 NPSM

Part #	Hose I.D. x Female NPSM	A	B	Hex	Weight per Piece. Lbs	List Price
30-340	1/4" X 1/8"	1.39	0.85	0.50	0.06	5.82
30-341	1/4" X 1/4"	1.47	0.80	0.68	0.06	5.36
30-343	3/8" X 1/4"	1.61	0.97	0.68	0.08	6.07
30-344	3/8" X 3/8"	1.75	0.95	0.81	0.10	8.70
30-346	1/2" X 1/2"	1.88	1.09	0.93	0.12	9.71
30-349	3/4" X 3/4"	2.36	1.55	1.18	0.22	18.81

GARDEN HOSE FITTINGS



See page 143 for Plastic Garden Hose Fittings

•Temperature and Working Pressure Ranges

From +35°F to +100°F at 75 PSI maximum or the recommended working pressure of the garden hose. (Not to exceed 150 PSI.)

Note: All female connector ends should have a rubber washer inserted prior to usage.

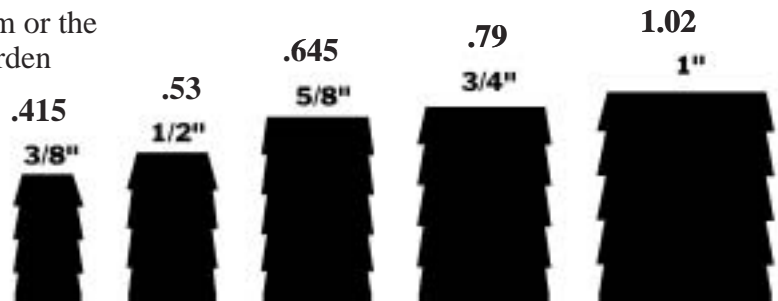
FGH = Female Garden Hose threads
 MGH = Male Garden Hex threads

Dimension data can change without notice. Please call us when dimensions are critical.



Male Garden Hose Profile

Male garden hose threads are all 3/4" with an outside diameter of 1.0625 and 11-1/2" threads per inch.



Actual size of Garden Hose Barbs



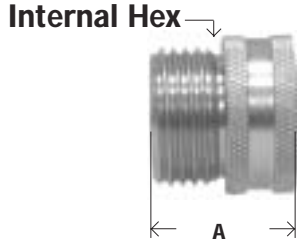
GARDEN HOSE

BRASS FITTINGS

BRASS

SWIVEL - MGH X FGH

•WASHER INCLUDED

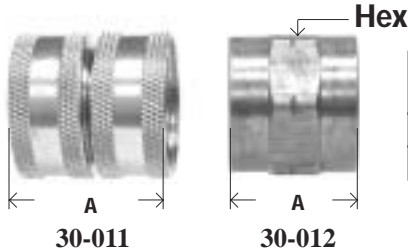


Part #	MGH X FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-000	3/4" x 3/4"	1.03	0.50*	0.26	4.16

* Internal Hex

SWIVEL - FGH X FGH

•WASHER INCLUDED



Part #	FGH X FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-011	3/4" x 3/4"	1.03	1.18 O.D.	0.24	4.28
30-012	No Swivel	1.08	1.19	0.24	5.73

HUS 91 203W
 GSU 101GHSV 22AS
 506 FS66

SWIVEL - FGH X FEMALE PIPE

•WASHER INCLUDED



Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-001	3/4" x 1/2"	1.05	0.87	0.11	4.95
30-006	3/4" x 3/4"	1.11	1.12	0.11	4.95

HSU11 91Z 197S 98GHSV
 5AS 21517 502 F565

RIGID - FGH X FEMALE PIPE

•WASHER INCLUDED



Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-016	3/4" x 1/8"	1.02	1.18	0.08	4.62
30-017	3/4" x 1/4"	0.65	1.12	0.07	4.62
30-018	3/4" x 3/8"	1.19	1.18	0.11	6.19

95GH 501

To be able to look back upon one's past life with satisfaction is to live twice.

- Lord Acton

MIDLAND METAL

GOODYEAR
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 WebSales@GoodyearRubberProducts.com

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RIGID - FGH X FEMALE PIPE

FS67
198
HU11
21507
502
99GH

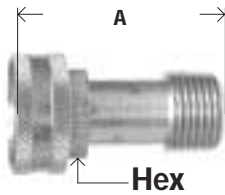


Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-078	3/4" x 1/2"	1.06	1.18	0.10	4.66
30-083	3/4" x 3/4"	1.06	1.18	0.12	4.66

SWIVEL - FGH X MALE PIPE

•WASHER INCLUDED

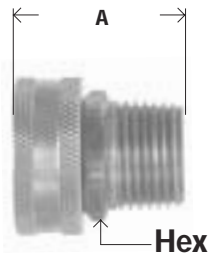
504
89GH
W1
62H4
88GH
W1



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-047	3/4" x 1/4"	2.04	0.75	0.13	4.76
30-048	3/4" x 3/8"	2.06	0.75	0.14	5.25
30-049	3/4" x 1/2"	2.06	0.87	0.18	6.95

SWIVEL - FGH X MALE PIPE

•WASHER INCLUDED



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-183	3/4" x 1/2"	1.32	0.81	0.11	8.51

RIGID - FGH X MALE PIPE

21505
503
83GH
20A
HU21
199
H7

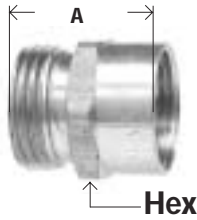


Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-088	3/4" x 1/2"(1/2"SWT)**	1.06	1.18	0.09	4.36
30-093	3/4" x 3/4"	1.06	1.18	0.11	4.36
30-094	3/4" x 3/4"(1/2" TAP)	1.17	1.18	0.11	4.36
30-093L*	3/4" x 3/4"	1.22	1.18	0.14	5.02

* Long pattern
** 1/2 Swt = 5/8 O.D.



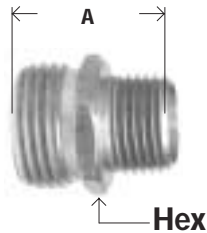
RIGID - MGH X FEMALE PIPE



197
18R
HU12 18H
H11PP 81GH
18A 21503
507 MF67

Part #	MGH X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-066	3/4" x 1/4"	1.10	1.06	0.09	3.41
30-067	3/4" x 3/8"	1.09	1.06	0.12	4.40
30-068	3/4" x 1/2"	0.81	1.06	0.10	2.72
30-073	3/4" x 3/4"	1.12	1.18	0.10	3.96

RIGID - MGH X MALE PIPE

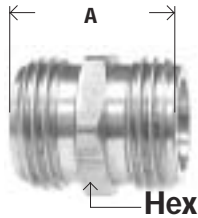


19R
196
H530
21501
508 71GH
HU22 19A

Part #	MGH X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-053	3/4" x 3/8"	1.25	1.06	0.10	4.66
30-058**	3/4" x 1/2"	1.31	1.06	0.12	3.03
30-063*	3/4" x 3/4" x 1/2"	1.31	1.06	0.13	3.09
30-063BE***	3/4" x 3/4"	1.31	1.06	0.15	5.03
30-063L	Long Pattern	1.43	1.06	0.12	5.03
30-063S	3/4" x 3/4" Short	1.10	1.06	0.10	4.55

No Tap
* (Tapped 1/2 Female)
** (1/2 Swt = 5/8 O.D.)
*** (Tapped 1/2 FIP Both ends)

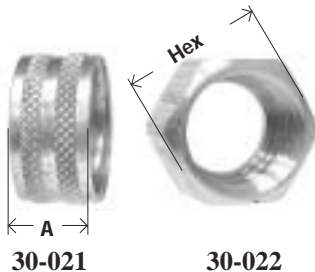
RIGID - MGH X MGH



21500
509
75GH H8
23A 19R

Part #	MGH X MGH	A	Hex	Approx. Wt. Lbs.	List Price
30-099	3/4"				3.04
30-098	3/4" x 3/4" (1/2" Tap)	1.22	1.06	0.13	3.23

GARDEN HOSE NUT



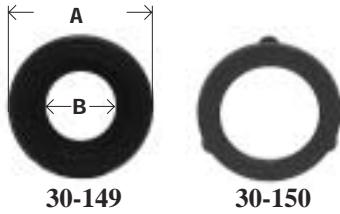
94GH
GHN1
HNR
21514

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-021	Knurled	0.61	1.37 O.D.	0.08	2.16
30-022	Hex Nut	0.51	1.12	0.08	2.76

Dimension data can change without notice.
Please call us when dimensions are critical.



GARDEN HOSE WASHERS

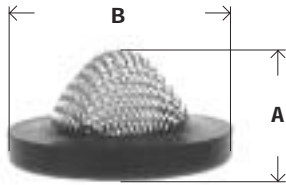


Part #	Size 3/4"	A	B	Thickness	Approx. Wt. Lbs.	List Price
30-149	recessed washer	1.02	0.49	0.18	0.01	0.28
30-150	black*	0.98	0.68	0.13	0.01	0.14
30-150R	red	1.00	0.68	0.13	0.01	0.14

* plasticized rubber

GHW
901GH

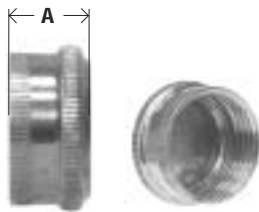
GARDEN HOSE FILTER WASHER



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-180	30 Mesh	0.52	1.00	0.02	0.70
30-180F	60 Mesh	0.52	1.00	0.02	0.83

LA662

GARDEN HOSE CAP - Die Cast Brass



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-103	3/4" Die Cast Cut Thread	0.58	0.04	1.06

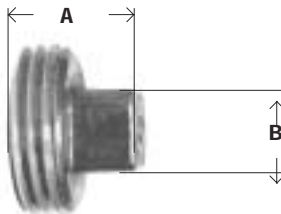
513
96GH
GHN5
HC1 21518
LA215 200-W

GARDEN HOSE CAP WITH CHAIN



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-142	3/4" w/ 8" Chain	0.58	0.06	5.99

GARDEN HOSE PLUG



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-026	3/4"	0.69	0.61	0.12	8.87



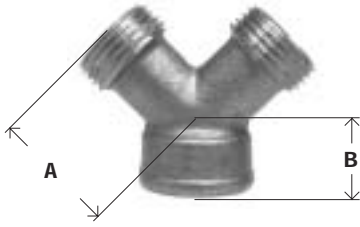
GARDEN HOSE

BRASS FITTINGS

BRASS

CAST BRASS HOSE - "Y" CONNECTOR

•WASHER INCLUDED



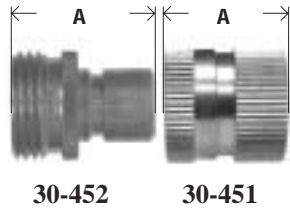
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-140	3/4"	1.40	0.67	0.22	6.21

• See more Garden Hose "Y"s on page 39

21A

QUICK DISCONNECT GARDEN HOSE COUPLERS

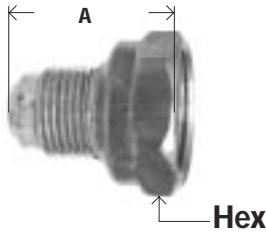
•WASHER INCLUDED



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-450	Complete	-----	0.24	9.19
30-451	Female end	1.14	0.12	5.84
30-452	Male end	1.26	0.12	3.65

LA73C

MALE FLARE X FEMALE HOSE RIGID

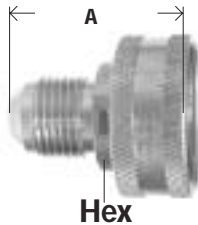


190
46WH
HFU21

Part #	Male Flare x Female Hose	A	Hex	Approx. Wt. Lbs.	List Price
30-123	3/8" x 3/4"	1.31	1.18	0.10	7.89
30-128	1/2" x 3/4"	1.38	1.18	0.12	6.36
30-133	5/8" x 3/4"	1.53	1.18	0.14	5.57

MALE FLARE x FEMALE HOSE SWIVEL

•WASHER INCLUDED



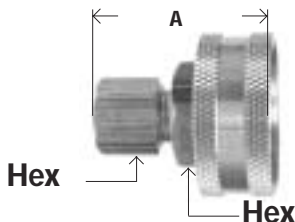
50GHSV
51GHSV 68H
W1 191

Part #	Male Flare x Female Hose	A	Hex	Approx. Wt. Lbs.	List Price
30-052	1/4" x 3/4"	1.24	0.75	0.10	3.15
30-138	3/8" x 3/4"	1.25	0.25*	0.12	10.57
30-139	1/2" x 3/4"	1.49	0.81	0.14	4.45

* Internal Hex

COMPRESSION X FGH

•WASHER INCLUDED



Part #	Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
30-050	1/4" x 3/4"	1.02	0.50	0.75	0.09	4.60
30-051	3/8" x 3/4"	1.04	0.62	0.75	0.12	5.14

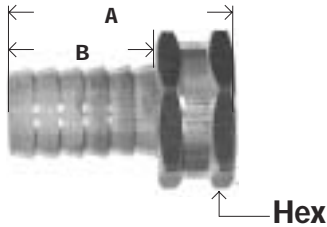
M IDLAND
M ETAL

BARSTOCK BRASS GARDEN HOSE COUPLINGS

BRASS

FEMALE SWIVEL ONLY

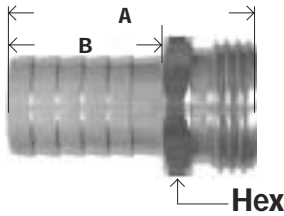
•WASHER INCLUDED



Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-031	3/8" x 3/4"	1.82	1.19	1.18	0.11	4.67
30-032	1/2" x 3/4"	1.82	1.19	1.18	0.12	3.91
30-033	5/8" x 3/4"	1.82	1.19	1.18	0.13	3.99
30-034	3/4" x 3/4"	1.82	1.19	1.18	0.15	4.11
30-035	1" x 1"	2.28	1.47	1.50	0.18	10.45

22RF KF-RY
591 HU126
GHF 195

MALE END ONLY



Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-039	3/8" x 3/4"	1.88	1.19	1.06	0.12	5.04
30-040	1/2" x 3/4"	1.88	1.19	1.06	0.12	4.04
30-041	5/8" x 3/4"	1.88	1.19	1.06	0.12	4.77
30-042	3/4" x 3/4"	1.88	1.19	1.06	0.13	3.19
30-043	1" x 1"	2.34	1.47	1.37	0.26	9.50

22RM
590 201GH
GHM 193
KF-PY HU125

GARDEN HOSE COUPLING



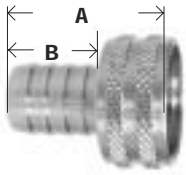
Part #	Hose Barb	List Price
30-025	3/8"	10.57
30-027	1/2"	9.26
30-028	5/8"	7.82
30-029	3/4"	8.76
30-030	1"	22.12

GHS
92GH 22R
936H 592
202GHS

Dimension data can change without notice.
Please call us when dimensions are critical.

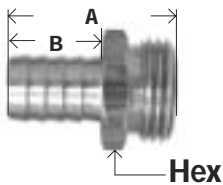


GARDEN HOSE COUPLING - Short Shank Knurled Nut



Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	List Price
30-466	1/2" x 3/4"	1.50	0.88	0.08	4.52
30-467	5/8" x 3/4"	1.50	0.88	0.09	4.53
30-468	3/4" x 3/4"	1.47	0.88	0.10	4.64

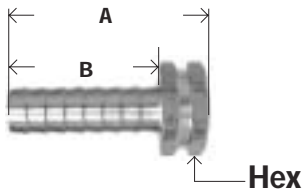
GARDEN HOSE COUPLING - Short Shank



Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-471	1/2" x 3/4"	1.55	0.88	1.06	0.11	4.38
30-472	5/8" x 3/4"	1.56	0.88	1.06	0.12	4.36
30-473	3/4" x 3/4"	1.56	0.88	1.06	0.13	5.24

ROD BRASS - 2" SHANK

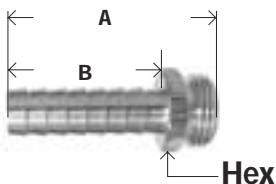
•WASHER INCLUDED



Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-505	1/2" x 3/4"	2.55	2.04	1.18	0.13	9.25
30-506	5/8" x 3/4"	2.56	2.04	1.18	0.16	8.90
30-507	3/4" x 3/4"	2.56	2.04	1.18	0.17	6.97

GHFL
594

ROD BRASS - 2" SHANK



Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-510	1/2" x 3/4"	2.72	2.04	1.06	0.16	9.88
30-511	5/8" x 3/4"	2.72	2.04	1.06	0.17	9.56
30-512	3/4" x 3/4"	2.72	2.04	1.06	0.20	10.45

Look at a day when you are supremely satisfied at the end. It's not a day when you lounge around doing nothing; it's when you've had everything to do, and you've done it.

GHML
593

- Lord Acton



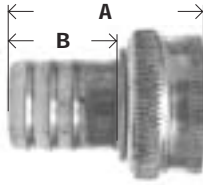
BRASS FITTINGS

GARDEN HOSE

WROUGHT BRASS

WROUGHT BRASS - Female end only

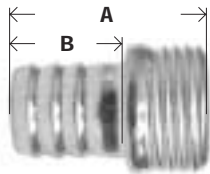
•WASHER INCLUDED



85L

Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	List Price
30-526	5/8" x 3/4"	1.58	0.91	0.05	2.55
30-527	3/4" x 3/4"	1.50	0.84	0.06	2.95

WROUGHT BRASS COUPLINGS - Male end only

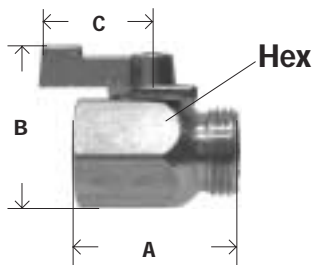


85M

Part #	Hose Barb x MGH	A	B	Approx. Wt. Lbs.	List Price
30-530	1/2" x 3/4"	1.50	0.88	0.02	2.09
30-531	5/8" x 3/4"	1.50	0.88	0.02	2.09
30-532	3/4" x 3/4"				2.09

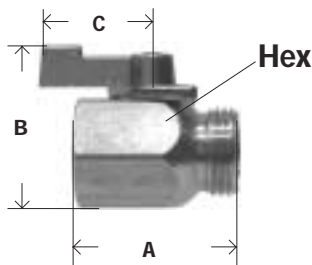
GARDEN HOSE VALVES

ONE WAY BRASS BALL VALVE - FGH x MGH



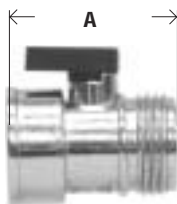
Part #	FGH x MGH	A	B	C	Hex	Approx. Wt. Lbs.	List Price
30-161	3/4" x 3/4"	1.55	1.89	1.31	1.06	0.42	31.37

ONE WAY BRASS BALL VALVE - Female x 3/4 MGH Pipe



Part #	Female NPTF x MGH	A	B	C	Hex	Approx. Wt. Lbs.	List Price
30-162	3/4" x 3/4"	1.55	1.89	1.31	1.06	0.42	40.64

ZINC ALLOY HOSE SHUT-OFF W/ ONE LEVER



Part #	FGH x MGH	A	Approx. Wt. Lbs.	List Price
30-631	3/4" x 3/4"	1.67	0.08	3.66

BRASS



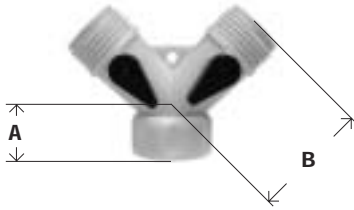
PLASTIC GARDEN HOSE VALVE • CYCOLAC BODY & BALL



LA450C

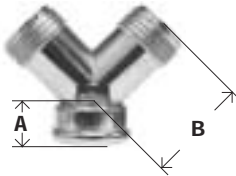
Part #	FGH x MGH	A	Hex	Approx. Wt. Lbs.	List Price
30-163	3/4" x 3/4"	1.75	1.25	0.04	3.60

PLASTIC, NON-CORROSIVE, 2-WAY HOSE SHUT-OFF "Y"



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-160	3/4"	0.74	1.87	0.08	2.76

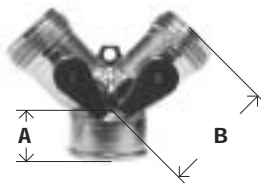
"Y" SHAPE ZINC ALLOY CONNECTOR



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-624	3/4"	0.75	1.52	0.12	3.31

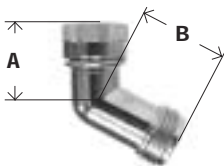
• Heavy Duty Garden Hose "Y" on page 35

"Y" SHAPE ZINC ALLOY CONNECTOR W/ TWO LEVERS



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-626	3/4"	0.60	1.66	0.10	5.06

ZINC ALLOY SWIVEL HOSE CONNECTOR



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-629	3/4"	1.31	1.50	0.08	4.00

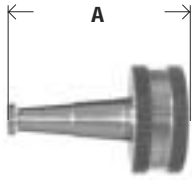
Dimension data can change without notice.
Please call us when dimensions are critical.

"The best way to predict the future is to invent it."

- Al an Kay

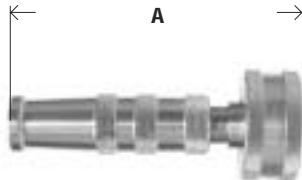


BRASS NOZZLE



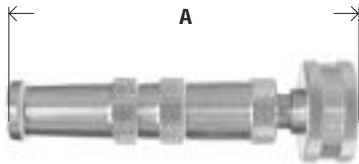
Part #	Size	A	Approx. Wt. Lbs.	List Price
30-637	3/4"	1.87	0.14	4.21

3" CROSSED PATTERN BRASS NOZZLE



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-640	3/4"	2.89	0.25	9.18

4" CROSSED PATTERN BRASS NOZZLE



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-638	3/4"	3.80	0.50	10.71

 <p>Lead Free</p> <p>10.24</p> <p>30-600 ..5-1/2" Zinc Alloy spray nozzle with insulated handle soft grip and front thread protector.</p>	 <p>Lead Free</p> <p>5.24</p> <p>30-6204-1/4" Zinc Alloy spray nozzle</p>
 <p>Lead Free</p> <p>10.95</p> <p>30-609 ... Zinc Alloy spray nozzle with easy adjustable brass head and plastic grip.</p>	 <p>2.48</p> <p>30-630 4-1/2" Plastic spray nozzle</p>



STEEL GREASE FITTINGS

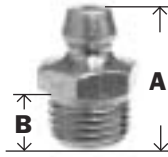
BRASS FITTINGS

Meets SAE #J-534C

Many types available on special order.

PIPE THREAD

BALL CHECK

#610
1610
2800
1720

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-110	1/8" -27 NPT	0.68	0.29	0.43	0.01	0.55
36-111	Thread Forming	0.62	0.23	0.43	0.01	0.83

PIPE THREAD

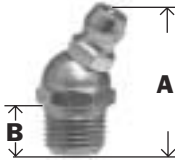
BALL CHECK

#607
1607
2800
1669

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-112	1/8" -27 NPT	1.25	0.78	0.43	0.02	1.60
36-113	1/8" -27 NPT	1.75	1.26	0.43	0.02	1.64

PIPE THREAD

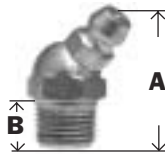
30° ANGLE BALL CHECK

#611
1611
2830

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-114	1/8" -27 NPT	0.90	0.29	0.43	0.01	1.01

PIPE THREAD

45° ANGLE BALL CHECK

#688
1688
2845

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-116 ⁴	1/8" -27 NPT	0.89	0.29	0.43	0.01	1.00

PIPE THREAD

65° ANGLE BALL CHECK

#612
1612
2865

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-118	1/8" -27 NPT	0.84	0.29	0.43	0.01	0.92

PIPE THREAD

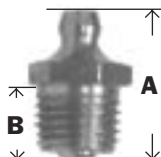
90° ANGLE BALL CHECK

#613
1613
2890

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-120	1/8" -27 NPT	0.84	0.29	0.43	0.01	0.89
36-121	1/8" -27 NPT	1.81	1.25	0.43	0.01	3.14

PIPE THREAD

BALL CHECK

#627
1627
2900K

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-130	1/4" -18 NPT	0.87	0.42	0.56	0.02	0.98

**MIDLAND
METAL**

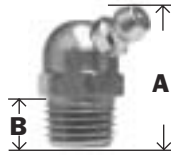
BRASS FITTINGS

STEEL GREASE FITTINGS

BRASS

PIPE THREAD

#629
1629
2965

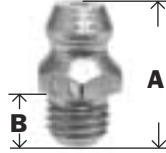


65° ANGLE BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-132	1/4"-18 NPT	0.96	0.34	0.56	0.02	1.53

1/4-28 TAPER THREAD

#641
1641
2400
3038

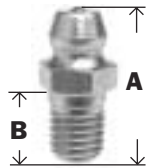


SHORT BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-140	1/4"-28 NPT	0.54	0.18	0.31	0.01	0.31
36-141	Thread Forming	0.57	0.20	0.31	0.01	0.37

1/4-28 TAPER THREAD

#652
1652
2400

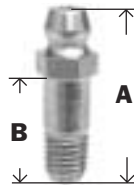


LONG BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-142	1/4"-28 Taper Thread	0.90	0.29	0.43	0.01	0.44

1/4-28 TAPER THREAD

#680
1680
2400

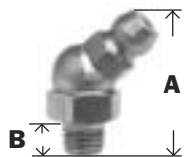


EXTRA LONG BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-144	1/4"-28 Taper Thread	0.96	0.62	0.31	0.02	0.67

1/4-28 TAPER THREAD

#637
1637
2445
1665
2465
3010

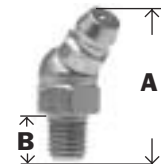


SHORT 45° BALL CHECK

Part #	Size	Angle	A	B	Hex	Approx. Wt. Lbs.	List Price
36-146	1/4"-28 Taper Thread	45°	0.81	0.20	0.37	0.02	0.82
36-147	1/4"-28 Taper Thread	65°	0.78	0.20	0.37	0.02	0.99

1/4-28 TAPER THREAD

#636
1630
2445



LONG 45° BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-148	1/4"-28 Taper Thread	0.90	0.29	0.37	0.02	1.23

1/4-28 TAPER THREAD

#911
1911
2490
3054



90° ANGLE BALL CHECK

Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-150	1/4"-28 Taper Thread	0.75	0.20	0.37	0.02	0.68
36-152	Thread Forming	0.75	0.20	0.37	0.02	1.39

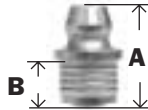


STEEL GREASE FITTINGS

BRASS FITTINGS

DRIVE TYPE

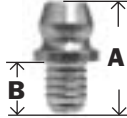
BALL CHECK

#608
1608

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-160	5/16"	0.54	0.25	0.01	0.58

DRIVE TYPE

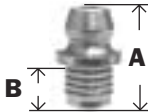
BALL CHECK

#728
1728
2316

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-164	3/16"	0.51	0.25	0.01	0.47

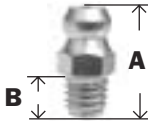
DRIVE TYPE

BALL CHECK

#743
1743
214

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-166	1/4"	0.55	0.23	0.01	0.37

METRIC

#711
6000
2106
2M6

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-168	6MM x 1	16	6	7	0.01	0.59

METRIC

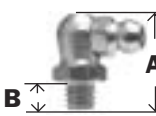
45° ANGLE

#712
6045
2107

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-170	6MM x 1	21	5.5	9	0.02	0.87

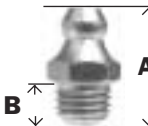
METRIC

90° ANGLE

#713
6090
2108
ZM906

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-172	6MM x 1	18	5.5	9	0.02	0.87

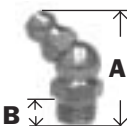
METRIC

#811
8000
2103
ZM58

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-174	8MM x 1	17	6	9	0.02	0.50

METRIC

45° ANGLE

#812
8045
2104
ZM458

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-176	8MM x 1	21	5.5	9	0.02	0.84

METRIC

90° ANGLE

#813
8090
2105
ZM908

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-178	8MM x 1	18	5.5	9	0.02	0.84

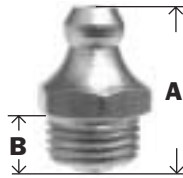
**MIDLAND
METAL**

BRASS FITTINGS

STEEL GREASE FITTINGS

METRIC

#911
9000
2109
ZM510



Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-180	10MM x 1	18	6	11	0.02	0.68

METRIC

#912
9045
2110
ZM4510

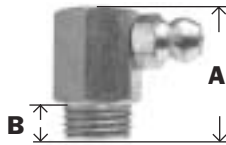


45° ANGLE

Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-182	10MM x 1	21	5.5	11	0.02	1.06

METRIC

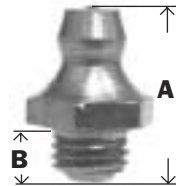
#913
9090
2111
ZM9010



90° ANGLE

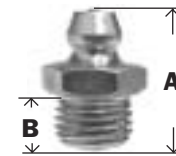
Part #	Size	A(mm)	B(mm)	Hex(mm)	Approx. Wt. Lbs.	List Price
36-184	10MM x 1	18	5.5	11	0.02	1.00

#711-B
1711
2500



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-186	5/16"-24	0.65	0.25	0.37	0.02	0.64

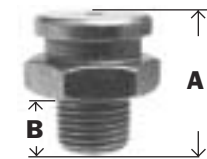
#710-B
1710
2600



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-188	3/8"-24	0.65	0.25	0.43	0.01	0.90

BUTTON HEAD

1184
1186



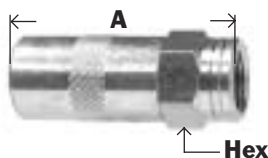
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-200	1/8"-27 PTF	0.75	0.34	0.62	0.03	2.43
36-205	1/4"-18 NPT	0.82	0.42	0.62	0.03	2.71

WHIP HOSE



Part #	Length	List Price
36-210	12" RUBBER	20.54
36-212	18" RUBBER	18.80
36-214	24" RUBBER	21.60
36-216	36" RUBBER	26.03

4 JAW GREASE GUN COUPLER



Part #	A	Hex	Approx. Wt. Lbs.	List Price
36-220	1.50	0.56	0.05	9.47

BRASS

**MIDLAND
METAL**

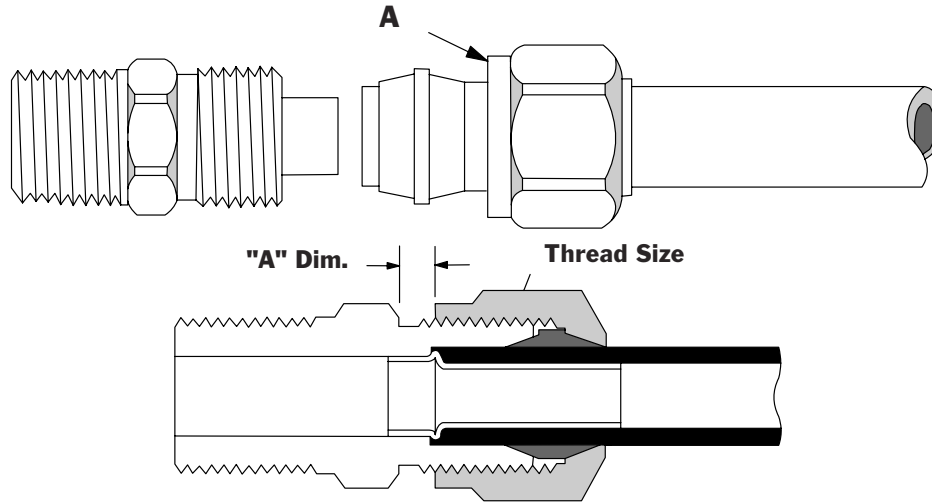
GOODYEAR
RUBBER PRODUCTS INC.

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**We Ship
World Wide**

D.O.T. Air Brake - Nylon Tubing



Tube O.D	1/4	3/8	1/2	5/8	3/4
Thread Size-B	7/16-24	17/32-24	11/16-20	13/16-18	1-18

•Typical Application

Air brake systems except where temperatures exceed +200°F or where battery acid can drip on tubing.

•Pressure

Maximum operating pressure of 150 PSI.

•Vibration

Fair resistance.

•Temperature Range

-40°F to +200°F (-40°C to +93°C).

•Material

CA360 Brass

•Used With

NT Nylon Tubing - SAE J844 Type A and B.

•Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Advantages

Easy to assemble (no tube preparation or flaring required.) Built in tube support. May be used with copper tubing by replacing nut, sleeve and insert with long nut and spherical sleeve. Insert should be removed for copper tubing use.

•Conformance

Meets specifications and standards of SAE and DOT FMVSS 571,106.

•Assembly Instructions

- 1- Cut tubing to desired length.
- 2-Slide nut and then sleeve on tubing. Threaded end of nut "A" must face toward fitting body.
- 3-Insert tubing into the preassembled fitting. Be sure tubing is bottomed in fitting.
- 4- Tighten nut to required torque as indicated on chart.

Disassembling: Remove nut and pull tubing out of fitting body. Insert will remain in tubing.

Reassembly: Push tubing and insert into fitting body until it bottoms. Thread nut onto fitting body and torque as in step 4.

Tube Size	Additional Number of Turns from Hand-Tight
1/4	3
3/8, 1/2	4
5/8, 3/4	3-1/2

Youth is when you're allowed to stay up late on New Year's Eve. Middle age is when you're forced to.

Bill Vaughan



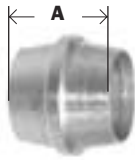
BRASS FITTINGS

D.O.T. AIR BRAKE - NYLON TUBING

BRASS

SLEEVE

SAE# 100115

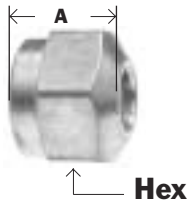


60NAB
60NTA
1460

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-001	1/4"	0.30	0.01	0.36
38-002	3/8"	0.39	0.02	0.46
38-003	1/2"	0.43	0.02	0.64
38-004	5/8"	0.48	0.03	1.35
38-005	3/4"	0.53	0.04	2.07

NUT

SAE# 100110

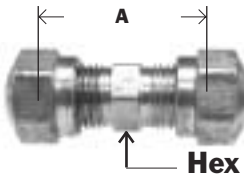


61NAB
61NTA
1461

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-010	1/4"	0.45	0.56	0.02	0.70
38-011	3/8"	0.63	0.62	0.02	0.83
38-012	1/2"	0.72	0.81	0.04	2.09
38-013	5/8"	0.77	0.94	0.04	2.41
38-014	3/4"	0.81	1.12	0.06	4.12

UNION

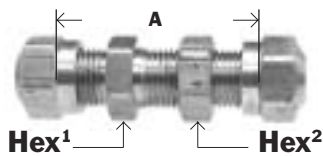
SAE# 100101BA



62NAB
62NTA
1462

Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-019	1/4"	0.85	0.43	0.08	5.06
38-020	3/8"	1.10	0.56	0.18	5.75
38-021	1/2"	1.31	0.68	0.20	9.85
38-022	5/8"	1.43	0.81	0.26	17.93
38-023	3/4"	1.60	1.00	0.48	27.73

BULKHEAD UNION

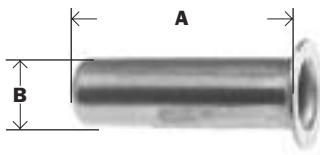


62NBH
1474
475

Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
38-028	1/4"	1.38	0.56	0.56	0.11	12.27
38-029	3/8"	1.61	0.69	0.75	0.16	16.66
38-030	1/2"	1.88	0.81	0.87	0.26	23.70

STAINLESS STEEL INSERT

• For SAE# J844 TUBING



59A
63NTA

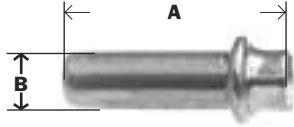
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
38-035	1/4"	0.53	0.16	0.01	0.51
38-036	3/8"	0.64	0.24	0.02	0.60
38-037	1/2"	0.81	0.37	0.02	0.59
38-038	5/8"	0.86	0.43	0.03	3.34
38-039	3/4"	1.04	0.56	0.03	3.15



D.O.T. AIR BRAKE - NYLON TUBING

BRASS FITTINGS

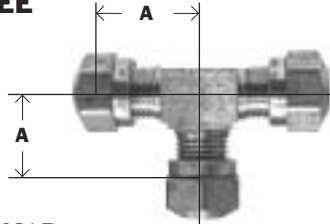
BRASS INSERT



1484
463

Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
38-040	1/4"	0.64	0.16	0.01	0.51
38-041	3/8"	0.76	0.24	0.02	0.44
38-042	1/2"	0.94	0.37	0.02	0.81
38-043	5/8"	1.06	0.43	0.02	1.21
38-048	3/4"	1.21	0.56	0.04	1.54

TEE

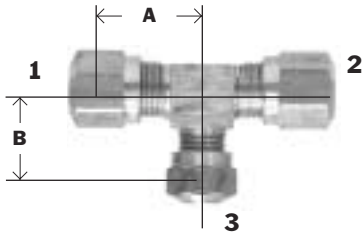


64NAB
264NTA
1464

SAE# 100401BA

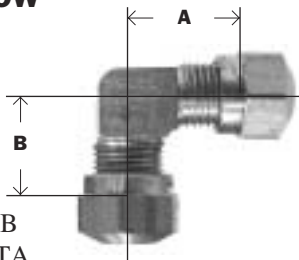
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-044	1/4"	0.61	0.14	8.23
38-045	3/8"	0.78	0.18	11.41
38-046	1/2"	0.92	0.36	15.57
38-047	5/8"	1.09	0.46	38.26

REDUCING TEE



Part #	Tube O.D. (1&2) x 3	A	B	Approx. Wt. Lbs.	List Price
38-049	3/8" x 1/4"	0.72	0.69	0.24	22.27
38-057	1/2" x 3/8"	0.92	0.85	0.30	12.77

ELBOW

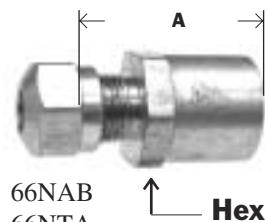


65NAB
265NTA
1465

SAE# 100201BA

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-052	1/4"	0.61	0.10	5.49
38-053	3/8"	0.78	0.12	8.51
38-054	1/2"	0.92	0.26	12.33
38-055	5/8"	1.09	0.34	27.54

FEMALE ADAPTER



66NAB
66NTA
1466
66NBH

SAE# 100103BA

Part #	Tube O.D. x Female NPT	A	Hex	Approx. Wt. Lbs.	List Price
38-060	1/4" x 1/8"	0.83	0.56	0.07	3.45
38-061	1/4" x 1/4"	1.06	0.68	0.08	3.62
38-062	3/8" x 1/8"	1.00	0.56	0.10	3.92
38-063	3/8" x 1/4"	1.18	0.68	0.10	5.06
38-064	3/8" x 3/8"	1.18	0.87	0.12	5.74
38-065	1/2" x 3/8"	1.27	0.87	0.16	6.80
38-066	1/2" x 1/2"	1.43	1.06	0.26	9.98
38-067	5/8" x 3/8"	1.31	0.87	0.28	19.19
38-068	5/8" x 1/2"	1.50	1.06	0.28	22.70

Dimension data can change without notice. Please call us when dimensions are critical.

**MIDLAND
METAL**

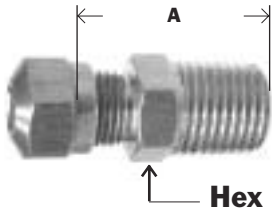
BRASS FITTINGS

D.O.T. AIR BRAKE - NYLON TUBING

BRASS

MALE ADAPTER

SAE# 100102BA

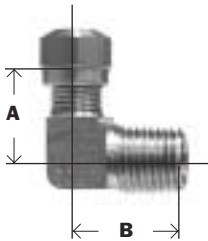


68NAB
68NTA
1468

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-072	1/4" x 1/16"	0.90	0.43	0.05	7.64
38-073	1/4" x 1/8"	0.88	0.43	0.05	2.91
38-074	1/4" x 1/4"	1.09	0.56	0.07	3.71
38-075	1/4" x 3/8"	1.13	0.68	0.09	4.48
38-076	3/8" x 1/8"	1.03	0.56	0.08	4.46
38-077	3/8" x 1/4"	1.20	0.56	0.10	4.97
38-078	3/8" x 3/8"	1.24	0.68	0.10	5.36
38-079	3/8" x 1/2"	1.43	0.87	0.16	6.61
38-080	1/2" x 1/4"	1.32	0.68	0.13	5.89
38-081	1/2" x 3/8"	1.32	0.68	0.14	6.20
38-082	1/2" x 1/2"	1.51	0.87	0.21	7.92
38-087	1/2" x 3/4"	1.57	1.06	0.23	18.45
38-083	5/8" x 3/8"	1.39	0.81	0.17	9.75
38-084	5/8" x 1/2"	1.57	0.87	0.20	10.80
38-088	5/8" x 3/4"	1.71	1.06	0.25	18.03
38-085	3/4" x 1/2"	1.68	1.00	0.28	18.21
38-086	3/4" x 3/4"	1.71	1.06	0.33	16.92

MALE ELBOW

SAE# 100202BA

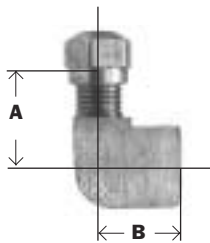


1469

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-091	1/4" x 1/8"	0.61	0.65	0.06	4.56
38-092	1/4" x 1/4"	0.67	0.86	0.09	4.43
38-093	1/4" x 3/8"	0.72	0.85	0.12	6.01
38-094	3/8" x 1/8"	0.72	0.73	0.09	5.85
38-095	3/8" x 1/4"	0.80	0.93	0.11	5.64
38-090	3/8" x 1/4" LONG	0.80	1.44	0.14	12.27
38-101	3/8" x 3/8"	0.83	0.90	0.14	5.89
38-102	3/8" x 1/2"	0.93	1.09	0.21	8.31
38-103	1/2" x 1/4"	0.85	0.98	0.18	7.25
38-104	1/2" x 3/8"	0.92	0.98	0.19	7.60
38-109	1/2" x 3/8" LONG	0.94	1.38	0.26	17.42
38-105	1/2" x 1/2"	1.02	1.17	0.28	8.66
38-106	5/8" x 3/8"	1.00	1.05	0.24	16.25
38-107	5/8" x 1/2"	1.10	1.25	0.28	13.45
38-110	5/8" x 3/4"	1.09	1.24	0.38	24.34
38-108	3/4" x 1/2"	1.19	1.33	0.41	21.54

FEMALE ELBOW

SAE# 100203BA



70NAB
1470
270NTA

Part #	Tube O.D. x Female NPTF	A	B	Approx. Wt. Lbs.	List Price
38-113	1/4" x 1/8"	0.68	0.52	0.08	5.42
38-114	1/4" x 1/4"	0.77	0.70	0.12	5.41
38-115	3/8" x 1/8"	0.82	0.58	0.14	5.73
38-116	3/8" x 1/4"	0.88	0.76	0.10	7.37
38-117	3/8" x 3/8"	0.93	0.76	0.12	8.02
38-118	1/2" x 3/8"	1.02	0.81	0.23	18.60
38-119	1/2" x 1/2"	1.13	1.01	0.36	13.30
38-120	5/8" x 1/2"	1.19	1.07	0.38	17.95



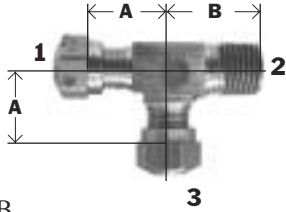
D.O.T. AIR BRAKE - NYLON TUBING

BRASS FITTINGS

BRASS

MALE RUN TEE

SAE# 100424BA

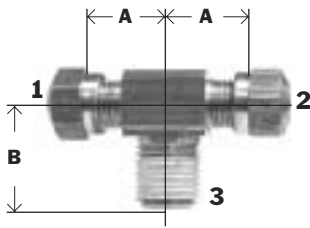


71NAB
271NTA
1471

Part #	Tube O.D. x Male NPTF x Tube O.D. 1x2x3	A	B	Approx. Wt. Lbs.	List Price
38-125	1/4" x 1/8" x 1/4"	0.61	0.65	0.10	9.15
38-126	1/4" x 1/4" x 1/4"	0.68	0.86	0.14	7.31
38-124	3/8" x 1/4" x 1/4"	0.72	0.69	0.14	18.15
38-127	3/8" x 1/4" x 3/8"	0.78	0.91	0.16	9.17
38-128	3/8" x 3/8" x 3/8"	0.83	0.90	0.20	8.51
38-129	1/2" x 3/8" x 1/2"	0.92	0.98	0.30	11.84

MALE BRANCH TEE

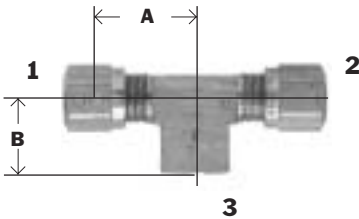
SAE# 100425BA



72NAB
272NTA
1472

Part #	Tube O.D. x Tube O.D. x Male NPTF 1x2x3	A	B	Approx. Wt. Lbs.	List Price
38-136	1/4" x 1/4" x 1/8"	0.61	0.65	0.10	7.86
38-137	1/4" x 1/4" x 1/4"	0.67	0.86	0.13	7.90
38-138	3/8" x 3/8" x 1/8"	0.71	0.73	0.14	9.45
38-132	3/8" x 1/4" x 1/4"	0.80	0.93	0.15	21.39
38-139	3/8" x 3/8" x 1/4"	0.78	0.91	0.16	9.19
38-133	1/2" x 1/2" x 1/4"	0.87	1.00	0.26	19.51
38-140	3/8" x 3/8" x 3/8"	0.83	0.90	0.20	9.58
38-134	1/2" x 3/8" x 3/8"	0.94	1.00	0.26	22.93
38-141	1/2" x 1/2" x 3/8"	0.92	0.98	0.30	12.05
38-142	1/2" x 1/2" x 1/2"	1.02	1.17	0.38	16.42
38-143	5/8" x 5/8" x 1/2"	1.09	1.24	0.44	19.11

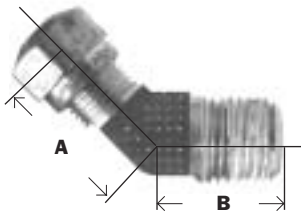
SPECIAL TEES



Part #	Tube O.D. x Tube O.D. x Female NPTF 1x2x3	A	B	Approx. Wt. Lbs.	List Price
38-144	3/8" x 3/8" x 1/4"	0.90	0.78	0.21	23.96
38-146	5/8" x 5/8" x 1/4"	1.04	0.89	0.48	34.86

45° ELBOW

SAE# 100302BA



6945NAB
279NTA
1480

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-148	1/4" x 1/8"	0.49	0.63	0.06	9.34
38-149	1/4" x 1/4"	0.60	0.85	0.08	9.81
38-150	3/8" x 1/8"	0.71	0.67	0.10	14.63
38-151	3/8" x 1/4"	0.72	0.86	0.10	8.23
38-152	3/8" x 3/8"	0.76	0.95	0.14	11.54
38-153	3/8" x 1/2"	0.78	1.20	0.24	15.88
38-157	1/2" x 1/4"	0.85	0.95	0.20	15.88
38-154	1/2" x 3/8"	0.84	0.94	0.20	12.25
38-155	1/2" x 1/2"	0.87	1.16	0.24	14.40
38-156	5/8" x 1/2"	1.00	1.20	0.28	17.02
38-158	3/4" x 1/2"	1.10	1.18	0.38	24.09

**MIDLAND
METAL**

GOODYEAR
RUBBER PRODUCTS INC.

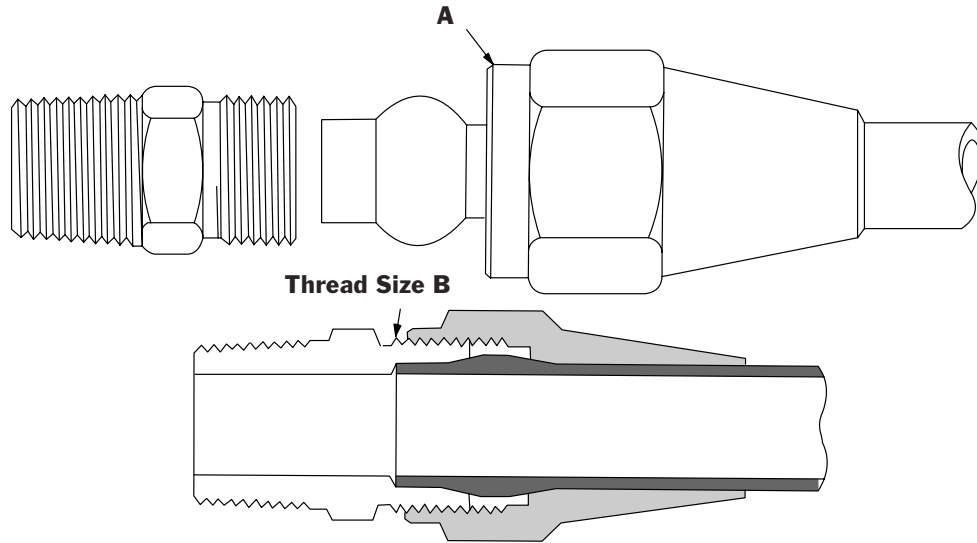
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D.O.T. Air Brake - Copper Tubing

BRASS



Tube O.D.	1/4	3/8	1/2	5/8	3/4
Thread Size-B	7/16-24	17/32-24	11/16-20	13/16-18	1-18

•Typical Application
Air brake systems.

•Pressure
Maximum operating pressure of 150 PSI.

•Vibration
Fair resistance.

•Temperature Range
-65°F to +250°F (-53°C to +121°C) with copper tubing.

•Material
CA360 Brass.

•Used With
Copper tubing in air brake systems.

•Tolerance
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Advantages
Easy to assemble (no flaring). May be used with nylon tubing by replacing long nut and spherical sleeve with insert, rigid sleeve and nut.

•Conformance
Meets specifications and standards of SAE and DOT.

•Assembly Instructions
 1- Cut tubing to desired length. Make sure all burrs are removed and the ends are cut square.
 2- Slide nut and then sleeve on tubing. Threaded end "A" must face toward fitting body.
 3- Insert tubing into fitting. Be sure tubing is bottomed on fitting shoulder.
 4- Thread nut onto fitting body until it is hand tight.
 5- From that point, tighten with a wrench the number of turns indicated in the chart below:

Tube Size	Additional Number of Turns from Hand Tight
1/4, 3/8	1-3/4
1/2, 5/8, 3/4	3-1/4



SLEEVE

SAE# 120115BA

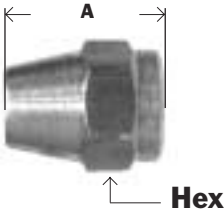


Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-161	1/4"	0.25	0.01	0.32
38-162	3/8"	0.31	0.02	0.38
38-163	1/2"	0.38	0.02	0.65
38-164	5/8"	0.44	0.02	1.17
38-165	3/4"	0.50	0.04	1.98

60AB
1360

NUT

SAE# 120111BA

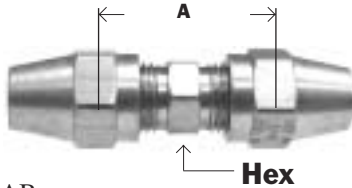


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-170	1/4"	0.75	0.56	0.02	1.16
38-171	3/8"	1.13	0.62	0.04	1.59
38-172	1/2"	1.25	0.81	0.08	2.75
38-173	5/8"	1.38	0.94	0.12	3.91
38-174	3/4"	1.56	1.12	0.18	8.15

20961
61AB
1361

UNION

SAE# 120101BA

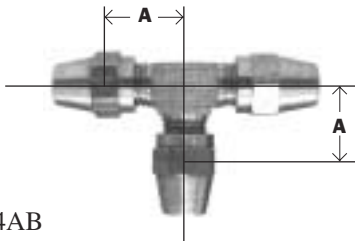


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-179	1/4"	0.81	0.44	0.08	4.69
38-180	3/8"	1.10	0.56	0.14	7.03
38-181	1/2"	1.07	0.69	0.24	11.53
38-182	5/8"	1.41	0.81	0.34	18.34
38-183	3/4"	1.59	1.00	0.54	29.60

62AB
1362

TEE

SAE# 120401BA



Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-188	1/4"	0.62	0.16	9.28
38-189	3/8"	0.82	0.24	12.16
38-190	1/2"	0.94	0.48	19.78
38-191	5/8"	1.09	0.60	35.90

264AB
1364

The freedom to fail is vital if you're going to succeed. Most successful people fail time and time again, and it is a measure of their strength that failure merely propels them into some new attempt at success.

Dimension data can change without notice.
Please call us when dimensions are critical.

- Michael Korda

**MIDLAND
METAL**

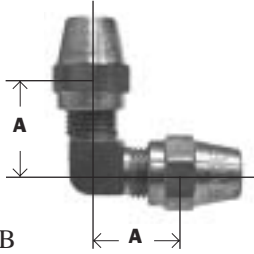
BRASS FITTINGS

D.O.T. AIR BRAKE - COPPER TUBING

BRASS

ELBOW

SAE# 120201BA



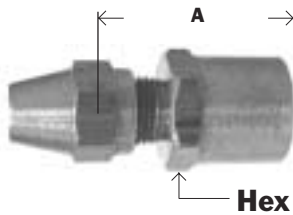
265AB
1365

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-196	1/4"	0.62	0.10	11.19
38-197*	3/8"	0.78	0.16	10.65
38-198	1/2"	0.92	0.28	15.34
38-199	5/8"	1.10	0.42	27.51

* Forged

FEMALE ADAPTER

SAE# 120103BA

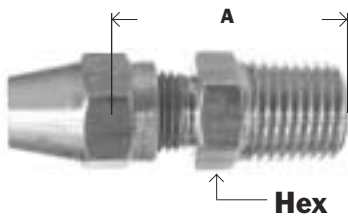


66AB
1366

Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-204	1/4" x 1/8"	0.84	0.56	0.08	5.13
38-205	1/4" x 1/4"	1.07	0.68	0.10	5.91
38-206	3/8" x 1/8"	1.00	0.56	0.10	5.28
38-207	3/8" x 1/4"	1.19	0.68	0.12	5.95
38-208	3/8" x 3/8"	1.18	0.87	0.16	6.61
38-209	1/2" x 3/8"	1.27	0.87	0.18	10.88
38-210	1/2" x 1/2"	1.44	1.06	0.20	13.52
38-211	5/8" x 3/8"	1.31	0.87	0.24	13.75
38-212	5/8" x 1/2"	1.50	1.06	0.26	22.07

MALE ADAPTER

SAE# 120102BA



68AB
1368

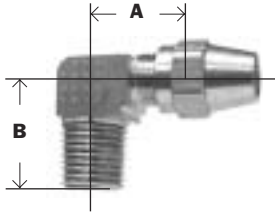
Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-217	1/4" x 1/8"	0.88	0.43	0.06	3.26
38-218	1/4" x 1/4"	0.97	0.56	0.08	3.92
38-219	1/4" x 3/8"	1.14	0.68	0.10	6.37
38-220	3/8" x 1/8"	1.02	0.56	0.08	4.70
38-221	3/8" x 1/4"	1.09	0.56	0.10	3.55
38-222	3/8" x 3/8"	1.19	0.69	0.12	5.41
38-223	3/8" x 1/2"	1.45	0.87	0.18	6.79
38-224	1/2" x 1/4"	1.32	0.69	0.16	7.28
38-225	1/2" x 3/8"	1.35	0.69	0.18	7.06
38-226	1/2" x 1/2"	1.51	0.87	0.24	8.75
38-227	5/8" x 3/8"	1.39	0.81	0.22	9.53
38-228	5/8" x 1/2"	1.57	0.87	0.24	10.66
38-229	3/4" x 1/2"	1.67	1.00	0.34	18.73
38-230	3/4" x 3/4"	1.71	1.06	0.40	19.11



BRASS

90° MALE ELBOW

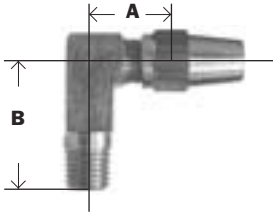
SAE# 120202BA



269AB
1369

Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-235	1/4" x 1/8"	0.64	0.76	0.08	5.41
38-236	1/4" x 1/4"	0.69	0.88	0.10	4.85
38-237	1/4" x 3/8"	0.73	0.86	0.14	9.09
38-238	3/8" x 1/8"	0.73	0.75	0.12	5.66
38-239	3/8" x 1/4"	0.80	0.93	0.12	5.95
38-240	3/8" x 3/8"	0.83	0.90	0.16	6.53
38-241	3/8" x 1/2"	0.95	1.11	0.24	8.17
38-242	1/2" x 1/4"	0.85	0.98	0.24	8.60
38-243	1/2" x 3/8"	0.92	0.98	0.22	9.07
38-244	1/2" x 1/2"	1.04	1.19	0.30	10.14
38-245	5/8" x 3/8"	1.01	1.06	0.34	16.05
38-246	5/8" x 1/2"	1.10	1.25	0.36	14.55
38-247	3/4" x 1/2"	1.19	1.32	0.44	26.81

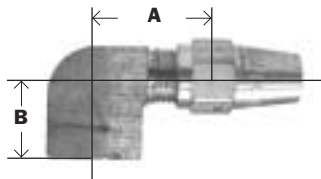
LONG PATTERN ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-249	3/8" x 1/4"	0.81	1.44	0.16	13.89

90° FEMALE ELBOW

SAE# 120203BA

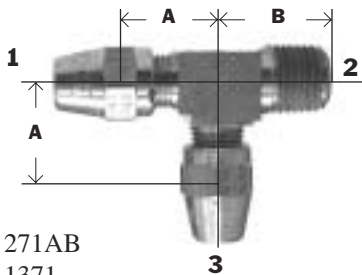


270AB
1370

Part #	Tube O.D. x Female NPTF	A	B	Approx. Wt. Lbs.	List Price
38-252	1/4" x 1/8"	0.69	0.52	0.10	8.24
38-253	1/4" x 1/4"	0.78	0.71	0.14	11.97
38-255	3/8" x 1/4"	0.84	0.78	0.16	6.44
38-256	3/8" x 3/8"	0.93	0.77	0.18	7.20
38-257	1/2" x 3/8"	1.03	0.82	0.26	13.99
38-259	5/8" x 1/2"	1.19	1.07	0.44	27.58

MALE RUN TEE

SAE# 120424BA



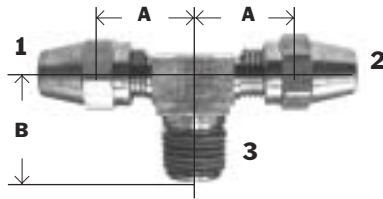
271AB
1371

Part #	Tube O.D. x Male NPTF (1&3)x2	A	B	Approx. Wt. Lbs.	List Price
38-264	1/4" x 1/8"	0.62	0.66	0.12	17.17
38-265	1/4" x 1/4"	0.68	0.87	0.16	17.02
38-266	3/8" x 1/4"	0.79	0.92	0.20	12.59
38-267	3/8" x 3/8"	0.83	0.90	0.24	13.06
38-269	1/2" x 1/2"	1.03	1.18	0.42	23.31



MALE BRANCH TEE

SAE# 120425BA

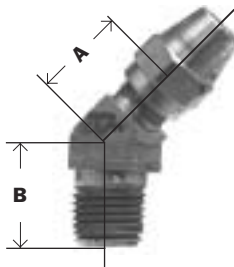


Part #	Tube O.D. x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
38-278	3/8" x 1/4"	0.78	0.91	0.18	12.72
38-279	3/8" x 3/8"	0.85	0.92	0.24	10.58
38-280	1/2" x 3/8"	0.91	0.98	0.36	12.02
38-281	1/2" x 1/2"	1.03	1.18	0.42	33.80
38-282	5/8" x 1/2"	1.09	1.24	0.52	23.59

272AB
1372

45° MALE ELBOW

SAE# 120302BA



Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-287	1/4" x 1/8"	0.49	0.63	0.08	6.68
38-288	1/4" x 1/4"	0.60	0.85	0.10	11.42
38-290	3/8" x 1/4"	0.72	0.86	0.18	7.45
38-291	3/8" x 3/8"	0.75	0.94	0.20	12.57
38-292	3/8" x 1/2"	0.78	1.16	0.22	13.13
38-293*	1/2" x 3/8"	0.82	0.94	0.18	12.05
38-294	1/2" x 1/2"	0.87	1.16	0.24	14.61

* Forged

279AB
1380

WORMS

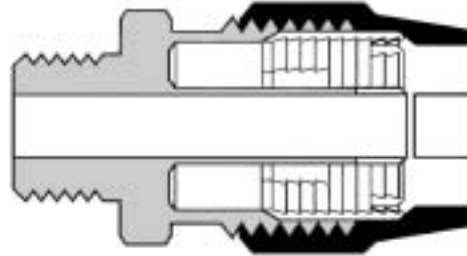
A minister decided that a visual demonstration would add emphasis to his Sunday sermon. Four worms were placed into four separate jars. The first worm was put into a container of alcohol. The second worm was put into a container of cigarette smoke. The third worm was put into a container of chocolate syrup. The fourth worm was put into a container of good clean soil. At the conclusion of the sermon, the Minister reported the following results: The first worm in alcohol - Dead. The second worm in cigarette smoke - Dead. Third worm in chocolate syrup - Dead. Fourth worm in good clean soil - Alive. So the Minister asked the congregation - What can you learn from this demonstration?

A little old woman in the back quickly raised her hand and said, "As long as you drink, smoke and eat chocolate, you won't have worms!"



**D.O.T.
Air Brake Hoses/Ends**

SAE# 100115



•Typical Application

Air Brake hose connections.
Meets SAE & DOT specifications
(FMVCS 10 GAL)

•Pressure

Determined by maximum working pressure for hose size.
Up to 125 psi

•Material

CA360 Brass.
Temperature: -40°F to + 120° F (-40°C to +48°C)

•Advantages

Can be used for nearly any brake line. Easy to assemble with a good selection of hose end configurations. Brass material offers excellent resistance against corrosion.

• Tolerance

+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

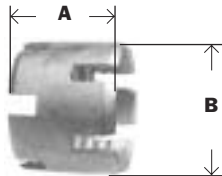
•Assembly Instructions

- 1- Slide nut and sleeve onto hose. Make sure bevel edge of sleeve faces out toward fitting.
- 2- Push hose into fitting until it bottoms.
- 3- Screw nut until contact is made with body hex.

NOTE: When reassembling fitting, body and nut should be inspected. Only reuse if in proper condition. Sleeves should never be reused.

SLEEVE

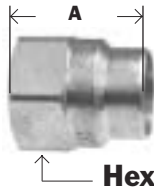
#60HC
3380-A
0903610
367



Part #	Hose I.D. Size	A	B	Approx. Wt. Lbs.	List Price
38-300	3/8"	0.69	0.90	0.02	1.76
38-301	1/2"	0.64	1.03	0.02	2.17

NUT

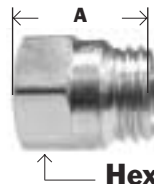
#61HC
369
3380-B
0903624



Part #	Hose I.D. Size	A	Hex	Approx. Wt. Lbs.	List Price
38-306	3/8"	1.26	1.03	0.04	3.17
38-307	1/2"	1.20	1.25	0.06	4.63

NUT

#61HCS
0903613
3380-D
31RBSG



Part #	Hose I.D. Size	Thread	A	Hex	Approx. Wt. Lbs.	List Price
38-312	3/8"	31/32-20	1.25	1.03	0.04	3.01
38-313	1/2"	1-3/32-20	1.20	1.25	0.06	4.70

Age wrinkles the body. Quitting wrinkles the soul.

- Douglas MacArthur

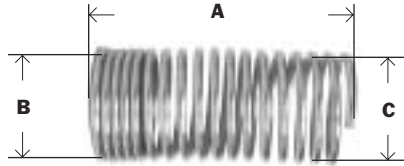


BRASS FITTINGS

D.O.T. AIR BRAKE - HOSES/ENDS

BRASS

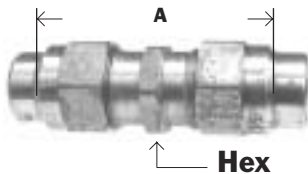
SPRING



Part #	Hose I.D.	A	B	C	Approx. Wt. Lbs.	List Price
38-351	3/8"	2.75	0.84	0.78	0.20	0.72
38-352	1/2"	2.75	1.10	1.10	0.22	1.05

#60SG 3380-C
0901045 377

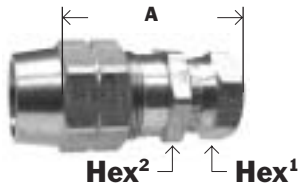
UNION



Part #	Hose I.D.	Thread	A	Hex	Approx. Wt. Lbs.	List Price
38-318	3/8"	31/32-30	2.55	0.97	0.32	21.09
38-319	1/2"	1-1/8-20	2.55	1.12	0.48	35.23

#62HC 362
3380B-Y0

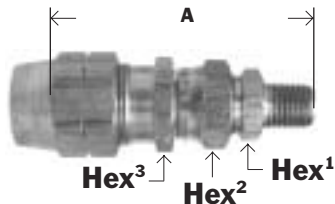
FEMALE CONNECTOR HOSE



Part #	Hose I.D. x Female ABS	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
38-357	3/8" x 3/4-20	1.96	0.87	0.97	0.24	21.54
38-358	1/2" x 7/8-20	2.1	1.06	1.12	0.38	28.08

#66ABS 3380B-Y7
66RBSV 386

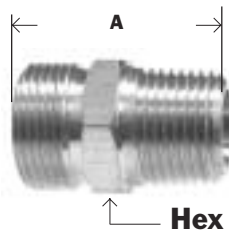
MALE CONNECTOR



Part #	Hose I.D. x Male Pipe	A	Hex 1	Hex 2	Hex 3	Approx. Wt. Lbs.	List Price
38-363	3/8" x 1/4"	2.90	0.75	0.87	0.97	0.38	22.20
38-364	1/2" x 3/8"	2.96	0.87	1.06	1.12	0.46	42.26

#68ABS 3380B-Y8
09155 387

ADAPTER



Part #	Male ABS x Male Pipe	ABS Thread	A	Hex	Approx. Wt. Lbs.	List Price
38-369	3/8" x 1/4"	3/4-20	1.14	0.75	0.06	2.50
38-368	3/8" x 3/8"	3/4-20	1.14	0.75	0.08	2.43
38-372	3/8" x 1/2"	3/4-20	1.37	0.87	0.12	3.97
38-370	1/2" x 3/8"	7/8-20	1.18	0.87	0.10	3.02
38-371	1/2" x 1/2"	7/8-20	1.38	0.87	0.12	7.50

#68ABS 76RB
1390 388

**MIDLAND
METAL**

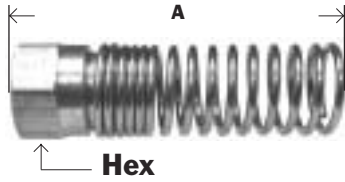
GOODYEAR
RUBBER PRODUCTS INC.

Call Toll Free: **1-866-711-4673**

WebSales@GoodyearRubberProducts.com

**We Ship
World Wide**

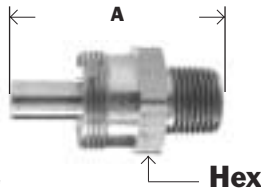
NUT AND SPRING ASSEMBLY



379
67RBSG
0999999

Part #	Hose I.D. Size	A	Hex	Approx. Wt. Lbs.	List Price
38-015	3/8"	3.55	1.03	0.18	3.75
38-016	1/2"	3.50	1.25	0.24	5.66

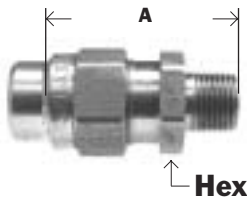
ADAPTER BODY



#68B
W1391Z

Part #	Hose I.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
38-324	3/8" x 1/4"	1.93	0.97	0.12	4.65
38-325	3/8" x 3/8"	1.92	0.97	0.14	4.45
38-326	3/8" x 1/2"	2.02	1.00	0.20	4.49
38-327	1/2" x 3/8"	2.07	1.12	0.18	5.74
38-328	1/2" x 1/2"	2.06	1.12	0.20	6.25

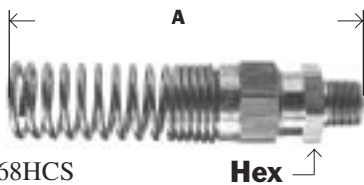
MALE ADAPTER



#68HC
368
3380B-Y2
68RB

Part #	Hose I.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
38-333	3/8" x 1/4"	1.91	0.97	0.22	9.75
38-334	3/8" x 3/8"	1.94	0.97	0.24	9.42
38-335	3/8" x 1/2"	2.12	0.97	0.26	10.25
38-336	1/2" x 3/8"	2.07	1.12	0.33	13.01
38-337	1/2" x 1/2"	2.07	1.12	0.36	13.74

MALE ADAPTER



#68HCS
3380B-Y3
68RBGS
378

Part #	Hose I.D. x Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
38-342	3/8" x 1/4"	4.91	1.00	0.32	10.94
38-343	3/8" x 3/8"	4.96	1.00	0.34	10.61
38-344	3/8" x 1/2"	5.53	1.00	0.38	11.45
38-345	1/2" x 3/8"	4.75	1.12	0.48	14.41
38-346	1/2" x 1/2"	4.88	1.12	0.52	17.24



D.O.T. PUSH-IN TUBE FITTINGS

Meets D.O.T. FMVSS 571.106 SAE J1131 Air Brake System Requirements

Benefits for Cost Savings & Engineering Project

- **Fast assembly:** No tools required. Simply push tubing in. Saves up to 75% of assembly time compared to standard air compression fittings. No loose parts to handle.
- **Fast disconnect:** Hold the collet collar with two fingers and pull out tube. No tools required.
- **Reusable:** Can be connected and disconnected several times.
- **Reliable sealing:** Using recommended tubing, full sealing is guaranteed.
- **Versatility:** Buna N O'ring standard. Viton and others available per request. Secure Tube Retention. Pulling on tubing only serves to tighten the connection.
- **Pre-Applied Teflon®** based pipe sealant on all male pipe threads, saving customer additional labor.
- **Full Flow Design,** provides more flow area than conventional fittings with internal tube supports even in the swivels.

DOT Fittings are constructed with an all brass captive eyelet which allows for maximum flow. The brass captive eyelet with extended length is floating and has a machined top end radius for easy instal-

lation of tubing. All male threads have a pre-applied Teflon® based pipe sealant to provide for easy assembly and leak proof seal.

Materials:

CA360 Brass - Barstock CA377 - Forged
"O" Ring: Buna - Nitrile (90 Durometer)
EP (Ethylene Propylene)

Working Pressures & Temperature Ranges

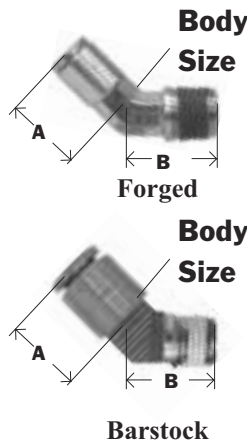
Vacuum to 750 PSI
-40°F to 200° F (-40°C to +93°C)

Ordering Options

The following options are **available only by customer request** and may be subject to minimum run quantities for ordering.

- Viton "O" Ring seals
- Electroless Nickel Plating
- Metric DQ DOT "One-Push" tube fittings with BSPT threads
- Manifolds with DQ DOT One Push Cartridges.

MALE 45° ELBOW

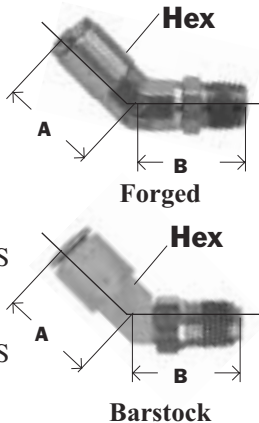


AQ54DOT
279 PTMS
1880
DQ54DOT

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
540402*	1/4" x 1/8"	0.83	0.89	0.37	0.06	9.48
540404*	1/4" x 1/4"	0.91	0.89	0.37	0.06	9.63
540602*	3/8" x 1/8"	0.75	0.89	0.51	0.08	12.51
540604*	3/8" x 1/4"	0.95	0.98	0.49	0.10	11.58
540606*	3/8" x 3/8"	0.89	0.98	0.50	0.10	12.51
540608	3/8" x 1/2"	0.70	1.10	0.87	0.15	9.17
540804*	1/2" x 1/4"	1.00	1.24	0.82	0.13	10.49
540806*	1/2" x 3/8"	1.05	1.10	0.62	0.16	18.34
540808*	1/2" x 1/2"	1.20	1.10	0.62	0.18	18.41
541006	5/8" x 3/8"	0.82	1.23	0.73	0.22	31.31
541008*	5/8" x 1/2"	0.98	0.98	0.72	0.21	22.22
541208*	3/4" x 1/2"	1.36	1.08	0.93	0.28	32.17
541212*	3/4" x 3/4"	1.36	1.08	0.94	0.32	30.07

* Forged

MALE 45° SWIVEL ELBOW



AQ54DOTS
279 PMT
1880
DQ54DOTS

Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
540402S	1/4" x 1/8"	0.60	0.72	0.43	0.06	8.97
540404S*	1/4" x 1/4"	1.10	0.89	0.56	0.09	9.32
540602S*	3/8" x 1/8"	1.07	0.98	0.43	0.10	12.27
540604S*	3/8" x 1/4"	1.07	0.98	0.56	0.11	12.42
540606S*	3/8" x 3/8"	1.23	0.97	0.68	0.14	13.08
540804S*	1/2" x 1/4"	1.22	1.12	0.56	0.14	22.68
540806S*	1/2" x 3/8"	1.32	1.10	0.68	0.16	17.64
540808S*	1/2" x 1/2"	1.61	1.10	0.88	0.18	19.18
541008S*	5/8" x 1/2"	1.69	1.23	0.87	0.24	31.31

* Forged

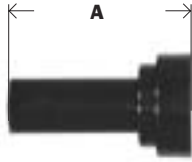
Dimension data can change without notice. Please call us when dimensions are critical.



D.O.T. PUSH-IN

BRASS FITTINGS

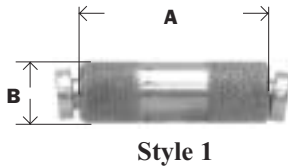
PLUG



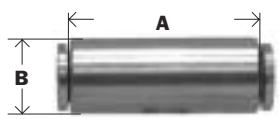
Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
595320	5/32"	1.16	0.01	1.17
590400	1/4"	0.81	0.02	0.91
590600	3/8"	0.99	0.02	1.26
590800	1/2"	0.99	0.04	1.40

1829
DQ59DOT

UNION



Style 1



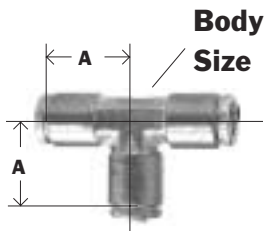
Style 2

AQ62DOT
162 PL
1862
DQ62DOT

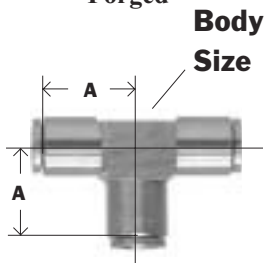
Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
620532*	5/32"	1.18	0.37	0.06	5.67
620400	1/4"	1.62	0.53	0.08	6.05
620600	3/8"	1.94	0.69	0.14	7.25
620800	1/2"	1.96	0.83	0.19	8.82
621000	5/8"	2.51	0.96	0.30	12.94
621200*	3/4"	2.00	1.06	0.30	41.31

* Style 1

UNION TEE



Forged



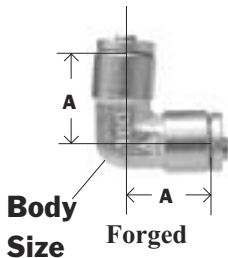
Barstock

AQ64DOT
164 PL
1864
DQ64DOT

Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
640400	1/4"	0.93	0.53	0.11	10.27
640600	3/8"	1.15	0.68	0.22	19.97
640800*	1/2"	1.16	0.63	0.25	26.24
641200*	3/4"	1.34	0.94	0.50	41.11

* Forged

UNION ELBOW



Forged

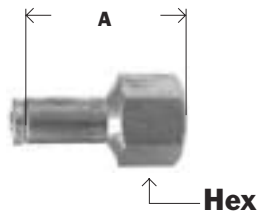
AQ65DOT
165 PL
1865
DQ65DOT

Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
655320*	5/32"	0.59	0.29	0.03	18.84
650400*	1/4"	0.91	0.37	0.06	10.88
650600*	3/8"	0.98	0.50	0.10	13.23
650800*	1/2"	1.15	0.62	0.18	18.67

* Forged



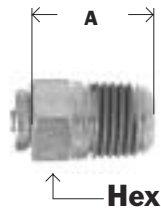
FEMALE CONNECTOR



AQ66DOT
166 PL
1866
DQ66DOT

Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
660402	1/4" x 1/8"	1.23	0.56	0.06	8.12
660404	1/4" x 1/4"	1.42	0.75	0.10	13.21
660602	3/8" x 1/8"	1.35	0.68	0.09	25.13
660604	3/8" x 1/4"	1.30	0.75	0.11	11.97
660606	3/8" x 3/8"	1.41	0.87	0.14	13.13
660804	1/2" x 1/4"	1.56	0.81	0.14	20.23
660806	1/2" x 3/8"	1.51	0.87	0.16	22.77
660808	1/2" x 1/2"	1.73	1.12	0.25	23.54

MALE CONNECTOR



AQ68DOT
168 PL
1868
DQ68DOT

Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
685320	5/32" x 10/32"	0.69	0.37	0.02	7.19
685321	5/32" x 1/16"	0.67	0.37	0.02	5.52
685322	5/32" x 1/8"	0.67	0.43	0.02	5.87
680302	3/16" x 1/8"	1.82	0.50	0.02	4.48
680402	1/4" x 1/8"	0.85	0.56	0.04	4.38
680404	1/4" x 1/4"	1.08	0.56	0.05	5.23
680406	1/4" x 3/8"	1.08	0.68	0.08	5.51
680602	3/8" x 1/8"	1.18	0.56	0.04	6.54
680604	3/8" x 1/4"	1.20	0.68	0.08	7.06
680606	3/8" x 3/8"	1.19	0.68	0.08	6.47
680608	3/8" x 1/2"	1.38	0.87	0.14	6.03
680804	1/2" x 1/4"	1.38	0.81	0.11	6.17
680806	1/2" x 3/8"	1.30	0.81	0.12	7.56
680808	1/2" x 1/2"	1.62	0.87	0.14	8.31
681006	5/8" x 3/8"	1.62	1.00	0.18	9.26
681008	5/8" x 1/2"	1.63	1.00	0.18	9.19
681208	3/4" x 1/2"	1.28	1.06	0.20	22.14
681212	3/4" x 3/4"	1.28	1.06	0.20	24.09

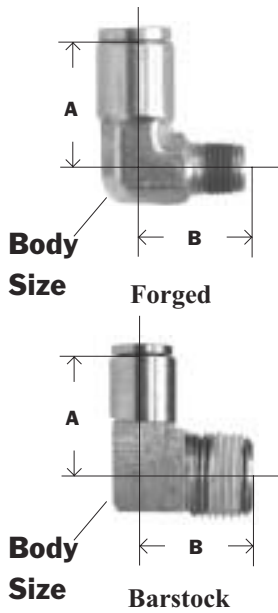
REASON ONE NOT TO MESS WITH A CHILD.

A little girl: was talking to her teacher about whales. The teacher: said it was physically impossible for a whale to swallow a human because even though it was a very large mammal its throat was very small. The little girl stated that Jonah was swallowed by a whale. Irritated, the teacher: reiterated that a whale could not swallow a human; it was physically impossible. The little girl: said, "When I get to heaven I will ask Jonah". The teacher: asked, " What if Jonah went to hell?"

The little girl replied, "Then you ask him".



MALE ELBOW

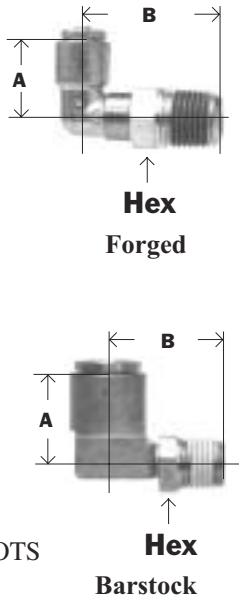


Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
695302*	5/32" x 1/16"	0.65	0.59	0.32	0.03	7.91
695322*	5/32" x 1/8"	0.65	0.59	0.32	0.03	9.05
690302*	3/16" x 1/8"	0.84	0.69	0.33	0.03	5.11
690402*	1/4" x 1/8"	0.91	0.75	0.37	0.05	9.60
690404	1/4" x 1/4"	0.82	0.82	0.36	0.06	8.78
690406	1/4" x 3/8"	0.93	0.83	0.69	0.11	9.19
690602*	3/8" x 1/8"	0.98	0.80	0.49	0.14	8.82
690604	3/8" x 1/4"	1.11	0.97	0.68	0.14	8.82
690606	3/8" x 3/8"	1.10	0.99	0.70	0.15	10.22
690608	3/8" x 1/2"	1.11	1.02	0.86	0.20	11.91
690804	1/2" x 1/4"	1.16	1.02	0.82	0.22	14.19
690806	1/2" x 3/8"	1.16	0.99	0.81	0.22	11.17
690808	1/2" x 1/2"	1.16	1.12	0.87	0.24	7.42
691006	5/8" x 3/8"	1.34	1.10	0.95	0.30	13.23
691008	5/8" x 1/2"	1.38	1.23	0.68	0.32	13.16
691208*	3/4" x 1/2"	1.22	1.36	0.93	0.32	33.72
691212*	3/4" x 3/4"	1.22	1.40	0.93	0.34	37.84

* Forged

AQ69DOT
169 PLNS
1869
DQ69DOT

MALE SWIVEL ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
690402S*	1/4" x 1/8"	0.89	0.88	0.43	0.07	9.19
690404S	1/4" x 1/4"	0.89	1.08	0.56	0.10	13.47
690406S*	1/4" x 3/8"	0.98	1.14	0.68	0.10	15.62
690602S*	3/8" x 1/8"	0.98	1.08	0.43	0.10	9.19
690604S*	3/8" x 1/4"	0.98	1.14	0.56	0.10	10.73
690606S*	3/8" x 3/8"	0.98	1.19	0.68	0.14	11.47
690608S*	3/8" x 1/2"	0.98	1.52	0.87	0.19	16.16
690804S	1/2" x 1/4"	0.99	1.22	0.56	0.16	22.71
690806S*	1/2" x 3/8"	1.16	1.34	0.68	0.18	12.57
690808S	1/2" x 1/2"	1.10	1.47	0.87	0.26	14.63
691006S	5/8" x 3/8"	1.25	1.34	0.68	0.28	14.07
691008S*	5/8" x 1/2"	1.23	1.71	0.87	0.30	21.32
691208S*	3/4" x 1/2"	1.22	2.20	1.06	0.50	45.22
691212S*	3/4" x 3/4"	1.22	2.30	1.06	0.56	47.40

* Forged

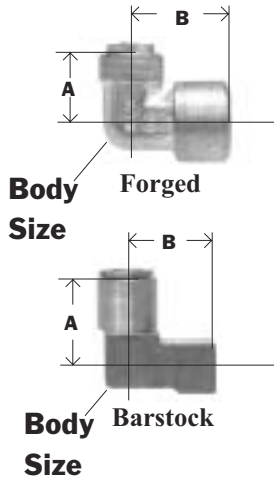
AQ69DOTS
169 PL
1869
DQ69DOTS

“Employ your time in improving yourself by other men’s writings, so that you shall gain easily what others have labored hard for.”

- Socrates



FEMALE ELBOW

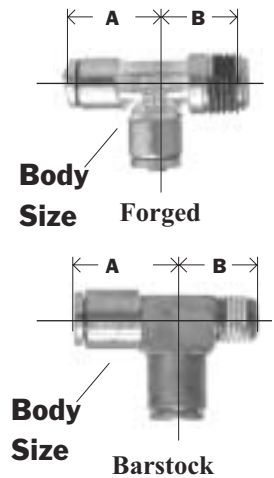


Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
700402*	1/4" x 1/8"	0.92	0.83	0.37	0.06	9.71
700404*	1/4" x 1/4"	1.02	1.02	0.50	0.10	11.81
700406*	1/4" x 3/8"	1.11	0.98	0.62	0.16	14.45
700602	3/8" x 1/8"	1.01	0.96	0.68	0.15	7.93
700604*	3/8" x 1/4"	0.96	0.94	0.48	0.12	12.21
700606*	3/8" x 3/8"	0.98	0.91	0.68	0.17	16.47
700804	1/2" x 1/4"	1.15	1.11	0.82	0.22	11.95
700806	1/2" x 3/8"	1.12	1.11	0.82	0.26	11.03
700808	1/2" x 1/2"	1.23	1.07	1.00	0.30	16.69

* Forged

AQ70DOTS
1870
DQ70DOTS

MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
710402*	1/4" x 1/8"	0.74	0.92	0.37	0.06	13.44
710404	1/4" x 1/4"	0.93	0.94	0.56	0.08	10.58
710604	3/8" x 1/4"	0.92	1.15	0.49	0.20	13.08
710606*	3/8" x 3/8"	0.98	0.98	0.49	0.12	18.38
710608	3/8" x 1/2"	1.11	1.09	0.87	0.14	17.60
710806	1/2" x 3/8"	1.22	1.09	0.81	0.28	16.54

* Forged

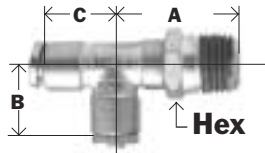
AQ71DOT
171 PL
1871
DQ71DOT

I think it is an immutable law in business that words are words, explanations are explanations, promises are promises – but only performance is reality.

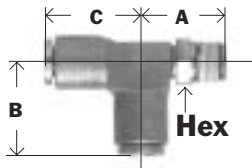
- Harold Geneen



MALE SWIVEL RUN TEE



Forged



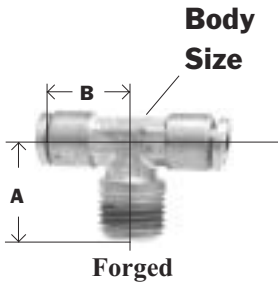
Barstock

AQ71DOTS
171 PL
1871
DQ71DOTS

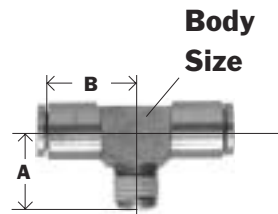
Part #	Tube O.D. x Male NPTF	A	B	C	Hex	Approx. Wt. Lbs.	List Price
710402S	1/4" x 1/8"	0.82	0.92	0.92	0.43	0.10	15.15
710404S*	1/4" x 1/4"	1.24	0.92	0.92	0.56	0.11	15.23
710604S*	3/8" x 1/4"	1.14	1.00	1.00	0.56	0.15	19.27
710606S*	3/8" x 3/8"	1.18	0.98	0.98	0.68	0.14	19.50
710804S	1/2" x 1/4"	1.22	1.18	1.18	0.56	0.24	24.15
710806S*	1/2" x 3/8"	1.31	1.14	1.14	0.68	0.24	28.28
710808S	1/2" x 1/2"	1.42	1.21	1.21	0.87	0.30	20.37

* Forged

MALE BRANCH TEE



Forged



Barstock

AQ72DOT
172 PL
1872
DQ72DOT

Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
720302	3/16" x 1/8"	0.64	0.75	0.41	0.07	11.83
720402	1/4" x 1/8"	0.93	0.93	0.54	0.10	10.85
720404*	1/4" x 1/4"	0.92	0.92	0.43	0.10	14.37
720604	3/8" x 1/4"	0.92	1.15	0.68	0.20	12.18
720606*	3/8" x 3/8"	0.92	1.15	0.48	0.10	12.81
720804*	1/2" x 1/4"	1.07	1.10	0.62	0.20	35.41
720806	1/2" x 3/8"	0.99	1.24	0.62	0.24	17.29
720808	1/2" x 1/2"	1.12	1.22	0.86	0.32	32.34

* Forged

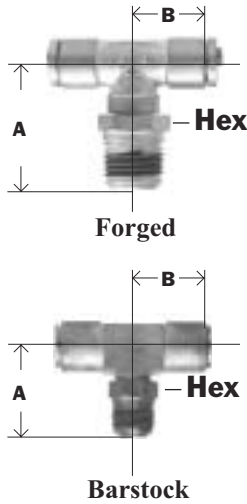
REASON TWO NOT TO MESS WITH A CHILD.

One day a little girl was sitting and watching her mother do the dishes at the kitchen sink. She suddenly noticed that her mother had several strands of white hair sticking out in contrast on her brunette head. She looked at her mother and inquisitively asked, "Why are some of your hairs white, Mom?" Her mother replied, "Well, every time that you do something wrong and make me cry or unhappy, one of my hairs turns white."

The little girl thought about this revelation for a while and then said, "Momma, how come ALL of grandma's hairs are white?"



MALE SWIVEL BRANCH TEE

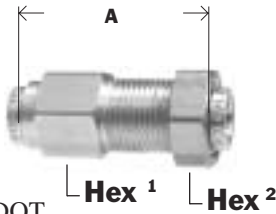


Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
725322S*	5/32" x 1/8"	1.08	0.59	0.43	0.06	0.07
720402S*	1/4" x 1/8"	1.04	0.92	0.43	0.12	15.15
720404S*	1/4" x 1/4"	1.16	0.92	0.56	0.14	15.31
720604S*	3/8" x 1/4"	1.16	0.99	0.56	0.20	21.83
720606S*	3/8" x 3/8"	1.21	0.98	0.68	0.18	20.82
720804S*	1/2" x 1/4"	1.26	1.16	0.56	0.30	27.27
720806S	1/2" x 3/8"	1.24	1.24	0.68	0.34	18.66
720808S	1/2" x 1/2"	1.42	1.09	0.87	0.22	21.85

* Forged

AQ72DOTS
172 PL
1872
DQ72DOTS

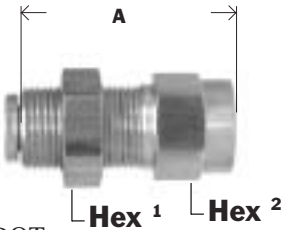
BULKHEAD UNION



AQ82DOT
62PLBH
1874
DQ82DOT

Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
820400	1/4"	1.52	0.62	0.68	0.16	11.98
820600	3/8"	1.69	0.81	0.81	0.21	16.61
820800	1/2"	1.85	1.12	1.12	0.14	28.88
821000	5/8"	1.85	1.25	1.25	0.30	33.96

FEMALE BULKHEAD UNION



AQ86DOT
1873
DQ86DOT

Part #	Tube O.D. x Female NPTF	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
860402	1/4" x 1/8"	1.30	0.68	0.68	0.08	13.05
860404	1/4" x 1/4"	1.53	0.68	0.75	0.10	9.71
860604	3/8" x 1/4"	1.89	0.81	0.75	0.14	13.05
860606	3/8" x 3/8"	1.49	0.94	0.87	0.16	11.10
860808	1/2" x 1/2"	1.87	1.25	1.00	0.32	20.01



AIR BRAKE - ACCESSORIES**BRASS SPLIT SLEEVE DOT FITTINGS (5/32 O.D.)****COLLET**

Part #	Tube O.D.	List Price
38-711	5/32"	1.13

NUT

Part #	Tube O.D.	List Price
38-732	5/32"	1.47

DOUBLE END UNION

Part #	Tube O.D.	List Price
38-761	5/32"	12.47

CONNECTOR

Part #	Tube O.D.	Pipe Thread	List Price
38-769	5/32"	1/16	7.59
38-770	5/32"	1/8	7.73

ELBOW

Part #	Tube	Pipe Thread	List Price
38-718	5/32"	1/8	7.27

BRASS FITTINGS**AIR BRAKE TUBING**

- SAE J844, Type 3 A & B & DOT FMVSS 106
- Nylon inner tube with open ply nylon fiber reinforcement and nylon cover.
- 40° F to +200° F temperature range.
- 150 P.S.I. max. working pressure



Part #	Type A	Color	Length	List Price
38-950	1/8"	Black	100'	45.53
38-952	1/4"	Black	100'	79.35
38-952R	1/4"	Red	100'	124.95
38-952U	1/4"	Blue	100'	124.95
38-952-2	1/4"	Black	500'	551.25
38-952-3	1/4"	Black	1000'	955.50

AIR BRAKE TUBING

Part #	Type B	Color	Length	List Price
38-960	3/8"	Black	100'	156.57
38-960U	3/8"	Blue	100'	338.10
38-960Y	3/8"	Yellow	100'	338.10
38-960B5	3/8"	Black	500'	723.33
38-965	1/2"	Black	100'	209.14
38-965R	1/2"	Red	100'	463.05
38-965B5	1/2"	Black	500'	986.19
38-970	5/8"	Black	100'	529.20
38-975	3/4"	Black	100'	690.90

NOTE: The Synflex, Parker and Eaton tubing must be torqued at 47 in. pounds.

Any other 5/32 DOT tubing used, tubing or fitting manufacturer should be contacted for proper torque requirements.

FUEL LINE AND VAPOR EMISSION

- SAE 30R7
- Nitrile tube w/ spiral synthetic cord, hypalon cover.
- 50 p.s.i. working pressure. 1/2 -35 PSI
- 40° F to + 257° F temperature range.
- Low pressure/ high temperature fuel for cars, light trucks, and small engines.
- Meets SAE J1402

Part #	ID	OD	Length	List Price
38-920	3/16	13/32	25'	128.63
38-926	5/16	9/16	25'	152.51
38-923	1/4	1/2	25'	135.98
38-927	3/8	5/8	50'	99.78

**MIDLAND
METAL**

BRASS FITTINGS

AIR BRAKE - HOSES/ ENDS



STEEL BRAKE LINES FOR DOMESTIC VEHICLES

Length	Catalog Number 3/16" O.D.	List Price	Catalog Number 1/4" O.D.	List Price	Catalog Number 5/16" O.D.	List Price	Catalog Number 3/8" O.D.	List Price
6"	38-930							5.37
8"	38-931							5.66
10"	38-932							6.03
12"	38-933						38-985	4.60
20"	38-934						38-986	6.84
30"	38-935		38-943	6.03				7.64
40"	38-936		38-944	6.98			38-988	9.26
51"	38-937		38-945	8.00	38-984	10.78	38-989	8.59
60"	38-938		38-946	9.00			38-990	14.11
72"	38-939							10.71

NOTE: 3/16" and 1/4" tube assemblies have one long and one short inverted nut.

AIR BRAKE ACCESSORIES GLADHAND COUPLINGS

- Die Cast Aluminum Body
- Conforms to SAE J318
- Connects to 1/2" pipe



SERVICE (Signal) Blue
connects only to service

Part #	List Price
38-712	15.88

EMERGENCY (Supply Line) Red

Part #	connects only to emergency	List Price
38-714		15.88

UNIVERSAL - Gold

Part #	connects to all three styles	List Price
38-716		15.14

GLADHAND SEAL



Part #	Full Face	List Price
38-720		1.69

HEX BALL FOOT CHUCK



Part #	1/4" Female Pipe	List Price
46-600		2.92

BALL FOOT CHUCK WITH 1/4 I.D. HOSE BARB



Part #	1/4" I.D. Hex	List Price
46-607		2.76

DUAL FOOT CHUCKS

6999		99941
693		50-065
108		6569
DFG-1		



Standard straight-on chuck with 30° reverse angle chuck,

Part #	1/4" NPT Female Thread	List Price
320-000		9.50

ANGLE CHUCK



For inner dual wheels with tilted valves.
Has 6" extension and 1/4" NPT female thread

Part #	1/4" NPT Female Thread	List Price
320-005		8.53

BRASS



AIR BRAKE - ACCESSORIES**AIR BRAKE HOSES****AIR BRAKE HOSE**

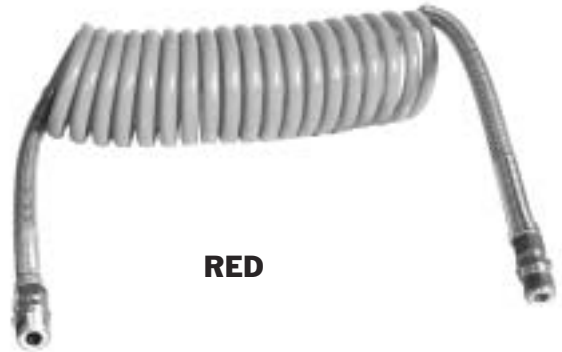
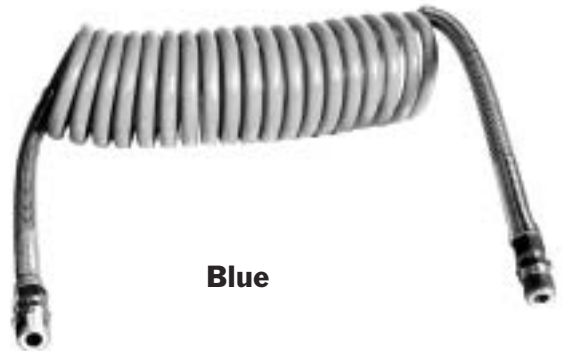
- Spiral synthetic cord reinforcement with neoprene cover.
- 40° F to +200° F temperature range.
- Max operating pressure 255 psi
- Max burst pressure 900 psi
- Meets SAE J1402

Part #	ID	OD	Length	List Price
38-910	3/8	3/4	50'	122.89
38-915	1/2	7/8	50'	125.83

REMOTE CONTROL DRAIN VALVES**REMOTE CONTROL DRAIN VALVES**

- Brass Body and stainless steel spring
- Steel cable, nylon coated, certified to 200lbs pull test.
- Low profile to minimize accidental hits and damages.
- Pipe thread 1/4" NPTF.
- To order pre-coated pipe threads, add prefix "P" to the part number.

Part #		List Price
46-492	Standard 48"	31.09
46-493	Standard 60"	31.09

BRASS FITTINGS**COILED AIRBRAKE TUBE ASSEMBLIES****RED****Blue**

- Conforms to SAE J844 Type B and SAE J1131.
- Conforms to DOT FMVSS 571. 106.
- Maximum Working Pressure 150 PSI,
- Minimum Burst 950 PSI.
- Temperature Range -40° F to 200° F.
- Brass end with spring guards and 1/2" male pipe connectors.
- Spring guards zinc plated for maximum corrosion resistance.
- Color coding, red for emergency and blue for service, provides you with error free installation.
- Preassembled for immediate installation.
- 1/2" O.D. with 1/2" fitting.

Each contains 1 red, 1 blue.

Part #	Working Length	Pigtail Length	List Price
38-700	12'	6"	127.64
38-705	12'	12"	212.27
38-710	15'	12"	141.83

I have a tip that can take five strokes off anyone's golf game: It's called an eraser."

-Arnold Palmer

MIDLAND METAL**GOODYEAR**
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World Wide**

BRASS FITTINGS

BRASS FUEL HOSE FITTINGS

Typical Application: Low pressure air, fuel and oil applications. Generally used for automotive, light truck, and small engine fuel lines. Use with fuel hose SAE 30R7 & SAE 30R9.

Advantages: Easy to assemble, just push the fitting into the hose & clamp. Good selection of configurations at reasonable cost.

MALE CONNECTOR



HOSE BARB X MALE PIPE

Part #	ID	Size	Ind #	List Price
38-800	3/16	1/8	1541	1.47
38-802	1/4	1/8	1537	1.25
32-377	1/4	1/4	1581	1.70
38-806	5/16	1/8	1551	1.25
38-808	5/16	1/4	1555	2.26
38-810	3/8	1/8	1565	2.13
32-381	3/8	1/4	1564	1.99
32-382	3/8	3/8	1566	2.34
32-383	1/2	3/8		2.64
32-384	1/2	1/2		4.41
32-182	5/8	3/8	1411	4.97
32-385	5/8	1/2	1431	4.31
32-387	3/4	1/2	1430	4.57
32-388	3/4	3/4		6.39
32-185	1	3/4		12.98

INVERTED FLARE MALE CONNECTOR



HOSE BARB X INVERTED FLARE

Part #	Hose ID	Inv. Flare	Industry Number	List Price
38-828	5/16	1/4	1598	2.25
38-830	5/16	5/16	1560	1.59
38-832	5/16	3/8	1561	4.32
38-834	3/8	5/16	1568	3.48
38-836	3/8	3/8	1570	5.39

See Hose Clamps starting on page 239

AIR BRAKE - HOSES/ ENDS

90° MALE ELBOW



HOSE BARB X MALE PIPE

Part #	ID	Size	Ind #	List Price
38-860	1/4	1/8	1582	3.60
38-862	5/16	1/8	1556	3.01
38-864	5/16	1/4	1557	3.68
38-866	3/8	1/8	1572	3.82
38-868	3/8	1/4	1571	3.68
32-186	3/8	3/8		8.70
32-187	1/2	3/8		11.66
32-191	1/2	1/2		15.85
32-188	5/8	3/8		8.47
32-189	5/8	1/2		13.29
32-190	3/4	1/2		13.29

INVERTED FLARE MALE SWIVEL

90° ELBOW



HOSE BARB X TUBE O.D.

Part #	ID	Tube	Ind #	List Price
38-873	5/16	5/16	1405	11.61
38-874	3/8	3/8	1407	7.64

LONG STREET ELLS



Part #	Size	Length	List Price
28-440	1/8	1-3/16"	7.00
28-441	1/8	1-7/16"	7.81
28-442	1/8	1-11/16"	8.53
28-443	1/8	1-7/8"	8.06
28-328	1/4	1-3/16"	9.83
28-329	1/4	1-7/16"	9.83
28-330	1/4	1-11/16"	10.25
28-332	1/4	2-1/4"	14.78
28-333	3/8	1-3/4"	17.39

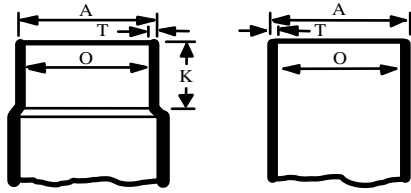
EXTENSION ADAPTERS D.O.T.



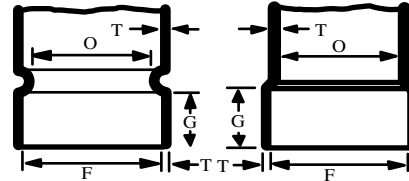
Part #	Size	Length	List Price
28-335	1/8	1-1/4"	6.08
28-336	1/8	1-3/4"	7.56
28-338	1/4	1-9/16"	5.87
28-339	1/4	1-13/16"	6.08
28-340	1/4	2-1/16"	7.14

BRASS





MALE (FITTING)



FEMALE (COPPER)

Nominal Size	Joint Ends										Metal Thickness T (in)	Inside Diameter O (in)
	Male End					Female End						
	Outside Diameter (A) in	Average Tolerance (mm)	Actual MIN in	O.D. MAX in	Length (Min) H (in)	Inside Diameter F (in)	Average Tolerance (mm)	Actual MIN in	O.D. MAX in	Length (Min) G (in)		
1/8	2/8	0.03	2/8	2/8	3/8	2/8	0.03	2/8	2/8	3/8	0	2/8
1/4	3/8		3/8	3/8	3/8	3/8		3/8	3/8	3/8	0	2/8
3/8	4/8		4/8	4/8	3/8	4/8		4/8	4/8	3/8	0	3/8
1/2	5/8		5/8	5/8	4/8	5/8		5/8	5/8	3/8	0	4/8
5/8	6/8		6/8	6/8	5/8	6/8		6/8	6/8	5/8	0	4/8
3/4	7/8		7/8	7/8	6/8	7/8		7/8	7/8	5/8	0	5/8
1	1-1/8	0.04	1-1/8	1-1/8	7/8	1-1/8	0.04	1-1/8	1-1/8	7/8	0	7/8
1-1/4	1-3/8		1-3/8	1-3/8	1	1-3/8		1-3/8	1-3/8	1	0	1-1/8
1-1/2	1-5/8	0.05	1-5/8	1-5/8	1-1/8	1-5/8	0.05	1-5/8	1-5/8	1-1/8	0	1-3/8
2	2-1/8		2-1/8	2-1/8	1-3/8	2-1/8		2-1/8	2-1/8	1-2/8	0	1-6/8
2-1/2	2-5/8		2-5/8	2-5/8	1-4/8	2-5/8		2-5/8	2-5/8	1-4/8	1/8	2-1/8
3	3-1/8		3-1/8	2-1/8	1-6/8	3-1/8		3-1/8	3-1/8	1-5/8	1/8	2-5/8
4	4-1/8		4-1/8	4-1/8	2-1/8	4-1/8		4-1/8	4-1/8	2-1/8	1/8	3-4/8
5	5-1/8	0.08	1-1/8	5-1/8	2-6/8	5-1/8	0.08	5-1/8	5-1/8	2-5/8	1/8	4-5/8
6	6-1/8		6-1/8	6-1/8	3-2/8	6-1/8		6-1/8	3-1/8	1/8	5-6/8	
8	8-1/8		8-1/8	8-1/8	4-1/8	8-1/8		8-1/8	3-7/8	1/8	7-4/8	
10	10-1/8		10-1/8	10-1/8	4-4/8	10-2/8		10-2/8	4-3/8	2/8	9-2/8	

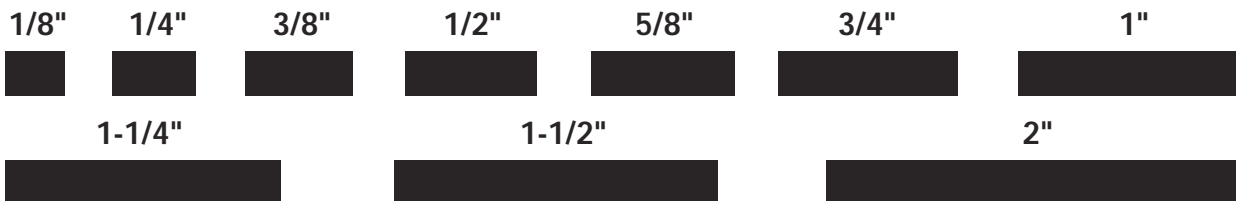
Symbol of Joint Ends

- C** Solder joint fitting end made to receive copper tube diameter
- Ftg.** Solder joint fitting end made to copper tube diameter
- F** Internal ANSI Standard Taper Pipe Thread-Female
- M** External ANSI Standard Taper Pipe Thread-Male

The above conforms to ASTM B 88 & ASTM B 306

Warranty: Seller warrants that all fittings will be free from defects in materials and construction that will impair their usefulness, provided they are used as recommended. Any fitting that proves to be defective will be replaced or a credit issued but no incidental labor charges, expenses or damages will be allowed.

Dimensions: We have included roughing-in dimensions in this catalog. These dimensions are provided with the latest information available at the time of publication and are for estimating purposes only.

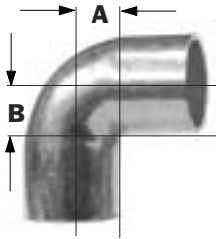


NIPPLES & FITTINGS

COPPER FITTINGS

WROT SOLDER JOINT

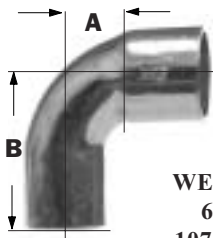
90° Ell C x C



WE-500-R
607-R
107-C

Part#	Nominal	Approx Net	A	B	List
77-100	1/8"	0.01	1/4	1/4	3.43
77-101	1/4"	0.01	1/4	1/4	3.56
77-102	3/8"	0.03	3/8	3/8	3.56
77-103	3/8" x 1/4"	0.03	5/8	1/2	7.15
77-104	1/2"	0.04	3/8	3/8	1.03
77-105	1/2"x3/8"	-	5/8	1/2	11.52
77-107	5/8"	0.07	3/8	3/8	8.53
77-108	3/4"	0.09	1/2	1/2	2.22
77-109	3/4" x 1/2"	0.12	3/4	3/4	6.54
77-110	1"	0.17	3/4	3/4	5.44
77-111	1"x3/4"	0.23	7/8	7/8	13.52
77-112	1"x1/2"	0.23	1-1/4	3/4	13.07
77-113	1-1/4"	0.27	7/8	7/8	8.27
77-114	1-1/2"	0.41	1-1/8	1-1/8	12.86
77-116	2"	0.73	1-1/4	1-1/4	23.39
77-117	2"x1-1/2"	0.73	1-5/8	1-1/4	62.71
77-118	2-1/2"	1.16	1-5/8	1-5/8	49.60
77-119	3"	1.87	1-7/8	1-7/8	74.96
77-120	4"	3.79	2-3/4	2-3/4	223.88

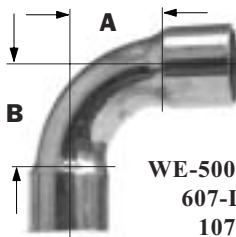
90° Street Ell Ftg. x C



WE-503
607-2
107-C-2

77-124	1/4"	0.01	3/8	3/4	7.38
77-125	3/8"	0.03	3/8	7/8	4.97
77-126	1/2"	0.05	1/2	1	1.48
77-127	5/8"	0.07	5/8	1-1/4	9.19
77-128	3/4"	0.12	3/4	1-1/2	3.23
77-129	1"	0.22	7/8	1-3/4	8.25
77-130	1-1/4"	0.33	1-1/8	2-1/8	12.54
77-131	1-1/2"	0.45	1-3/8	2-1/2	16.45
77-132	2"	0.87	1-3/4	3-1/8	48.50
77-134	3"	1.93	2-3/8	4	111.29

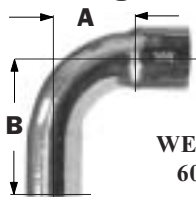
90° Long Turn Ell C x C



WE-500-L
607-LT
107-L

77-139	1/8"	0.01	1/4	1/4	8.56
77-140	1/4"	0.02	3/8	3/8	5.85
77-141	5/16"	0.03	5/8	5/8	6.78
77-142	3/8"	0.04	3/4	3/4	7.82
77-143	1/2"	0.06	7/8	7/8	7.04
77-144	5/8"	0.1	1	1	6.41
77-145	3/4"	0.15	1-1/4	1-1/4	8.17

90° Long Turn Street Ell Ftg. x C



WE-503-L
607-2LT

77-152	1/8"	0.01	1/2	1/2	8.46
77-153	1/4"	0.22	3/8	3/4	7.05
77-154	3/8"	0.04			16.70
77-155	1/2"	0.06	7/8	1-3/8	11.53
77-156	5/8"	0.11	1	1-3/4	10.81
77-157	3/4"	0.15	1-1/4	2	13.73

See copper fitting brushes on page 296

NIPPLES & FITTINGS

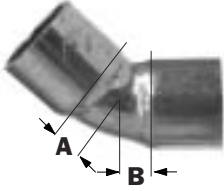


WROT SOLDER JOINT

COPPER FITTINGS

45° ELL C x C

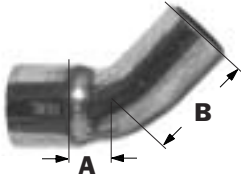
WE-504
606
106



Part#	Nominal	Approx Net Wt.	A	B	List Price
77-161	1/8"	0.01	1/4	1/4	10.08
77-162	1/4"	0.01	1/4	1/4	9.31
77-163	3/8"	0.02	1/4	1/4	7.54
77-164	1/2"	0.04	1/4	1/4	2.20
77-165	5/8"	0.06	3/8	3/8	14.34
77-166	3/4"	0.10	3/8	3/8	3.16
77-167	1"	0.19	1/2	1/2	9.57
77-168	1-1/4"	0.27	3/4	3/4	13.57
77-169	1-1/2"	0.39	3/4	3/4	15.54
77-170	2"	0.75	7/8	7/8	26.03
77-171	2-1/2"	1.23	1-1/8	1-1/8	64.69

Street 45° Ftg. x C

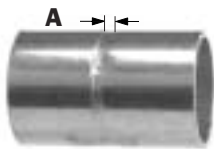
WE-505
606-2



77-177	1/4"	0.01	1/8	3/8	11.15
77-178	3/8"	0.02	1/8	1/2	7.78
77-179	1/2"	0.06	1/4	3/4	2.51
77-180	5/8"	0.06	1/4	3/4	21.52
77-181	3/4"	0.10	3/8	1-1/8	3.89
77-182	1"	0.18	1/2	1-1/2	13.25
77-183	1-1/4"	0.27	3/4	1-3/4	17.99
77-184	1-1/2"	0.38	3/4	1-3/4	20.63
77-185	2"	0.75	7/8	2-1/4	32.46

Coupling (Socket) w/Rolled Tube Stop C x C

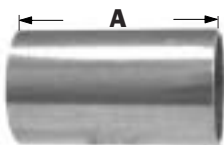
WC-400
100



77-201	1/8"	0.01	0		1.01
77-202	1/4"	0.01	0		0.97
77-203	3/8"	0.02	1/8		1.17
77-204	1/2"	0.03	1/8		0.76
77-205	5/8"	0.04	0		3.04
77-206	3/4"	0.06	1/8		1.48
77-207	1"	0.10	1/8		3.66
77-208	1-1/4"	0.15	1/8		7.21
77-209	1-1/2"	0.22	1/8		8.48
77-210	2"	0.39	1/8		12.45
77-211	2-1/2"	0.71	1/8		35.96
77-212	3"	0.98	1/8		61.91
77-214	4"	2.01	1/4		113.03

Coupling (Socket) Less Tube Stop C x C

WC-400NS
601



77-219	1/8"	0.01	5/8		1.99
77-220	1/4"	0.01	3/4		0.70
77-222	1/2"	0.03	1-1/8		1.14
77-223	3/4"	0.06	1-5/8		2.16
77-224	1"	0.10	2		5.47
77-225	1-1/4"	0.15	2		8.31
77-226	1-1/2"	0.22	2-3/8		10.65
77-227	2"	0.39	2-3/4		18.82

MIDLAND METAL

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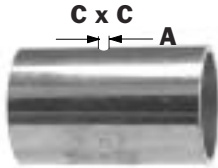
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NIPPLES & FITTINGS

COPPER FITTINGS

WROT SOLDER JOINT

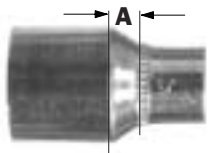
**Coupling (Socket)
w/Dimpled Tube Stop**



WC-400S

Part#	Nominal	Approx Net Wt.	A	List Price
77-238	1/2"	0.03	1/8	0.91
77-240	3/4"	0.06	1/8	1.78
77-241	1"	0.10	1/8	4.87
77-242	1-1/4"	0.15	1/8	7.26
77-244	2"	0.39	1/8	18.62
77-247	4"	2.01	1/4	85.92

**Reducer Coupling
w/ Stop
C x C**

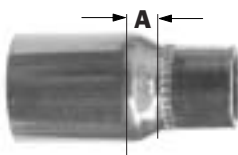


WC-400R
600-R

77-252	1/4" x 1/8"	0.01	1/4	7.69
77-253	3/8" x 1/4"	0.02	1/8	2.52
77-255	1/2" x 3/8"	0.03	1/4	1.97
77-256	1/2" x 1/4"	0.03	1/4	2.42
77-258	5/8" x 1/2"	0.04	1/8	4.81
77-262	3/4" x 1/2"	0.06	1/4	2.69
77-263	3/4" x 3/8"	0.06	3/8	3.87
77-264	3/4" x 1/4"	0.06	3/8	4.90
77-265	1"x3/4"	0.12	3/8	5.91
77-267	1"x1/2"	0.10	1/2	7.34
77-268	1-1/4" x 1"	0.17	1/4	9.37
77-269	1 -1/4" x 3/4"	0.17	1/2	9.37
77-270	1 -1/4" x 1/2"	0.14	1/2	8.30
77-271	1-1/2" x 1-1/4"	0.24	1/4	14.58
77-272	1-1/2" x 1"	0.24	1/2	16.84
77-273	1 -1/2" x 3/4"	0.25	5/8	12.76
77-274	1-1/2" x 1/2"	0.19	7/8	13.58
77-275	2" x 1-1/2"	0.42	5/8	24.07
77-276	2 x 1-1/4"	0.46	5/8	21.31
77-277	2" x 1"	0.48	5/8	24.86
77-280	2-1/2"x2"	0.79	3/4	49.86
77-284	3" x 2-1/2"	1.15	1/2	61.49

Fitting Reducer

Ftg. x C



WC-403
600-2

77-291	3/8" x 1/4"	0.02	1/8	2.78
77-292	3/8" x 1/8"	0.01	5/8	4.08
77-294	1/2" x 1/4"	0.03	3/4	2.80
77-295	5/8" X 1/2"	0.03	1/8	6.65
77-296	3/4" x 5/8"	0.08	1/8	4.29
77-297	3/4" x 1/2"	0.06	1/8	3.23
77-298	3/4" x 3/8"	0.05	1-1/8	4.53
77-299	3/4" X 1/4"	0.05	1-1/8	4.60
77-300	1"x3/4"	0.11	1/4	4.35
77-352	1" x 1/2"	0.10	1/4	6.77
77-354	1-1/4" x 1"	0.17	1/4	9.61
77-355	1 -1/4" x 3/4"	0.15	1/4	9.53
77-356	1 -1/4" x 1/2"	0.14	1/2	10.51
77-357	1 -1/2" X 1-1/4"	0.21	1/4	12.56
77-358	1-1/2"x1"	0.22	1/4	12.43
77-359	1 -1/2" x 3/4"	0.21	1/2	12.43
77-360	1 -1/2" x 1/2"	0.21	5/8	11.82
77-361	2" x 1-1/2"	0.39	1/2	23.44
77-362	2" x 1 -1/4"	0.38	1/2	26.49
77-363	2" x 1"	0.40	5/8	22.29
77-364	2" x 3/4"	0.39	3/4	29.41
77-365	2" x 1/2"	0.44	7/8	26.72
77-370	3" x 2-1/2"	0.93	1/2	75.05

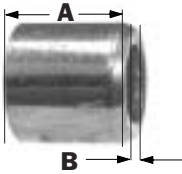
NIPPLES & FITTINGS



WROT SOLDER JOINT

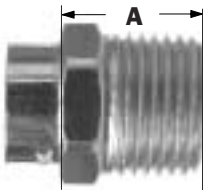
COPPER FITTINGS

Flush Bushing
Ftg. x C
WC-106
618



Part#	Nominal	Approx Net Wt.	A	List Price
77-382	3/4" x 1/2"	0.08	7/8	4.25
77-383	3/4" x 5/8"	0.04	7/8	4.86
77-385	1" x 3/4"	0.13	1	7.98
77-387	1" x 1/2"	0.22	1	8.10
77-389	1-1/4" x 3/4"	0.30	1	10.17
77-391	1-1/2" x 1-1/4"	0.22	1-1/8	15.21
77-392	2" x 1-1/2"	0.68	1-3/8	40.80

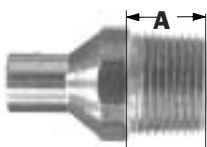
Male Adapter
C x M
WC-401
604



77-393	1/8"	0.02	3/8	15.12
77-394	1/4"	0.03	1/2	17.15
77-395	1/4" x 1/2"	0.09	1	7.71
77-396	1/4" x 3/8"	0.06	5/8	17.39
77-397	1/4" x 1/8"	0.02	7/8	12.51
77-398	3/8"	0.06	7/8	8.56
77-401	1/2"	0.08	5/8	2.15
77-303	1/2" x 3/4"	0.16	3/4	8.62
77-306	3/4"	0.14	7/8	3.77
77-307	3/4" x 1"	0.29	7/8	15.90
77-309	1"	0.24	7/8	9.00
77-312	1" x 3/4"	0.18	1-7/8	19.48
77-314	1-1/4"	0.41	1-1/2	15.90
77-318	1-1/2"	0.50	1-5/8	15.23
77-320	1-1/2" x 1-1/4"	0.44	1-3/4	37.75
77-322	2"	0.87	7/8	25.76

Fitting Male Adapters
Ftg. x M

WC-404
604-2



77-331	1/2"	0.09	1-1/2	10.93
77-332	1/2" x 3/4"	0.15	-	35.17
77-333	3/4"	0.15	1-7/8	14.07
77-335	1-1/4"	0.41	2-1/2	76.10
77-337	2"	0.86	2-7/8	122.09

Why don't you ever see the headline
"Psychic Wins Lottery"?

Why is "abbreviated"
such a long word?

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Female Adapters

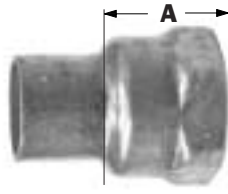
C x F

WC402

603

WC402R

603R



Part#	Nominal	Approx Net Wt.	A/X	List Price
77-338	1/8"	0.03	1/2	8.22
77-339	1/4"	0.04	1/2	8.02
77-340	3/8"	0.06	5/8	9.63
77-341	3/8" x 1/2"	0.10	7/8	9.42
77-343	1/2"	0.10	7/8	4.69
77-345	1/2" x 3/4"	0.15	7/8	8.59
77-346	1/2"x3/8"	0.70	5/8	6.49
77-347	1/2" x 1/4"	0.05	5/8	7.26
77-349	3/4"	0.14	3/4	4.52
77-351	3/4" x 1/2"	0.11	3/4	8.59
77-402	1"	0.24	1	12.32
77-404	1"x3/4"	0.22	5/8	21.32
77-405	1"x 1/2"	0.29	3/4	21.59
77-406	1-1/4"	0.43	1-1/8	18.27
77-407	1-1/4" x 1-1/2"	0.52	1-1/4	40.80
77-409	1 -1/4" x 3/4"	0.26	1/2	35.53
77-410	1-1/2"	0.58	1-1/8	32.93
77-413	2"	0.74	1-1/4	38.82
77-416	3"	1.83	1-1/2	140.37

Fitting Female Adapt.

Ftg. x F

A

WC405
603-2



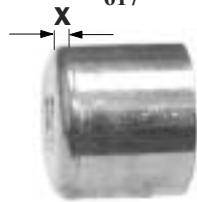
WC405R
603R

77-419	3/8"	0.05	1-1/8	11.97
77-420	1/2"	0.11	1-3/8	7.86
77-423	3/4"	0.19	1-3/4	8.94
77-424	1"	0.25	2	19.19
77-426	1-1/2"	0.55	2-1/2	43.69
77-427	2"	0.68	2-5/8	71.05

Cap

WC-415

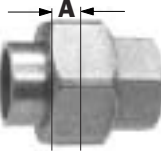
617



77-428	1/8"	0.003	0	1.62
77-429	1/4"	0.01	0	1.47
77-430	3/8"	0.01	0	2.38
77-431	1/2"	0.02	0	0.72
77-432	5/8"	0.03	1/8	2.52
77-433	3/4"	0.04	1/8	1.25
77-434	1"	0.08	1/8	4.04
77-435	1-1/4"	0.11	1/8	5.83
77-436	1-1/2"	0.18	1/8	7.49
77-437	2"	0.30	0	15.45

Unions C x C

WC-407



77-452	1/8	0.13	3/8	27.76
77-453	1/4	0.11	3/8	29.84
77-454	3/8	0.11	1/2	24.44
77-455	1/2	0.17	1/2	11.40
77-456	3/4	0.37	5/8	14.19
77-457	1	0.51	1/2	25.38

Tube Strap

Copper Coated Steel

• Two Hole Tube OD



Part #	Size	Box	Case	List Price
970-257	5/8" (1/2" nom)	100	10000	0.21
970-259	7/8" (3/4" nom.)	100	1000	0.28
970-260	1-1/8" (1" nom.)	25	250	0.41

NIPPLES & FITTINGS



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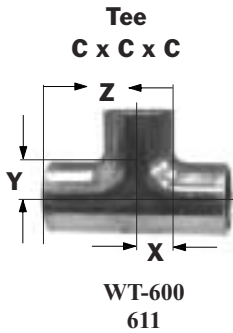
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COPPER FITTINGS

NIPPLES & FITTINGS



Part#	Nominal	Approx Net Wt.	A/X	B/Y	Z	List Price
77-467	1/8"	0.02	1/8	1/8		8.90
77-468	1/4"	0.03	1/4	1/4		10.34
77-470	3/8"	0.05	1/4	3/8		6.36
77-473	1/2"	0.08	3/8	3/8		2.00
77-474	1/2"x1/2"x1"	-	1-1/4	5/8		21.52
77-481	5/8"	-	3/8	1/2		13.83
77-483	3/4"	0.18	1/2	1/2		4.09
77-485	3/4"x3/4"x1"	0.25	1	7/8		18.49
77-486	3/4" x 3/4" x 1/2"	0.15	3/8	1/2		4.43
77-488	3/4" x 1/2" x 3/4"	0.19	3/8	1/4		4.82
77-489	3/4"x1/2"x1/2"	0.15	3/8	1/2	1-3/8	4.82
77-490	1"	0.35	5/8	5/8		12.60
77-492	1"x1"x 1-1/4"	0.64	1-1/8	1		44.48
77-493	1"x1"x3/4"	0.29	1/2	5/8		14.26
77-496	1"x1"x1/2"	0.24	3/8	5/8		17.11
77-498	1"x3/4"x1"	0.38	3/4	5/8		20.39
77-499	1"x3/4"x3/4"	0.31	1/2	5/8	1-5/8	20.39
77-500	1"x3/4"x1/2"	0.27	1/2	3/4		23.79
77-501	1"x1/2"x1"	0.34	3/4	5/8		20.39
77-502	1"x1/2"x3/4"	0.34	3/8	3/4		23.45
77-504	1-1/4"	0.58	3/4	5/8		19.08
77-506	1 -1/4" x1 -1/4" x 1-1/2"	0.79	1-1/4	1		49.49
77-507	1-1/4"x1-1/4"x1"	0.47	5/8	3/4		22.29
77-508	1-1/4" x 1-1/4" x 3/4"	0.39	3/8	3/4		22.29
77-509	1-1/4"x1-1/4"x1/2"	0.33	3/8	3/4		22.29
77-510	1-1/4" x 1"x 1-1/4"	-	3/4	3/4		27.07
77-511	1-1/4" x 1"x1"	0.50	5/8	7/8		33.41
77-514	1 -1/4" x 3/4" x 1-1/4"	0.63	3/4	7/8		32.36
77-516	1-1/4"x3/4"x3/4"	-	1/2	7/8		35.01
77-518	1 -1/4"x 1/2" x 1-1/4"	-	3/4	7/8		34.09
77-519	1-1/2"	-	1	1		26.52
77-521	1-1/2"x1-1/2"x 1-1/4"	-	3/4	1		31.17
77-522	1-1/2" x 1-1/2" x1"	-	---	---		23.68
77-523	1 -1/2" x 1-1/2" x 3/4"	0.51	3/4	1		23.65
77-524	1 -1/2" x 1 -1/2" x 1/2"	0.46	3/8	1		22.93
77-543	2"	1.35	1-1/8	1-1/4		41.29
77-545	2" x 2" x 1-1/2"	1.17	7/8	1-1/4		31.11
77-546	2" x 2" x 1-1/4"	1.01	7/8	1-3/8		49.34
77-547	2"x2"x1"	0.99	7/8	1-1/4		37.49
77-548	2" x 2" x 3/4"	0.90	5/8	1-1/4		37.49
77-549	2"x2"x1/2"	0.77	5/8	1-1/4		42.29
77-554	2" x 1 -1/2" x 3/4"	1.40	5/8	1-1/4		59.65
77-556	2" x 1-1/4" x 1-1/4"	1.14	7/8	1-3/8		84.96
77-559	2"x1"x2"	1.34	1-1/8	1-1/4		69.58
77-560	2"x1"x1"	0.98	1/2	1-1/4		69.58
77-563	2-1/2"	2.21	1-1/2	1-5/8		88.29
77-585	3"x 3" x 2"	2.53	1-1/8	1-3/4		149.74
77-587	3" x 3" x 1-1/4"	2.18	3/4	1-7/8		145.14
77-588	3"x3"x1"	2.14	5/8	1-3/4		118.86



PLASTIC FITTINGS

SLIP TEES



Part #	Size	List Price
55-710	1/2"	0.61
55-711	3/4"	0.71
55-712	3/4" x 1/2"	1.22
55-713	1"	1.56
55-714	1" x 1" x 1/2"	1.63
55-715	1" x 1" x 3/4"	1.75
55-716	1-1/4"	2.84
55-717	1-1/2"	4.19
55-718	2"	3.91
55-719	2-1/2"	11.81

SLIP COUPLINGS



Part #	Size	List Price
55-736	1/2"	0.21
55-737	3/4"	0.45
55-738	1"	0.79
55-739	1-1/4"	0.64
55-740	1-1/2"	1.62
55-741	2"	1.91
55-742	2-1/2"	2.93
55-743	3"	3.86

THREADED COUPLINGS

Part #	Size	List Price
55-950	1/2"	0.75
55-951	3/4"	1.37

Smoking is one of the leading causes of statistics.

- Fletcher Knebel

PVC SCHEDULE 40 FITTINGS

SLIP X ADAPTER



Part #	Size	List Price
55-744	1/2"	0.52
55-812	1/2" x 1/4"	1.13
55-813	1/2" x 3/8"	1.38
55-745	3/4"	0.71
55-746	1"	0.89
55-747	1-1/4"	1.27
55-748	1-1/2"	1.47
55-749	2"	1.56
55-807	2-1/2"	7.34
55-804	3"	7.34

MIP X ADAPTER



Part #	Size	List Price
55-750	MIP 1/2"	0.35
55-751	MIP 3/4"	0.55
55-752	MIP 1"	0.89
55-753	MIP 1-1/4"	1.15
55-754	MIP 1-1/2"	0.76
55-755	MIP 2"	1.50
55-808	MIP 2-1/2"	7.34
55-811	MIP 3"	7.47

90° SLIP ELBOWS



Part #	Size	List Price
55-720	1/2"	0.51
55-721	3/4"	0.51
55-722	1"	0.84
55-723	1-1/4"	3.40
55-724	1-1/2"	2.23
55-725	2"	3.18
55-726	2-1/2"	6.47
55-727	3"	11.56

PLASTIC FITTINGS



PVC SCHEDULE 40 FITTINGS

SLIP CAPS



Part #	Size	List Price
55-756	1/2"	0.45
55-757	3/4"	0.52
55-758	1"	0.88
55-759	1-1/4"	0.68
55-760	1-1/2"	1.36
55-761	2"	1.52
55-762	2-1/2"	4.88
55-801	3"	5.34

SLIP X FIP BUSHINGS



Part #	Size	List Price
55-805	1/2" x 1/4"	1.18
55-806	1/2" x 3/8"	1.26
55-781	3/4" x 1/2"	0.81
55-782	1" x 1/2"	1.33
55-783	1" x 3/4"	1.56
55-784	1-1/4" x 1/2"	2.40
55-785	1-1/4" x 3/4"	2.40
55-786	1-1/4" x 1"	0.81
55-803	1-1/2" x 1/2"	3.68
55-787	1-1/2" x 3/4"	2.36
55-788	1-1/2" x 1"	1.49
55-809	1-1/2" x 1-1/4"	4.29
55-810	2" x 1/2"	3.70
55-789	2" x 3/4"	3.18
55-790	2" x 1"	3.70
55-791	2" x 1-1/4"	3.70
55-792	2" x 1-1/2"	3.70
55-798	2-1/2" x 1-1/2"	7.34
55-796	2-1/2" x 2"	7.34
55-816	3" x 2"	8.99
55-780	3" x 2-1/2"	4.70

PLASTIC FITTINGS

45° SLIP ELBOWS



Part #	Size	List Price
55-728	1/2"	0.81
55-729	3/4"	1.36
55-730	1"	1.63
55-731	1-1/4"	2.49
55-732	1-1/2"	3.12
55-733	2"	3.71
55-734	2-1/2"	7.69
55-735	3"	9.26

SLIP BUSHINGS



Part #	Size	List Price
55-765	3/4" x 1/2"	0.20
55-766	1" x 1/2"	0.95
55-767	1" x 3/4"	0.95
55-768	1-1/4" x 1/2"	0.90
55-769	1-1/4" x 3/4"	0.57
55-770	1-1/4" x 1"	1.48
55-815	1-1/2" x 1/2"	1.09
55-771	1-1/2" x 3/4"	1.35
55-772	1-1/2" x 1"	1.04
55-773	1-1/2" x 1-1/4"	1.67
55-774	2" x 1/2"	1.72
55-775	2" x 3/4"	1.65
55-776	2" x 1"	2.28
55-777	2" x 1-1/4"	4.03
55-778	2" x 1-1/2"	2.22
55-814	2-1/2" x 1-1/2"	2.93
55-779	2-1/2" x 2"	2.01
55-797	3" x 2"	6.55
55-802	3" x 2-1/2"	4.26

THREADED PIPE CAPS



Part #	Size	List Price
55-763	1/2"	0.92
55-764	3/4"	1.26

PLASTIC
FITTINGS

**MIDLAND
METAL**

GOODYEAR
RUBBER PRODUCTS INC.

Call Toll Free: **1-866-711-4673**

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World Wide**

PVC NIPPLES

PVC SCHEDULE 80 NIPPLES

Machined Schedule 80 PVC nipples comply fully with ASTM D2464, threads conform to ASTM F1498, and the pipe is extruded from PVC 1120-1220 meeting ASTM D1784 and meets ASTM D1785, products standard 21-70



1/2" DIAMETER

Part #	Length	List Price
55-060	X Close (1-1/8")	0.77
55-061	1-1/2"	0.84
55-062	2"	0.74
55-063	2-1/2"	0.84
55-064	3"	0.90
55-065	3-1/2"	1.16
55-066	4"	1.04
55-067	4-1/2"	1.39
55-068	5"	1.34
55-069	5-1/2"	1.18
55-070	6"	0.97
55-072	8"	1.63
55-076	12"	1.97
55-241	24"	3.88
55-243	36"	7.81

3/4" DIAMETER

Part #	Length	List Price
55-080	X Close (1-3/8")	0.74
55-081	1-1/2"	0.81
55-082	2"	0.84
55-083	2-1/2"	0.97
55-084	3"	0.90
55-085	3-1/2"	1.17
55-086	4"	1.31
55-087	4-1/2"	1.44
55-088	5"	1.57
55-089	5-1/2"	1.61
55-090	6"	1.57
55-253	36"	1.11

1" DIAMETER

Part #	Length	List Price
55-100	X Close (1-1/2")	1.11
55-101	2"	1.24
55-102	2-1/2"	1.57
55-103	3"	1.03
55-104	3-1/2"	1.68
55-105	4"	1.72
55-106	4-1/2"	2.15
55-107	5"	2.05
55-108	5-1/2"	2.49
55-109	6"	2.34
55-111	8"	2.63
55-115	12"	3.69

1-1/4" DIAMETER

Part #	Length	List Price
55-120	X Close (1-5/8")	1.88
55-121	2"	2.20
55-122	2-1/2"	2.32
55-123	3"	2.81
55-124	3-1/2"	2.81
55-125	4"	2.80
55-126	4-1/2"	3.27
55-127	5"	3.88
55-128	5-1/2"	3.73
55-129	6"	3.66

1-1/2" DIAMETER

Part #	Length	List Price
55-140	X Close (1-5/8")	2.27
55-141	2"	2.70
55-142	2-1/2"	2.81
55-143	3"	2.56
55-144	3-1/2"	3.36
55-145	4"	2.95
55-146	4-1/2"	3.82
55-147	5"	3.95
55-148	5-1/2"	4.36
55-149	6"	3.85

2" DIAMETER

Part #	Length	List Price
55-160	X Close (2")	
55-161	2-1/2"	3.58
55-162	3"	3.33
55-163	3-1/2"	4.21
55-164	4"	4.09
55-165	4-1/2"	5.42
55-166	5"	5.30
55-167	5-1/2"	5.59
55-168	6"	7.57
55-174	12"	9.26

More sizes available...just ask!

It is a happy talent to know how to play.

- Ralph Waldo Emerson



PLASTIC PIPE

PLASTIC FITTINGS

AVAILABLE IN THREE TYPES OF PLASTIC

Add () letter for type of plastic required

(W) White Nylon- made from virgin grade formulated to resist physical stress and abrasion. This material meets F.D.A. requirements of Code of Federal Regulation part 177.1500 and is therefore suitable for food contact surfaces.

Temperature Range: -40°F to 200°F
Working Pressure: 125 PSI maximum.

(B) Black Polyethylene- made from a high molecular weight linear polyethylene formulated for chemical compatibility and high impact resistance at lower temperatures. Polyethylene is NSF approved for potable water.

Temperature Range: -65°F to 190°F
Working Pressure: 125 PSI maximum.

(P) Polypropylene- made from the finest polypropylene resins. Polypropylene is used for its resistance to a wide range of chemicals. Working pressures decrease as temperatures increase.

- NSF-approved materials
- FDA-approved materials

HEX HEAD PLUGS



Part #	Size	List Prices		
		B	P	W
28-601	1/8	0.47	0.71	0.73
28-602	1/4	0.50	0.48	0.57
28-603	3/8	0.51	0.78	0.45
28-604	1/2			0.75
28-605	3/4		0.65	0.48
28-606W	1			0.88
28-607W	1-1/4			1.58
28-608W	1-1/2			1.86
28-609W	2			3.58

PIPE CAP



Part #	Size	W
		List Prices
28-640W	1/4	0.47
28-641W	3/8	0.78
28-642W	1/2	0.88
28-643W	3/4	1.01

It is never too late to give up our prejudices.

- Henry David Thoreau

HEX NIPPLES



Part #	Size	List Prices		
		B	P	W
28-611	1/8	0.47		0.73
28-612	1/4	0.63	0.78	0.67
28-613	3/8	0.71	0.83	0.64
28-614	1/2	0.73	0.91	0.96
28-615	3/4		1.16	0.72
28-616W	1			1.91
28-617W	1 1/4			2.94
28-618W	1 1/2			4.76

REDUCER NIPPLES



Part #	Size	List Prices		
		B	P	W
28-620W	1/4 x 1/8			0.65
28-621W	3/8 x 1/8			0.81
28-622W	3/8 x 1/4			0.83
28-623	1/2 x 1/4	0.75		1.01
28-624	1/2 x 3/8	0.78		0.98
28-628	3/4 x 3/8	0.81		0.98
28-625	3/4 x 1/2	0.82		1.08
28-629P	1 x 3/4		5.94	
28-631P	1-1/4 x 3/4		6.37	
28-634P	2 x 1-1/4		8.43	
28-635P	3 x 2		26.58	

More shapes and sizes available

HEX BUSHING



Part #	Size	List Prices	
		P	W
28-659	1/4 x 1/8	2.19	2.03
28-660	3/8 x 1/8	2.11	1.86
28-661	3/8 x 1/4	1.86	1.86
28-663	1/2 x 1/4	2.10	1.30
28-664	1/2 x 3/8	1.89	1.88
28-665W	3/4 x 1/8		2.04
28-666	3/4 x 1/4	2.44	1.36
28-667W	3/4 x 3/8		1.96
28-668	3/4 x 1/2	2.32	
28-671	1 x 1/2	2.92	2.70
28-672	1 x 3/4	2.52	1.90
28-674W	1-1/4 x 3/4	2.94	
28-675W	1-1/4 x 1		3.02
28-678	1-1/2 x 3/4	3.48	3.65
28-679W	1-1/2 x 1		4.23
28-680	1-1/2 x 1-1/4	3.08	3.60
28-682W	2 x 3/4		11.61
28-683W	2 x 1		7.07
28-685W	2 x 1-1/2		4.34

ALL HOSE BARB "Y"



Part #	Size	List Prices	
		P	W
33-300P	1/4	5.89	
33-301	3/8	2.37	2.64
33-302P	1/2	5.89	



PLASTIC FITTINGS

PLASTIC PIPE

ELBOW



Part #	Size	List Prices	
		P	W
28-701W	1/4		4.71
28-702P	3/8	9.04	
28-703W	1/2		4.96
28-704	3/4	5.99	7.27
28-705W	1		10.60
28-706W	1-1/4		14.27

STREET ELBOW



Part #	Size	List Prices	
		P	W
28-720W	1/4		3.75
28-721W	3/8		3.57
28-723	1/2	3.29	4.23
28-724W	3/4		5.94
28-725W	1		11.55
28-726W	1-1/4		14.72

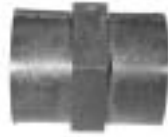
TEE



Part #	Size	List Prices	
		P	W
28-741	1/4		5.59
28-742P	3/8	15.49	
28-743	1/2	5.21	6.19
28-744	3/4	6.70	6.32
28-745W	1		15.49
28-746W	1-1/4		20.24
28-747W	1-1/2		23.97

More shapes and sizes available

COUPLING



Part #	Size	List Prices	
		P	W
28-760	1/8	4.53	4.79
28-761	1/4	4.53	4.32
28-762	3/8	4.79	4.79
28-763	1/2	4.10	5.03
28-764	3/4	4.91	4.42
28-765W	1		5.56
28-767W	1-1/2		5.28
28-768W	2		10.65

HOSE BARB ADAPTERS FEMALE ADAPTERS



Hose ID x FIP

Part #	Size	List Prices		
		B	P	W
33-053	1/4 x 1/4	1.97		3.45
33-058	3/8 x 1/4	3.37		1.52
33-059W	3/8 x 3/8			3.75
33-060W	3/8 x 1/2			3.50
33-062P	1/2 x 3/8			3.62
33-061W	1/2 x 1/2			1.29
33-063W	5/8 x 3/4			4.51
33-064W	3/4 x 1/2			4.08
33-065W	3/4 x 3/4			2.43

MALE ADAPTERS



Hose ID x MIP

Part #	Size	List Prices		
		B	P	W
33-002	3/16 x 1/8	0.55		0.63
33-003W	3/16 x 1/4			0.65
33-004	1/4 x 1/8	0.47		0.39
33-005	1/4 x 1/4	0.61		0.65
33-006	1/4 x 3/8	0.54		0.73
33-007	1/4 x 1/2	0.39		0.79
33-380W	1/4 x 3/4			1.06
33-008	5/16 x 1/8	0.55		0.63
33-009	5/16 x 1/4	0.61		0.65
33-010W	5/16 x 3/8			0.69
33-011W	3/8 X 1/8			0.67
33-012	3/8 x 1/4	0.65	0.52	0.71
33-013	3/8 x 3/8	0.45	0.85	0.69
33-014	3/8 x 1/2	0.51	0.93	0.84
33-026	3/8 x 3/4	0.73		0.70
33-015	1/2 x 1/4	0.63		0.53
33-016	1/2 x 3/8	0.68	0.81	0.55
33-017	1/2 x 1/2	0.51		0.44
33-018	1/2 x 3/4	0.58		0.71
33-019	5/8 x 3/8	0.68		0.83
33-020	5/8 x 1/2	0.42	0.91	0.83
33-021	5/8 x 3/4	0.93	1.10	1.01
33-022	3/4 x 1/2	0.53	0.93	0.63
33-023	3/4 x 3/4	0.60	1.12	0.87
33-000W	3/4 x 1			1.13
33-024	1 x 3/4	2.57	1.28	0.96
33-025	1 x 1	0.93	0.98	0.98
33-029W	1 x 1-1/4			3.02
33-028W	1-1/4 x 1			2.67
33-030W	1-1/4 x 1-1/4			1.88
33-033W	1-1/2 x 1-1/2			2.39
33-035W	2 x 2			5.89

PLASTIC FITTINGS



PLASTIC PIPE

PLASTIC FITTINGS

HOSE BARB ADAPTERS -CONTINUED-

ELBOWS



Hose ID x Male Pipe

Part #	Size	List Prices		
		B	P	W
33-308B	3/16 x 1/8	1.06		1.38
33-381W	3/16 x 1/4			1.30
33-038	1/4 x 1/8	0.93		1.38
33-039	1/4 x 1/4	0.73		0.89
33-309W	1/4 x 3/8			0.96
33-040	5/16 x 1/4	1.11		1.54
33-310	5/16 x 3/8			1.48
33-046	3/8 x 1/8	1.16		1.42
33-041	3/8 x 1/4	1.13		1.17
33-042	3/8 x 3/8	1.16		0.95
33-047	3/8 x 1/2	1.20		1.02
33-384	3/8 x 3/4	1.27		1.38
33-048	1/2 x 1/4	1.13		1.44
33-043	1/2 x 3/8	1.04	1.48	0.87
33-311	1/2 x 1/2	0.75	1.03	0.89
33-385	1/2 x 3/4	1.20	1.86	1.41
33-044W	5/8 x 3/8			1.64
33-045	5/8 x 1/2	1.91		1.15
33-312	5/8 x 3/4	1.79		1.23
33-313	3/4 x 1/2	0.95	1.81	1.36
33-314	3/4 x 3/4	1.09	1.46	1.07
33-315W	3/4 x 1			1.83
33-386W	1x3/4			2.14
33-316	1 x 1	2.28	2.49	1.47
33-460W	1 x 1-1/4			4.20
33-461	1-1/4 x 1-1/4	4.13		3.71
33-463	1-1/2 x 1-1/2	6.22		5.17
33-464W	2 x 2			6.95

HOSE BARB X FEMALE ELBOW



Hose ID x Female Pipe

Part #	Size	List Prices	
		B	W
33-402	1/2 x 3/8	2.61	
33-403W	1/2 x 3/4		2.91
33-471W	3/4 x 3/4		3.40

UNION ELBOWS



Part #	Size	List Prices		
		B	P	W
33-390	1/4	1.03		1.38
33-391	3/8	0.82		1.05
33-394	1/2	0.95		1.27
33-395	5/8	0.99	1.24	0.97
33-396	3/4	1.41	1.81	1.33
33-397W	1			1.45
33-398W	1-1/4			7.60
33-399W	1-1/2			10.09
33-389W	2			17.64

REDUCING UNION ELBOWS

Part #	Size	List
		W
33-392W	1/2 X 1/4	1.60

SPLICERS



Part #	Size	List Prices		
		B	P	W
33-091	1/8	0.53		0.68
33-092	3/16	0.51		0.59
33-093	1/4	0.46		0.73
33-094W	5/16			0.72
33-095	3/8	0.49	0.83	0.57
33-096	1/2	0.43	0.62	0.67
33-097	5/8	0.92		0.71
33-098	3/4	1.25	1.18	1.03
33-099	1		1.56	1.79
33-480W	1-1/4			3.12
33-481W	1-1/2			3.48
33-482W	2			

REDUCER CONNECTORS

Part #	Size	List Prices	
		B	W
33-406	3/8 x 1/4	0.36	0.63
33-407W	1/2 x 1/4		0.81
33-408	1/2 x 3/8	0.50	0.67
33-409W	5/8 x 3/8		0.81
33-410	5/8 x 1/2	0.63	0.75

TEES BARBED ON ALL SIDES



Part #	Size	List Prices		
		B	P	W
33-415	1/8	1.06		0.97
33-417W	5/32			1.41
33-418*	3/16	1.09		2.35
33-420	3/16	1.06		1.23
33-422	1/4	0.81		0.91
33-426	5/16	1.07		1.46
33-429	3/8	0.73	1.48	0.96
33-433	1/2	0.77	1.00	1.01
33-436	5/8	0.93		0.95
33-437	3/4	1.25		1.38
33-438	1	1.71		1.92
33-439W	1-1/4			4.36
33-440	1-1/2		4.23	5.28
33-441W	2			20.47

* single barb

REDUCING TEES

Part #	Size 3 x 1 x 2	List	
		B	W
33-416W*	1/8 x 5/32 x 5/32		1.40
33-423B	1/4 x 3/8 x 3/8	0.98	
33-424	1/4 x 1/2 x 1/2	1.13	1.59
33-430	3/8 x 1/2 x 1/2	1.26	1.48
33-431W	3/8 x 5/8 x 5/8		1.36
33-432	1/2 x 3/8 x 3/8	1.26	1.61
33-435	1/2 x 3/4 x 3/4	1.64	1.83

* single barb

TEES



Part #	Size 1 & 2 x 3	List Prices	
		B	W
33-448	1/4 x 1/4	1.18	1.48
33-450W	3/8 x 1/4		1.56
33-451W	3/8 x 3/8		1.09
33-453W	1/2 x 1/4		1.18
33-454W	1/2 x 3/8		1.61
33-456W	3/4 x 3/4		2.09

PLASTIC FITTINGS



PLASTIC FITTINGS

PLASTIC GARDEN HOSE

PLASTIC GARDEN HOSE FITTINGS

"FITTINGS WITH GARDEN HOSE THREAD"

GARDEN HOSE CAP



• White Nylon

Part #	Size	List Price
30-103P	3/4	0.95

GARDEN HOSE NUT



• White Nylon

Part #	Size	List Price
31-022	3/4	0.92

GARDEN HOSE ADAPTER INSERTS



• White Nylon

Part #	Size	List Price
31-034	3/4	0.75

GARDEN HOSE THREAD ADAPTERS



• White Nylon

Part #	Size	List Price
31-040	1/2	1.13
31-041	5/8	1.24

More sizes available

MALE GARDEN HOSE X FEMALE PIPE



• White Nylon

Part #	Size	List Price
31-068	MGH X 1/2 FIP	3.26

FEMALE GARDEN HOSE X MALE PIPE



• White Nylon

Part #	Size	List Price
31-093	FGH X 3/4 MPT	3.20

FEMALE GARDEN HOSE X FEMALE PIPE



• White Nylon

Part #	Size	List Price
31-096	FGH X 1/2 FIP	3.28

ADAPTERS GARDEN TO PIPE THREAD



• White Nylon

Part #	Size	List Price
31-058	GHT X 1/2	0.97
31-063	GHT X 3/4	1.06

PLASTIC COMPRESSION FITTINGS

• Standard nut and sleeve provided

Corrosion resistant thermoresins designed to resist vibration, provide good electrical insulation, low flow resistance, and resistance to scale buildup.

Add letter to the end of part no. to denote the type you prefer.

N = Nylon
P = Polypropylene
C = Celcon

Standard nut and sleeves will be provided (sleeve is integral part of nut). Other sizes available upon request.

UNION & REDUCING UNION CONNECTORS



Part #	Size	List Prices	
		P	N
17-064	1/4	2.72	2.84
17-065	5/16	3.72	3.19
17-078N	5/16 x 1/4		3.50
17-066	3/8	4.00	4.67
17-079	3/8 x 1/4	4.31	6.83
17-068	1/2	6.12	6.12
17-081	1/2 x 3/8	5.44	5.44

BULKHEAD UNIONS



Part #	Size	List
17-088N	1/4	4.90
17-090N	3/8	4.99
17-091N	1/2	8.44

UNION TEES



Part #	Size	List Prices	
		P	N
17-101N	1/8		5.03
17-103	1/4	5.76	5.76
17-105	3/8	7.94	9.94
17-106	1/2	9.57	9.57

UNION ELBOWS



Part #	Size	List Prices	
		P	N
17-124	1/4	4.58	4.58
17-126	3/8	6.31	6.31
17-127	1/2	7.76	7.76

PLASTIC FITTINGS



PLASTIC COMPRESSION

PLASTIC FITTINGS

FEMALE CONNECTORS



Part #	Tube x Female Pipe	List Prices	
		P	N
17-145	1/4 x 1/8	2.99	2.99
17-146N	1/4 x 1/4		3.13
17-153	3/8 x 1/4	3.81	2.99
17-154	3/8 x 3/8	3.95	3.95
17-155N	3/8 x 1/2		4.54
17-158	1/2 x 3/8	4.49	4.49
17-159P	1/2 x 1/2	4.85	

MALE CONNECTORS



Part #	Tube x Male Pipe	C	List Prices	
			P	N
17-176N	1/8 x 1/8			1.95
17-179	1/4 x 1/8	0.08	2.22	2.22
17-180	1/4 x 1/4		2.45	2.10
17-181	1/4 x 3/8		2.54	2.54
17-183	5/16 x 1/8		2.59	2.59
17-184	5/16 x 1/4		2.68	2.68
17-187	3/8 x 1/8		2.90	2.90
17-188	3/8 x 1/4		2.95	2.53
17-189	3/8 x 3/8		3.31	3.31
17-190	3/8 x 1/2		4.04	3.46
17-193	1/2 x 1/4		5.17	5.17
17-194	1/2 x 3/8		4.04	2.99
17-195	1/2 x 1/2		4.31	3.95

MALE ELBOWS



Part #	Tube x Male Pipe	List Prices	
		P	N
17-224	1/4 x 1/8	3.49	3.49
17-225	1/4 x 1/4	3.54	3.24
17-226N	1/4 x 3/8		4.22
17-229	5/16 x 1/4	3.16	3.99
17-233	3/8 x 1/4	4.45	3.81
17-234	3/8 x 3/8	4.63	4.63
17-237	1/2 x 3/8	5.35	5.35
17-238	1/2 x 1/2	5.40	5.40

FEMALE ELBOWS



Part #	Tube x Female Pipe	List Prices	
		P	N
17-254	1/4 x 1/4	5.44	4.31
17-258	3/8 x 1/4	5.58	5.42
17-259	3/8 x 3/8	6.35	6.35
17-262P	1/2 x 3/8	7.39	
17-263	1/2 x 1/2	8.62	8.62

MALE RUN TEES



Part #	Tube x Male Pipe	List
		P
17-279P	3/8 x 1/4	6.32
17-282P	1/2 x 1/2	9.07

MALE BRANCH TEES



Part #	Tube x Male Pipe	List Prices	
		P	N
17-291	1/4 x 1/8	4.67	4.67
17-292	1/4 x 1/4	5.76	5.76
17-296	3/8 x 1/4	6.76	6.76
17-297P	3/8 x 3/8	6.94	
17-299P	1/2 x 3/8	8.89	

Never lose a chance of saying a kind word.

- William M Thackeray

Male vs. Female

NAMES If Laurie, Linda, Elizabeth and Barbara go out for lunch, they will call each other Laurie, Linda, Elizabeth and Barbara. If Mark, Chris, Eric and Tom go out, they will affectionately refer to each other as Fat Bastard, BHC(Bald Headed Champ), Butt Nugget and Freak.

EATING OUT When the bill arrives, Mark, Chris, Eric and Tom will each throw a \$20, even though it's only for \$32.50. None of them will have anything smaller and none will actually admit they want change back. When the girls get their bill, out come the pocket calculators.

MONEY A man will pay \$2 for a \$1 item he needs. A woman will pay \$1 for a \$2 item that she doesn't need, but it's on sale.

BATHROOMS A man has 5 items in his bathroom: a toothbrush, shaving cream, razor, a bar of soap and a towel from the Marriott. The average number of items in the typical woman's bathroom is 337. A man would not be able to identify most of these items.

ARGUMENTS A woman has the last word in any argument. Anything a man says after that is the beginning of a new argument.

FUTURE A woman worries about the future until she gets a husband. A man never worries about the future until he gets a wife.

SUCCESS A successful man is one who makes more money than his wife can spend. A successful woman is one who can find such a man.

MARRIAGE (Too true to be considered humorous) A woman marries a man expecting he will change, but he doesn't. A man marries a woman expecting that she won't change and she does.



PLASTIC PUSH-IN TUBE FITTINGS

Fitting Working Specifications

Temperature

Air: -140°F to + 167°F (-25°C to 75°C)
 Water: 33°F to 140°F (1°C to 60°C)

Pressure

Air: 0 - 150 lbs. psi.
 Liquid: 0 - 150 lbs. psi.
 Suitable for Vacuum

Material Specifications

- Bodies:** Food Grade, Acetal Copolymer or Polypropylene
O'Rings: Food Grade Nitrile Rubber or EPDM
Collet: Food Grade Acetal Copolymer, stainless steel teeth



Fitting Tube Types

Plastic Tube:

Polyethylene, nylon, polyurethane (for soft tubing or thin wall tube, tube supports are recommended).

Braided Tube:

For Braided Tube, the use of Tube to Hose Stems and Elbows is required. To retain braided tube on barbs, the use of clamps is also recommended.

Metal Tube (soft):

Brass, Copper and Mild Steel; Ends must be de-burred, no sharp edges.

Metal Tube (hard):

Superseal fittings are recommended for stainless steel and other hard metal tubes; Ends must be deburred, no sharp edges.

Also available in metric sizes. Call order desk for details

MALE CONNECTOR



Part #	Tube OD	Thread NPTF	List Price
20-050P	5/32	1/8	3.47
20-046P	5/32	1/4	2.90
20-052P	3/16	1/8	3.69
20-054P	1/4	1/8	2.70
20-055P	1/4	1/4	2.69
20-531P	5/16	1/4	3.87
20-056P	1/4	3/8	4.26
20-532P	5/16	3/8	6.55
20-057P	3/8	1/8	8.08
20-058P	3/8	1/4	4.63
20-059P	3/8	3/8	5.34
20-062P	3/8	1/2	8.29
20-061P	1/2	3/8	6.79
20-063P	1/2	1/2	7.76

More sizes available upon request

It's not dying for faith that's so hard, it's living up to it.

- William M Thackeray

UNION CONNECTOR



Part #	Tube OD	Tube OD	List Price
20-018P	5/32	5/32	4.71
20-702P	3/16	3/16	5.15
20-019P	1/4	1/4	3.49
20-703P	5/16	5/16	4.67
20-020P	3/8	3/8	4.74
20-021P	1/2	1/2	6.59

CROSS



Part #	Tube OD	List Price
20-143P	3/8	18.42

REDUCING UNION



Part #	Tube OD	Tube OD	List Price
20-750P	1/4	3/16	6.40
20-751P	5/16	5/32	5.98
20-752P	5/16	3/16	4.88
20-753P	5/16	1/4	5.48
20-754P	3/8	3/16	5.94
20-755P	3/8	1/4	5.66
20-756P	3/8	5/16	5.75
20-757P	1/2	5/16	7.85
20-758P	1/2	3/8	9.06

UNION ELBOW



Part #	Tube OD	List Price
20-151P	5/32	4.10
20-704P	3/16	5.44
20-152P	1/4	3.99
20-155P	5/16	6.58
20-153P	3/8	8.05
20-154P	1/2	8.57

PLASTIC FITTINGS



PLASTIC PUSH-IN

PLASTIC FITTINGS

REDUCING ELBOW



Part #	Tube OD	Tube OD	List Price
20-730P	5/16	5/32	6.15
20-731P	5/16	3/16	6.15
20-732P	5/16	1/4	7.25
20-733P	3/8	3/16	8.13
20-734P	3/8	1/4	9.44
20-735P	3/8	5/16	9.44
20-736P	1/2	3/8	9.90

FIXED ELBOW



Part #	Tube OD	Thread NPTF	List Price
20-068P	1/4	1/8	4.19
20-069P	1/4	1/4	4.79
20-070P	1/4	3/8	6.29
20-072P	3/8	1/4	7.21
20-073P	3/8	3/8	7.44

PLUG-IN ELBOW

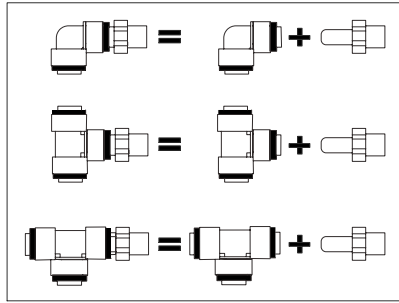


Part #	Stem OD	Tube OD	List Price
20-740P	5/32	5/32	5.28
20-741P	3/16	3/16	4.52
20-742P	1/4	1/4	5.13
20-743P	5/16	5/16	5.73
20-744P	3/8	3/16	6.68
20-745P	3/8	1/4	6.08
20-746P	3/8	5/16	6.08
20-747P	3/8	3/8	9.58
20-748P	1/2	1/2	9.19

More sizes available upon request

Adaptability

Products can be coupled together to form new, intergral fittings.



Use to get reducing swivel sizes you need!

STEM ADAPTER



Part #	Stem OD	Thread NPTF	List Price
20-522P	5/32	1/8	1.20
20-523P	5/32	1/4	1.34
20-700P	3/16	1/8	1.91
20-524P	1/4	1/8	1.91
20-526P	5/16	1/8	2.10
20-525P	1/4	1/4	2.04
20-527P	5/16	1/4	1.91
20-701P	5/16	3/8	3.22
20-528P	3/8	1/4	2.35
20-529P	3/8	3/8	3.15
20-530P	1/2	3/8	5.15
20-533P	1/2	1/2	4.87

REDUCER



Part #	Stem OD	Tube OD	List Price
20-759P	3/16	5/32	4.90
20-760P	5/16	3/16	4.87
20-761P	5/16	1/4	5.60
20-762P	3/8	3/16	5.18
20-512P	3/8	1/4	6.04
20-763P	3/8	5/16	6.24
20-764P	1/2	5/16	7.42
20-514P	1/2	3/8	11.49

UNION TEE



Part #	Tube OD	List Price
20-026P	5/32	7.48
20-027P	3/16	7.70
20-028P	1/4	5.11
20-031P	5/16	8.69
20-029P	3/8	6.29
20-030P	1/2	9.16

REDUCING BRANCH TEE



Part #	Tube OD Ends	Tube OD Branch	List Price
20-724P	1/2	3/8	12.32
20-725P	3/8	1/4	9.07

BULKHEAD UNION



Part #	Tube OD	List Price
20-125P	5/32	6.29
20-126P	3/16	7.21
20-127P	1/4	7.34
20-123P	5/16	9.69
20-128P	3/8	13.27
20-129P	1/2	12.51

FEMALE CONNECTOR



Part #	Tube OD	Thread NPTF	List Price
20-993P	1/4	1/8	7.99
20-035P	1/4	1/4	6.24
20-944P	3/8	1/8	8.91
20-036P	3/8	1/4	8.87

PLASTIC FITTINGS

MIDLAND METAL

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PLASTIC FITTINGS

PLASTIC PUSH-IN

2-WAY DIVIDER



Part #	Tube OD	List Price
20-776P	5/16	7.21
20-777P	3/8	7.67

TUBE TO HOSE STEM



Part #	Stem OD	Hose OD	List Price
20-853P	1/4	3/16	3.50
20-854P	1/4	1/4	3.50
20-855P	5/16	5/16	3.18
20-856P	1/4	5/16	2.55
20-857P	5/16	3/16	2.83
20-858P	5/16	1/4	3.18
20-859P	5/16	3/8	4.03
20-860P	3/8	1/4	4.36
20-861P	3/8	5/16	4.03
20-862P	3/8	3/8	4.38
20-863P	3/8	1/2	7.86
20-864P	1/2	3/8	5.92
20-865P	1/2	1/2	5.87

PLUG



Part #	Stem OD	List Price
20-876P	5/32	0.99
20-877P	3/16	0.99
20-878P	1/4	1.39
20-879P	5/16	1.56
20-880P	3/8	2.29
20-881P	1/2	3.79

TUBE SUPPORT



Part #	Tube OD	Tube ID	List Price
20-836P	5/16	1/4	0.53
20-837P	3/8	5/16	0.70
20-838P	1/2	3/8	0.59

propylene push-in shut off valves for potable water

Technical Specifications

- Working Pressure: 0 to 150 psi (0 to 10 bar)
- Working Temp. (water): 33° F to 150° F (+1°C to 65°C)

Materials

- Body
- Collet
- Food grade Polypropylene
- Food grade Polypropylene with stainless steel teeth
- O-Ring
- EPDM

Tube Tolerances

- Shut-off Valves are intended for use with potable water.
- The Valves are not for use with compressed air, explosive gases, petroleum spirits and other fuels or for heating systems.

PL X PL



Part #	Tube OD	List Price
20-900P	1/4	9.89
20-901P	3/8	10.44

CHECK VALVE



Part #	Tube OD	List Price
20-779P	1/8	28.27

PL X MALE NPTF



Part #	Tube OD	Thread NPTF	List Price
20-904P	1/4	1/4	13.31
20-905P	3/8	3/8	13.26

Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did do. So throw off the bowlines. Sail away from the safe harbour. Catch the trade winds in your sails. Explore. Dream. Discover.

- Mark Twain

PLASTIC FITTINGS



FLOW, ACETAL, QUICK DISCONNECTS

PLASTIC QUICK DISCONNECT

Features	Benefits
thumb latch	One hand connection and disconnection
Integral terminations	Fewer leak points, shorter assemblies, faster installations
Clicks when connected	Assurance of a reliable connection

Applications:

- Gas detection
- Chemical analyzers
- Ink jet printing
- Medical devices
- Optical inspection equipment
- Carpet cleaners

- Pressure:** Vacuum to 120 psi, 8.3 bar
- Temperature:** -40°F to 180°F continuous
-40°C to 82°C continuous
- Tubing sizes:** 1/16" thru 1/4" ID, 4 mm thru 6.4 mm ID
5/32" thru 3/8" OD, 4 mm thru 9.5 mm OD
- Materials:**
- Main components and valves: Acetal
 - Also available in polypropylene
 - Thumb latch: Stainless Steel
 - Valve Spring: 316 Stainless Steel
 - External Springs and pin: Stainless Steel
 - O-Rings: Buna-N
 - Color: Natural white, others available

COUPLING BODIES

All measurements are in inches unless otherwise noted.

PIPE THREAD



Straight Thru Part #	List Price	Shutoff Part #	List Price	Thread Size	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-001	15.13	99-021	20.58	1/8" NPT	99-041	6.50	99-063	20.50
99-003	15.13	99-023	20.14	1/4" NPT	99-043	6.50	99-065	22.84

COUPLING INSERTS

Couplings are pictured with valves unless otherwise noted. All measurements are in inches unless otherwise noted.



PLASTIC FITTINGS

PANEL MOUNT - Ferruleless Polytube Fitting, PTF (Tubing must meet stated inside and outside diameters.)



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-007	25.31	99-027	29.47	1/4" OD .17" ID	6mm OD 4.3mm ID	99-045	21.28	99-067	33.51

HOSE BARB - Panel Mount



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-008	6.04	99-028	29.98	1/16" ID	1.5 mm ID	99-046	18.81	99-068	30.90
99-009	24.11	99-029	27.36	1/8" ID	3.2 mm ID	99-047	15.27	99-069	26.87
99-010	24.11	99-030	27.86	3/16" ID	4.8 mm ID	99-048	13.72	99-070	28.35
99-011	24.53	99-031	27.86	1/4" ID	6.4 mm ID	99-049	15.62	99-071	27.57

IN-LINE - Ferruleless Polytube Fitting, PTF (Tubing must meet stated inside and outside diameters.)



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-015	17.96	99-035	23.26	1/4" OD .17" ID	6mm OD 4.3mm ID	99-052	9.47	99-074	20.36
				3/8" OD .25" ID	9.5mm OD 6mm ID	99-053	12.58	99-075	23.26

HOSE BARB

Many more styles and sizes available.



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-016	15.84	99-036	21.99	1/16" ID	1.5 mm ID	99-054	5.66	99-076	22.27
99-017	14.07	99-037	19.65	1/8" ID	3.2 mm ID	99-055	3.54	99-077	22.27
99-018	14.21	99-038	20.86	3/8" ID	4.8 mm ID	99-056	4.17	99-078	19.09
99-019	13.79	99-039	19.65	1/4" ID	6.4 mm ID	99-057	11.39	99-079	19.09

Phone

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PLASTIC QUICK DISCONNECT

Features	Benefits
thumb latch	One hand connection and disconnection
Integral terminations	Fewer leak points, shorter assemblies, faster installations
Clicks when connected	Assurance of a reliable connection

Applications:

- Floor cleaning equipment
- Bottle capping machinery
- Deionized water filtration
- Thermoplastic molding
- Beverage dispensing
- Leak detection

COUPLING BODIES

All measurements are in inches unless otherwise noted.

PIPE THREAD



Straight Thru Part #	List Price	Shutoff Part #	List Price	Thread Size	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-100	19.11	99-121	20.93	1/4" NPT	99-142	5.23	99-166	22.09
99-102	20.29	99-123	23.33	3/8" NPT	99-144	5.23	99-168	22.29

PANEL MOUNT - Ferruleless Polytube Fitting, PTF (Tubing must meet stated inside and outside diameters.)



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-104	38.04	99-125	41.78	1/4" OD .17"ID	6mm OD 4.3mm ID	99-146	21.90	99-170	26.44
99-106	38.39	99-127	41.78	3/8" OD .25"ID	9.5MM OD 6mm ID	99-148	21.42	99-172	32.80

HOSE BARB - Panel Mount



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-108	36.06	99-129	40.51	1/4" ID	6.4 mm ID	99-150	12.30	99-174	27.79
99-109	37.82	99-130	42.49	5/16" ID	7.9 mm ID	99-151	16.97	99-175	29.69
99-110	36.06	99-131	44.08	3/8" ID	9.5 mm ID	99-152	15.98	99-176	29.27

IN-LINE - Ferruleless Polytube Fitting, PTF (Tubing must meet stated inside and outside diameters.)



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-112	30.50	99-133	29.13	1/4" OD .17"ID	6mm OD 4.3mm ID	99-154	10.89	99-178	23.26
99-114	27.50	99-135	31.02	3/8" OD .25"ID	9.5mm OD 6mm ID	99-156	10.89	99-180	23.26

HOSE BARB

Many more styles and sizes available.



Straight Thru Part #	List Price	Shutoff Part #	List Price	Tubing Size	Metric EQ	Straight Thru Part #	List Price	Shutoff Part #	List Price
99-116	16.69	99-137	20.36	1/4" ID	6.4 mm ID	99-158	4.31	99-182	21.78
99-117	17.71	99-138	20.36	5/16" ID	7.9 mm ID	99-159	4.31	99-183	20.01
99-118	16.69	99-139	22.20	3/16" ID	9.5 mm ID	99-160	3.89	99-184	22.34

FLOW, ACETAL, QUICK DISCONNECTS

- Pressure:** Vacuum to 120 psi, 8.3 bar
- Temperature:** -40°F to 180°F continuous
-40°C to 82°C continuous
- Tubing sizes:** 1/4" thru 3/8" ID, 6.4 mm thru 9.5 mm ID
1/4" thru 3/8" OD, 6.4 mm thru 9.5 mm
- Materials:**
- Main components and valves: Acetal
 - Also available in polypropylene
 - Thumb latch: Stainless Steel
 - Valve Spring: 316 Stainless Steel
 - External Springs and pin: Stainless Steel
 - O-Rings: Buna-N
 - Color: Natural white, others available

COUPLING INSERTS

Couplings are pictured with valves unless otherwise noted.
All measurements are in inches unless otherwise noted.



Phone

Fax

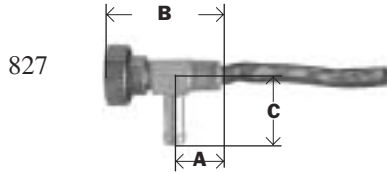
DRAIN COCKS

BRASS FITTINGS

DRAIN COCKS

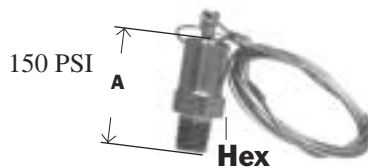
- For use with low pressure air, water and fluids.
- Designed for a working pressure of 150 PSI.
- Hand-tightening provides a metal-to-metal seal.
- Not intended for natural gas, LPG, nuclear or aircraft applications

GASOLINE SHUT OFF w/ SCREEN FILTER



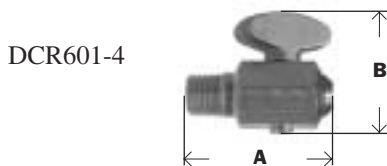
Part #	Barb X Male Pipe	A	B	C	Approx. Wt. Lbs.	List Price
46-064	1/4" x 1/8"	0.55	1.34	0.66	0.06	31.16

AIR TANK DRAIN VALVE - Self Sealing w/ 5ft. remote cable



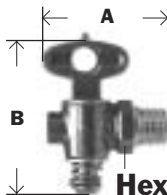
Part #	Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
46-065	1/4"	1.74	0.75	0.16	34.77

DRAIN COCK 150 PSI - Trunk Air Tank



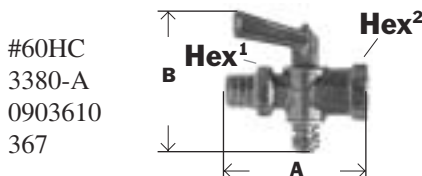
Part #	Male Pipe	A	B	Approx. Wt. Lbs.	List Price
46-066	1/4"	1.73	1.41	0.22	25.28

TRUCK DRAIN - 125 P.S.I.G



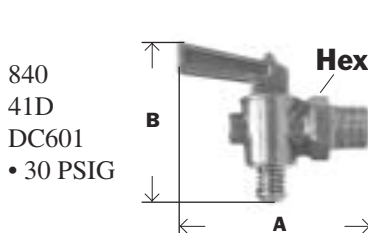
Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price
46-067	1/8"		1.53	1.95	0.62	0.14	16.78
46-068	1/4"	W15310	1.53	1.95	0.62	0.18	16.78

SHUT OFF - 150 P.S.I max.



Part #	Male Pipe x Female Pipe	Industry Number	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
46-069	1/4"	W20332	1.96	1.96	0.75	0.62	0.20	23.30

LEVER HANDLE



Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price
46-070	1/8"	M-41-P	1.99	1.80	0.62	0.04	12.59
46-071	1/4"	M-42-P	2.06	1.81	0.62	0.06	10.49
46-072	3/8"	M-43-P	2.30	2.29	0.81	0.08	18.03
46-073	1/2"	M-44-P	3.00	2.50	0.87	0.16	25.95

**MIDLAND
METAL**

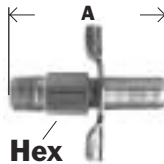
BRASS FITTINGS

DRAIN COCKS

BRASS

INTERNAL SEAT

DC602
808
400A
1800A



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-079	1/8"	6783	1.63	0.40	0.02	9.19

INTERNAL SEAT

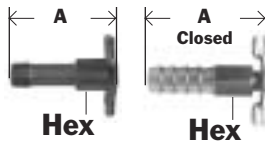
HB - 5/16
803
305A



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-074	1/8"	130	0.92	0.40	0.04	4.66
46-075	1/4"	140	0.94	0.56	0.06	4.76
46-077	3/8"	230	1.34	0.68	0.08	6.80

LONG INTERNAL SEAT

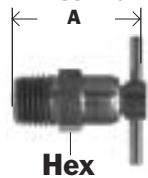
809



Part #	Size	Ind #	A	Hex	Approx. Wt. Lbs.	List Price
46-078	1/8" MIP	185	1.72	0.43	0.02	13.97
46-076	3/8" Hose I.D.		1.65	0.43	0.02	3.31

TEE HANDLE - Internal Seat

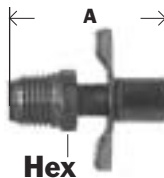
DC603
802



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-080	1/8"	M-200-P	1.22	0.50	0.04	8.63
46-081	1/4"	M-201-P	1.31	0.56	0.06	9.01
46-082	3/8"	M-202-P	1.69	0.68	0.12	13.16

EXTERNAL SEAT w/ SPOUT

200A
239
DC606
807

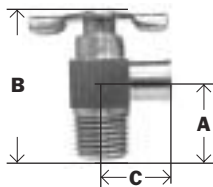


Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-084*	1/4"	6788	1.56	0.56	0.02	2.72

* Replaces GM # 511771 & Chrysler #836015

BIBB NEEDLE VALVE - .38 Hose ID

804
DC607
2019
201DH



Part #	Male Pipe	Industry Number	A	B	C	Approx. Wt. Lbs.	List Price
46-088	1/8"	150	0.55	1.12	0.38	0.04	9.40
46-089	1/4"	120	0.82	1.76	0.66	0.06	11.50
46-089A	1/4"	6660	0.55	1.34	0.66	0.06	6.82

RADIATOR TYPE - External Seat

320D
240
DC604
801



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-085	1/8"	M-320-P	0.90	0.43	0.02	2.27
46-086	1/4"	M-321-P	1.00	0.56	0.04	1.31
46-087	3/8"	M-322-P	1.25	0.68	0.08	7.37
46-083	1/2"		1.52	0.87	0.12	17.39

* 7/16" hex for 9/16" hex, order 46085A

** 1-3/8" wide handle, 1" available - 46086A



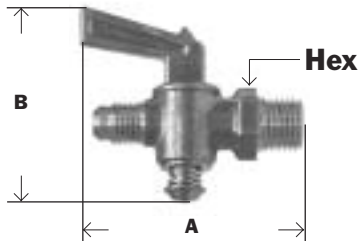
SHUT-OFF COCKS

BRASS FITTINGS

- Designed for automotive or industrial use. AGA approved shut-off cocks approved for LPG and natural gas applications. Lubricant may wash out at higher pressures or with some exotic fluids.

- Designed for working pressure of 30 PSI.
- Forged brass bodies and brass handles.
- Instantaneous off-on operation with 360° rotation.

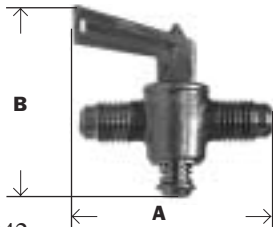
FLARE X MALE PIPE



V402F
848

Part #	Male Flare X Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price
46-100	1/4" x 1/8"	27SAE	2.16	1.88	0.50	0.14	15.77
46-101	1/4" x 1/4"	227SAE	2.19	1.84	0.62	0.16	19.11
46-102	5/16" x 1/8"	29SAE	2.06	1.88	0.50	0.14	15.77
46-103	5/16" x 1/4"	229SAE	2.12	1.82	0.69	0.16	19.11
46-104	3/8" x 1/4"	57SAE	2.27	1.84	0.62	0.17	19.11
46-106	3/8" x 1/2"	577SAE	2.16	2.28	1.00	0.18	25.33
46-107	1/2" x 3/8"	67SAE	2.36	2.27	0.82	0.20	21.68

FLARE X FLARE

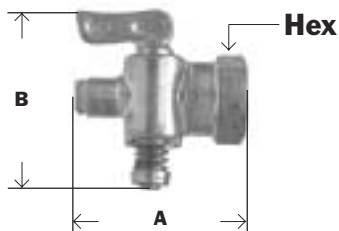


842
V203F
136C

Part #	Male Flare X Male Flare	Industry Number	A	B	Approx. Wt. Lbs.	List Price
46-115	1/4"	28SAE	1.94	1.87	0.13	16.32
46-116	5/16"	30SAE	2.00	1.90	0.16	19.43
46-117	3/8"	58SAE	2.20	1.83	0.18	18.80
46-118	1/2"	68SAE	2.50	2.31	0.50	22.84
46-119	5/8"	1010SAE	3.05	2.59	0.70	25.25

* Please request AGA valves

FLARE X FEMALE PIPE



138C
2046

Part #	Male Flare X Female Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-127	3/8" x 3/8"	163SAE	2.28	2.38	1.03	0.40	45.48
46-125	3/8" x 1/2"	161SAE	2.45	2.31	1.03	0.32	45.48
46-126*	3/8" x 1/2"	161SAE	2.26	2.32	1.03	0.28	46.93
46-128	1/2" x 1/2"	164SAE	2.52	2.19	1.03	0.34	44.69
46-123	5/8" x 1/2"	164SAE	2.61	2.12	1.25	0.54	63.70

* Heater Valve

Dimension data can change without notice.
Please call us when dimensions are critical.

**MIDLAND
METAL**

GOODYEAR
RUBBER PRODUCTS INC.

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WebSales@GoodyearRubberProducts.com

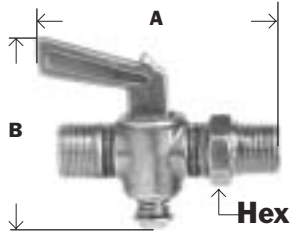
**We Ship
World Wide**

BRASS FITTINGS

SHUT-OFF COCKS

COMPRESSION X MALE PIPE

* See pg. 67 & 68 to order nut and sleeve separately.

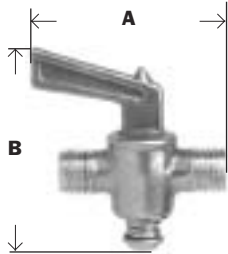


868 133C
V304C VC206
2068

Part #	Comp X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-130	1/4" x 1/8"	27-C	1.87	1.81	0.51	0.14	17.25
46-131	1/4" x 1/4"	227-C	2.05	1.86	0.62	0.15	19.74
46-132	5/16" x 1/8"	29-C	2.05	1.90	0.50	0.16	16.32
46-134	3/8" x 1/4"	57-C	2.05	1.83	0.62	0.15	18.26
46-135	3/8" x 3/8"	557-C	2.05	2.30	0.62	0.18	27.77

COMPRESSION X COMPRESSION

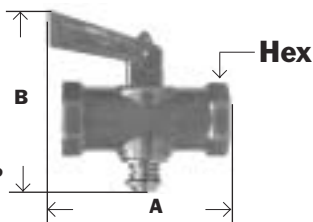
* See pg. 67 & 68 to order nut and sleeve separately.



V3030F
2062
134C

Part #	Comp X Comp	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-140	1/4"	28-C	1.82	1.84	0.12	15.77
46-141	5/16"	30-C	1.84	1.88	0.14	17.56
46-142	3/8"	58-C	1.87	1.80	0.14	1.33
46-143	1/2"	68-C	2.21	2.32	0.22	29.03

FEMALE X FEMALE PIPE

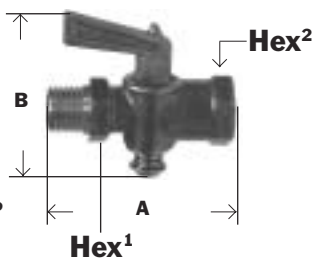


V403P
132C
875

Part #	Female Pipe X Female Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
46-151	1/8"	1.77	1.79	0.56	0.12	13.12
46-152	1/4"	2.28	1.82	0.69	0.20	13.65
46-152T*	1/4"	2.28	2.00	0.68	0.20	18.57
46-153	3/8"	2.44	2.28	0.81	0.30	22.04
46-154	1/2"	2.41	2.28	1.00	0.50	40.17

* 150 PSI

MALE PIPE X FEMALE

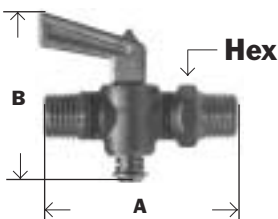


880
V402P
130C

Part #	Male Pipe X Female Pipe	Ind. #	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
46-160	1/8"	48-P	2.03	1.84	0.50	0.56	0.14	11.10
46-161	1/4"	49-P	2.26	1.84	0.69	0.69	0.18	11.38
46-161T*	1/4"		2.26	1.98	0.69	0.69	0.20	18.57
46-162	3/8"	50-P	2.33	2.28	0.82	0.82	0.28	25.72

* 150 PSI

MALE PIPE X MALE PIPE



1V401P
890

Part #	Male Pipe X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-165	1/8"	76-P	2.09	1.77	0.50	0.12	16.16
46-166	1/4"	77-P	2.22	1.84	0.70	0.17	17.40
46-166T*	1/4"		2.23	2.00	0.68	0.18	19.11
46-167	3/8"	78-P	2.43	2.24	0.82	0.22	25.72

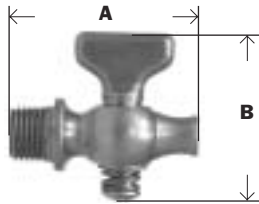
* 150 PSI



- For use on low pressure air systems.
- Designed for working pressure of 80 PSI at moderate temperatures.
- Spring-key type cocks of all brass construction with stainless steel springs.
- Machine finish is standard. Polished or plated finish available at extra cost.

MIP X BIBB

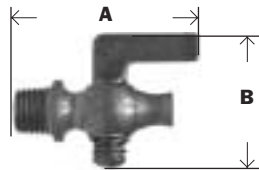
- tee handle
- no hex



Part #	MIP x BIBB	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-300	1/8"	6	1.53	1.55	0.12	15.37
46-301	1/4"	7	1.61	1.54	0.14	14.96

MIP X BIBB

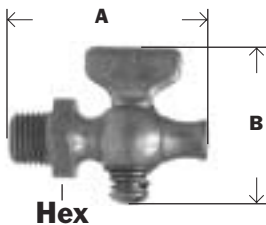
- lever handle
- no hex



Part #	MIP x BIBB	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-305	1/8"	12	2.01	1.71	0.14	15.79
46-306	1/4"	13	2.09	1.66	0.14	16.21

MIP X BIBB

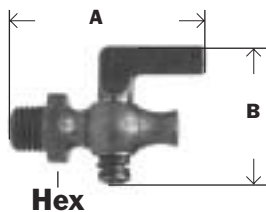
- tee handle
- hex



Part #	MIP x BIBB	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-310	1/8"	63	1.64	1.51	0.56	0.14	14.28
46-311	1/4"	64	1.69	1.54	0.62	0.14	16.33
46-312	3/8"	8	1.75	1.48	0.75	0.17	15.46

MIP X BIBB

- lever handle
- hex



Part #	MIP x BIBB	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-315	1/8"	65	2.11	1.71	0.62	0.14	15.30
46-316	1/4"	66	2.16	1.71	0.62	0.16	16.62
46-317	3/8"	14	2.26	1.71	0.75	0.18	18.70
46-318	1/2"	15	2.32	1.46	0.87	0.26	16.38

Dimension data can change without notice. Please call us when dimensions are critical.



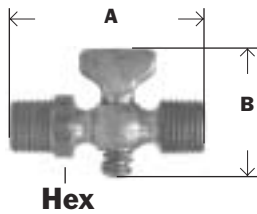
BRASS FITTINGS

BRASS AIR COCKS

BRASS

MIP X MIP

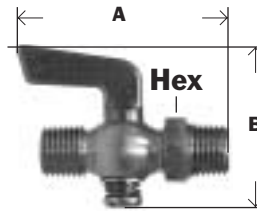
- tee handle
- hex



Part #	MIP X MIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-320	1/8"	18	1.81	1.51	0.75	0.14	17.71
46-321	1/4"	19	1.92	1.55	0.62	0.16	14.85
46-322	3/8"	20	2.34	1.55	0.75	0.19	19.32
46-323	1/2"	21	2.18	1.50	0.87	0.26	20.15

MIP X MIP

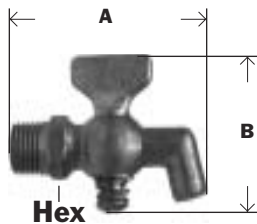
- lever handle
- hex



Part #	MIP X MIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-324	1/8"	22	2.09	1.69	0.56	0.14	18.27
46-325	1/4"	23	2.18	1.69	0.62	0.16	24.43
46-326	3/8"	24	2.26	1.72	0.75	0.20	21.09
46-327	1/2"	25	2.57	1.81	0.91	0.36	26.89

MIP X BIBB NOSE

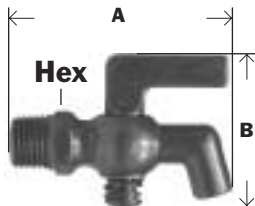
- tee handle
- hex



Part #	MIP X BIBB NOSE	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-330	1/8"	26	2.18	1.75	0.56	0.14	22.78
46-331	1/4"	27	2.11	1.57	0.56	0.16	23.68
46-333	1/2"	33	2.30	1.55	0.87	0.20	25.24

MIP X BIBB NOSE

- lever handle
- hex



Part #	MIP X BIBB NOSE	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-335	1/8"	29	2.25	1.68	0.56	0.14	27.68
46-336	1/4"	30	2.20	1.67	0.56	0.17	20.66
46-337	3/8"	31	2.25	1.72	0.87	0.20	24.83
46-338	1/2"	32	2.31	1.71	0.87	0.22	44.44

"Imagination is more important than knowledge."

- Albert Einstein

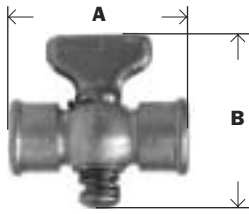


BRASS AIR COCKS

BRASS FITTINGS

FIP X FIP

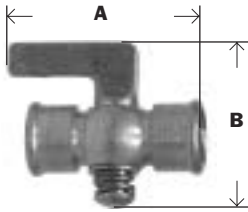
- tee handle
- no hex



Part #	FIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-340	1/8"	37	1.62	1.50	0.14	16.33
46-341	1/4"	38	1.93	1.56	0.16	13.61
46-342	3/8"	39	2.00	1.55	0.20	20.93

FIP X FIP

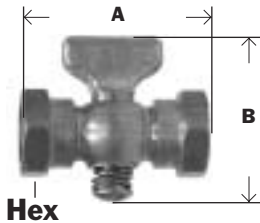
- lever handle
- no hex



Part #	FIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-345	1/8"	43	1.94	1.68	0.14	14.03
46-346	1/4"	44	2.10	1.71	0.16	14.25
46-347	3/8"	45	2.14	1.69	0.20	22.94

FIP X FIP

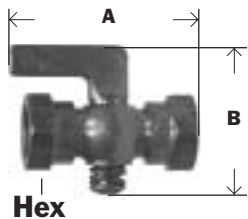
- tee handle
- hex



Part #	FIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-350	1/8"	55	1.62	1.54	0.75	0.17	23.51
46-351	1/4"	56	1.94	1.55	0.75	0.18	16.21
46-352	3/8"	57	1.99	1.58	0.81	0.20	19.58

FIP X FIP

- lever handle
- hex



Part #	FIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-355	1/8"	58	1.97	1.70	0.56	0.15	23.18
46-356	1/4"	59	2.10	1.71	0.75	0.18	16.38
46-357	3/8"	60	2.10	1.69	0.81	0.20	29.00
46-358	1/2"	60A	2.50	2.02	1.00	0.36	29.48

"There is only one success – to be able to spend your life in your own way."

- Christopher Morley

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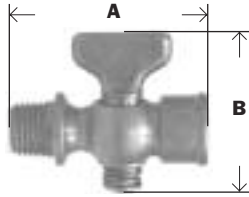
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BRASS FITTINGS

BRASS AIR COCKS

MIP X FIP

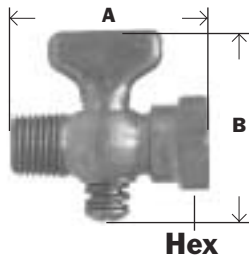
- tee handle
- no hex



Part #	MIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-360	1/8"	40	1.70	1.55	0.14	12.47
46-361	1/4"	41	1.94	1.55	0.16	14.60
46-362	3/8"	42	2.06	1.50	0.20	21.07

MIP X FIP

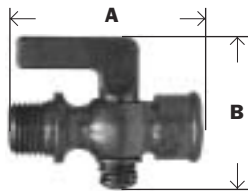
- tee handle
- hex



Part #	MIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-370	1/8"	49	1.81	1.55	0.56	0.14	17.04
46-371	1/4"	50	2.06	1.55	0.75	0.20	19.94
46-372	3/8"	51	2.12	1.53	0.81	0.22	24.47
46-373	1/2"	51A	2.13	1.62	1.00	0.30	27.42

MIP X FIP

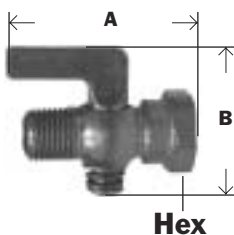
- lever handle
- no hex



Part #	MIP X FIP	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-365	1/8"	46	1.94	1.72	0.14	16.73
46-366	1/4"	47	2.10	1.65	0.16	14.96
46-367	3/8"	48	2.20	1.81	0.24	28.62
46-368	1/2"	48A	2.50	1.95	0.42	24.10

MIP X FIP

- lever handle
- hex



Part #	MIP X FIP	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-375	1/8"	52	1.93	1.69	0.56	0.16	18.70
46-376	1/4"	53	2.06	1.76	0.75	0.20	22.67
46-377	3/8"	54	2.13	1.71	0.81	0.22	24.96
46-378	1/2"	54A	2.65	1.96	1.00	0.28	32.46

Dimension data can change without notice.
Please call us when dimensions are critical.



NEEDLE VALVES

BRASS FITTINGS

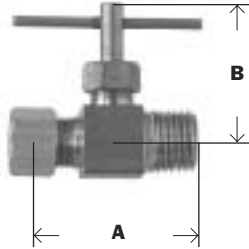
NEEDLE VALVES

Made with either pin handle or pressed on handle.
Please specify if you have a preference.

- Used on instrumentation, hydraulic, and pneumatic systems.
- Designed for a maximum working pressure of 150 PSI.

- Provided with steel handles and metal-to-metal seats with fine-thread screwdown.
- Not designed for natural gas, LPG, nuclear or aircraft applications.
- Always install with pressure against the seat.

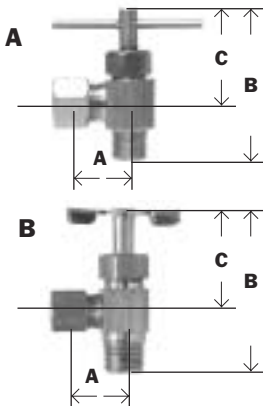
COMP X MALE PIPE



NV106C 820
2205 3068

Part #	Comp X Male Pipe	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-001	3/16" x 1/8"	M-133-C	1.16	0.88	0.06	3.83
46-002	1/4" x 1/8"	M-101-C	1.29	1.12	0.07	6.72
46-002X	Heavy Pattern	M-101-C	1.19	0.88	0.09	10.68
46-003	1/4" x 1/4"	M-101-C	1.27	1.14	0.10	7.41
46-004	5/16" x 1/8"	M-102-C	1.50	1.25	0.14	16.78
46-005	3/8" x 1/4"	M-143-C	1.53	1.22	0.18	6.32

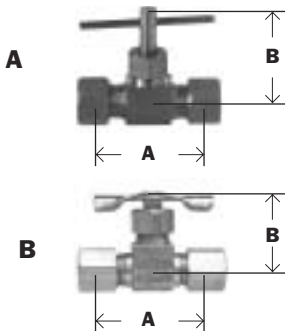
COMP X MALE PIPE-ANGLE



NV104C 821
2203 3069

Part #	Comp X Male Pipe	Handle	Ind. #	A	B	C	Approx. Wt. Lbs.	List Price
46-010	3/16" x 1/8"	B	M-33-C	0.50	1.50	0.82	0.07	13.66
46-011	1/4" x 1/8"	A	M-103-C	0.56	1.48	0.93	0.08	5.08
46-011X	Heavy Pattern	B	M-103-C	0.53	1.53	0.83	0.08	9.06
46-012	1/4" x 1/4"	B	M-104-C	0.64	1.80	1.05	0.13	13.50
46-013	5/16" x 1/8"	B	M-104-C	0.63	1.63	0.95	0.10	14.08
46-014	5/16" x 1/4"	B	M-104-C	0.69	1.73	0.92	0.14	31.60
46-016	3/8" x 1/4"	A	M-303-C	0.69	1.81	0.92	0.16	6.32

COMP X COMP



NV105C 2201
3062 822

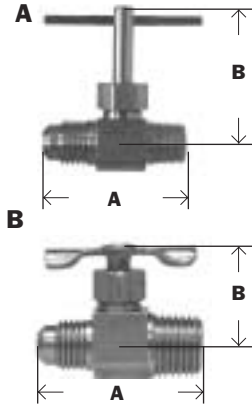
Part #	Comp X Comp	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-020	3/16"	B	M-105-C	1.06	0.88	0.08	16.55
46-021	1/4"	A	M-106-C	1.17	1.12	0.10	6.05
46-022	5/16"	A	M-107-C	1.22	1.08	0.12	16.19
46-023	3/8"	A	M-113-C	1.31	1.15	0.13	6.05

Patience, that blending of moral courage with physical timidity.

- Thomas Hardy

**MIDLAND
METAL**

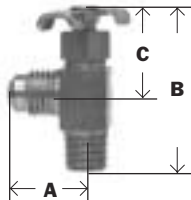
FLARE X MALE PIPE



Part #	Male Flare X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-028	1/4" x 1/8"	A	M-104-SAE	1.35	1.12	0.07	12.00
46-029	1/4" x 1/4"	B	M-1040-SAE	1.38	0.88	0.09	9.01
46-031	3/8" x 1/4"	B	M-108-SAE	1.73	1.22	0.18	15.10

NV103F
2405
823
3048

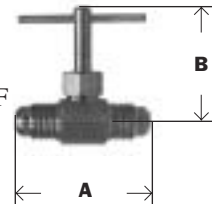
FLARE X MALE PIPE



Part #	Male Flare X Male Pipe	Ind. #	A	B	C	Approx. Wt. Lbs.	List Price
46-036	1/4" x 1/8"	M-103-SAE	0.68	1.54	0.86	0.08	9.19
46-038	5/16" x 1/8"	M-203-SAE	0.88	1.59	0.94	0.11	12.51
46-039	5/16" x 1/4"	M-204-SAE	0.90	1.94	1.00	0.14	10.00
46-040	3/8" x 1/4"	M-303-SAE	0.97	1.84	0.90	0.17	13.92

NV101F 824
2403 3049

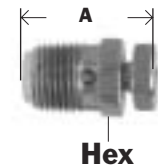
FLARE X FLARE



Part #	Male Flare X Male Flare	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-045	1/4"	M-110-SAE	1.48	1.20	0.18	5.20
46-046	3/8"	M-115-SAE	1.79	1.19	0.20	15.30

NV102F
3042
825
2401

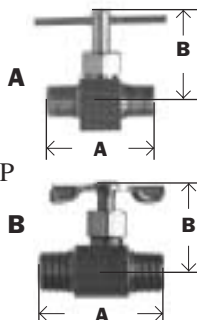
MULTI-PURPOSE AIR VENT



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
46-048	1/8"	0.78	0.43	0.02	3.15

705

MALE PIPE TO MALE PIPE



Part #	Male Pipe X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-050	1/8"	A	M-108-P	1.25	1.09	0.08	14.76
46-050X	1/8"	B	M-108-P	1.38	0.66	0.08	11.86
46-051	1/4"	A	M-110-P	1.69	1.00	0.16	10.34

NV107P
2301
826
3122

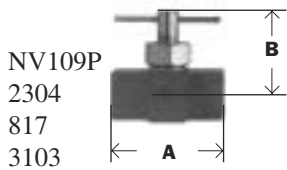
A man who dares to waste one hour of time has not discovered the value of life.

- Charles Darwin



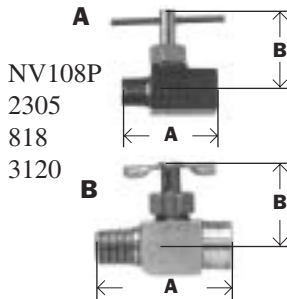
NEEDLE VALVES

BRASS FITTINGS



Part #	Female Pipe X Female Pipe	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-055	1/8"	M-304-P	1.12	0.88	0.18	11.54
46-056	1/4"	M-3044-P	1.60	1.24	0.21	10.30
46-056P	1/4" Heavy	M-3044-P	1.60	1.12	0.20	13.93

MALE X FEMALE PIPE



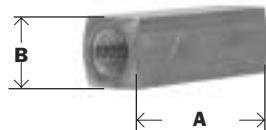
Part #	Male Pipe X Female Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-060	1/8"	A	M-305-P	1.18	1.09	0.10	7.56
46-061	1/4"	A	M-3055-P	1.87	1.65	0.18	10.61
46-061L	1/4" Light Pattern	B	M-3055-P	1.88	1.09	0.21	16.35

FLOW CONTROL NEEDLE & CHECK VALVES

- Precision calibrated dial to determine and allow a return to required flow settings
- Safe positive stop for needle travel
- Positive no-leak stem seal

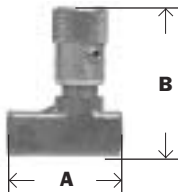
- 2PSI check cracking pressure
- 1000 PSI maximum operating pressure
- One piece forged housing
- Nickel Plated available
- Suitable for natural gas

CHECK VALVE



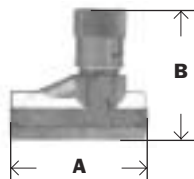
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
20-473	1/4"	1.94	0.68	0.20	63.26

FLOW CONTROL



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
20-485	1/8"	1.47	1.48	0.18	72.99
20-487	1/4"	1.94	1.92	0.27	87.43

NEEDLE VALVE



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
20-501	1/8"	1.47	1.80	0.18	66.39
20-503	1/4"	1.94	2.00	0.28	78.60

Pessimism never won any battle.

- Dwight D Eisenhower

**MIDLAND
METAL**

BRASS FITTINGS

SCREW STEM SHUT-OFF VALVES NEEDLE VALVES

NEEDLE VALVES are constructed to meter fluids and gases. They are **O-RING SEALED** to eliminate valve maintenance. The O-ring is positioned between the actuating threads and the seat, and seals the closely fitted cylinder to give the lowest possible internal volume and protect threads from contamination.

NEEDLE VALVES have a medium tipped stem (37°) to offer RAPID SHUT OFF, FULL FLOW and a SEMI-METERING FUNCTION.

The standard construction is a forged brass body, brass stem, thrust washer, cap and a BUNA "N" 'O' - RING seal. This valve is rated for 1,000 p.s.i.g. service from -40° to 250° F.

FACTORY MUST BE CONSULTED WHEN VALVES ARE TO BE USED WITH FLAMMABLE FLUIDS IN ORDER TO DETERMINE WORKING PRESSURE AND O-RING COMPATIBILITY.
COMPRESSION AND FLARE ENDS CAN BE SUBSTITUTED FOR PIPE ENDS IN MOST CASES
(Price on application)



MIP X FIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-768	1/8 Male x 1/8 Female	Regular	0.141	51.59
46-769	1/8 Male x 1/8 Female	Panel Mntg.	0.141	62.86
46-770	1/4 Male x 1/4 Female	Regular	0.188	49.88
46-771	1/4 Male x 1/4 Female	Panel Mntg.	0.188	62.08

MIP X MIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-774	1/8 Male x 1/8 Male	Regular	0.141	43.05
46-775	1/8 Male x 1/8 Male	Panel	0.141	57.58
46-776	1/4 Male x 1/4 Male	Regular	0.188	43.37
46-777	1/4 Male x 1/4 Male	Panel	0.188	58.74

FIP X FIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-780	1/8 Female x 1/8 Female	Regular	0.172	51.59
46-781	1/8 Female x 1/8 Female	Panel	0.172	60.84
46-782	1/4 Female x 1/4 Female	Regular	0.188	52.91
46-783	1/4 Female x 1/4 Female	Panel	0.188	62.08

NEEDLE VALVES



MIP X FIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-786	1/8 Male x 1/8 Female	Regular	0.188	49.88
46-787	1/8 Male x 1/8 Female	Panel Mntg.	0.188	59.21
46-788	1/4 Male x 1/4 Female	Regular	0.281	51.13
46-789	1/4 Male x 1/4 Female	Panel Mntg.	0.281	60.37

MIP X MIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-792	1/8 Male x 1/8 Male	Regular	0.188	41.57
46-793	1/8 Male x 1/8 Male	Panel	0.188	54.00
46-794	1/4 Male x 1/4 Male	Regular	0.281	44.60
46-795	1/4 Male x 1/4 Male	Panel	0.281	57.03

FIP X FIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-798	1/8 Female x 1/8 Female	Regular	0.188	49.88
46-799	1/8 Female x 1/8 Female	Panel	0.188	59.21
46-800	1/4 Female x 1/8 Female	Regular	0.281	51.13
46-801	1/4 Female x 1/4 Female	Panel	0.281	60.37

SPECIAL VERSIONS

Many special versions of these valves have been produced for other services. If your application is not described here or covered by our recommendations, please contact us. It is quite possible that one of these valve types can be economically adapted to your requirements.

REASON THREE NOT TO MESS WITH A CHILD.

The children had all been photographed, and the teacher was trying to persuade them each to buy a copy of the group picture.

"Just think how nice it will be to look at it when you are all grown up and say, 'There's Jennifer, she's a lawyer,' or 'That's Michael, He's a doctor.'

A small voice at the back of the room rang out, "And there's the teacher, She's dead. "



MICRO-METERING VALVES**MICRO-METERING VALVES**

MICRO-METERING VALVES offer PRECISE FLUID CONTROL through a full metering tip (5°) and lubricated micrometer threads. Our O-ring seal arrangement eliminates contamination of system media by the thread lubricant.

The standard construction is forged brass body, brass stem and cap, a CELCON® thrust bearing and a BUNA "N" 'O'-RING seal. It is rated for 3,500 p.s.i.g. service from -40° to 150° F.

Many variations and modifications have been made in these valves to accommodate customer applications. It is quite possible they can be economically adapted to your requirements.

**MIP X FIP STRAIGHT**

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-741	1/8 Male x 1/8 Female	Regular	0.102	54.47
46-742	1/8 Male x 1/8 Female	Panel Mntg.	0.102	65.27
46-743	1/4 Male x 1/4 Female	Regular	0.172	55.63
46-744	1/4 Male x 1/4 Female	Panel Mntg.	0.175	66.51

MIP X MIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-745	1/8 Male x 1/8 Male	Regular	0.102	54.47
46-746	1/8 Male x 1/8 Male	Panel	0.102	65.27
46-747	1/4 Male x 1/4 Male	Regular	0.172	55.63
46-748	1/4 Male x 1/4 Male	Panel	0.172	66.51

FIP X FIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-752	1/8 Female x 1/8 Female	Regular	0.141	54.47
46-753	1/8 Female x 1/8 Female	Panel	0.141	65.27
46-754	1/4 Female x 1/4 Female	Regular	0.172	55.63
46-755	1/4 Female x 1/4 Female	Panel	0.172	66.51

"You can't measure success if you have never failed."

-Steffi Graf

BRASS FITTINGS**MIP X FIP ANGLE**

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-756	1/8 Male x 1/8 Female	Regular	0.182	52.84
46-757	1/8 Male x 1/8 Female	Panel	0.182	63.64
46-758	1/4 Male x 1/4 Female	Regular	0.182	54.00
46-759	1/4 Male x 1/4 Female	Panel	0.182	64.80

MIP X MIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-760	1/8 Male x 1/8 Male	Regular	0.182	52.84
46-761	1/8 Male x 1/8 Male	Panel	0.182	63.64
46-762	1/4 Male x 1/4 Male	Regular	0.182	54.00
46-763	1/4 Male x 1/4 Male	Panel	0.182	64.80

FIP X FIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-764	1/8 Female x 1/8 Female	Regular	0.182	52.84
46-765	1/8 Female x 1/8 Female	Panel	0.182	63.64
46-766	1/4 Female x 1/4 Female	Regular	0.182	54.00
46-767	1/4 Female x 1/4 Female	Panel	0.182	64.80

COMPRESSION AND FLARE ENDS CAN BE SUBSTITUTED FOR PIPE ENDS IN MOST CASES

Some valves only available on made-to-order basis.

Dimension data can change without notice. Please call us when dimensions are critical.

**MIDLAND
METAL**

GOODYEAR
RUBBER PRODUCTS INC.

Call Toll Free: **1-866-711-4673**
WebSales@GoodyearRubberProducts.com

**We Ship
World Wide**

BRASS FITTINGS

TOGGLE VALVES

TOGGLE SHUT OFF VALVES are constructed to INSTANTANEOUSLY OPEN and CLOSE the flow of fluids and gases. It is ideally suited for use in gas sampling and analysis systems as well as test equipment.

This valve is O-RING SEALED to eliminate leakage and maintenance. The O-ring is positioned between the operating mechanism and the seat, and seals the closely fitted cylinder to give the lowest possible internal volume and protect the mechanism from contamination.

The standard construction is forged brass body, brass cylinder, cap and lever, Viton seat, BUNA "N" 'O' RING seal, steel spring, and stainless steel lever pin.

This valve is rated for 200 p.s.i.g. service from -40° to 250° F and is available in the angle and straight pattern, both of which are available for panel or bracket mounting.



MIP X FIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-804	1/8 Male x 1/8 Female	Regular	0.102	52.06
46-805	1/8 Male x 1/8 Female	Panel Mntg.	0.102	59.44
46-806	1/4 Male x 1/4 Female	Regular	0.172	54.23
46-807	1/4 Male x 1/4 Female	Panel Mntg.	0.175	61.62

MIP X MIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-809	1/8 Male x 1/8 Male	Panel	0.102	59.91
46-810	1/4 Male x 1/4 Male	Regular	0.172	48.48
46-811	1/4 Male x 1/4 Male	Panel	0.172	58.74

FIP X FIP STRAIGHT

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-812	1/8 Female x 1/8 Female	Regular	0.141	52.06
46-813	1/8 Female x 1/8 Female	Panel	0.141	59.44
46-814	1/4 Female x 1/4 Female	Regular	0.172	54.23
46-815	1/4 Female x 1/4 Female	Panel	0.172	61.62

TOGGLE COCKS



MIP X FIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-816	1/8 Male x 1/8 Female	Regular	0.182	49.81
46-817	1/8 Male x 1/8 Female	Panel	0.182	57.34
46-818	1/4 Male x 1/4 Female	Regular	0.182	51.59
46-819	1/4 Male x 1/4 Female	Panel	0.182	58.97

MIP X MIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-820	1/8 Male x 1/8 Male	Regular	0.182	41.57
46-821	1/8 Male x 1/8 Male	Panel	0.182	55.94
46-822	1/4 Male x 1/4 Male	Regular	0.182	42.58
46-823	1/4 Male x 1/4 Male	Panel	0.182	57.03

FIP X FIP ANGLE

Part #	Pipe Thread Inlet Outlet	Style	Maximum Orifice	List Price
46-824	1/8 Female x 1/8 Female	Regular	0.182	49.81
46-825	1/8 Female x 1/8 Female	Panel	0.182	57.34
46-826	1/4 Female x 1/4 Female	Regular	0.182	51.59

COMPRESSION AND FLARE ENDS CAN BE SUBSTITUTED FOR PIPE ENDS IN MOST CASES

Some valves only available on made-to-order basis

REASON FOUR NOT TO MESS WITH A CHILD.

A Sunday school teacher: was discussing the Ten Commandments with her five and six year olds.

After explaining the commandment to "honor" thy Father and thy Mother, she asked, "Is there a commandment that teaches us how to treat our brothers and sisters?"

Without missing a beat one little boy: (the oldest of a family) answered, "Thou shall not kill."



INDUSTRIAL INSTRUMENTATION BALL VALVES

INDUSTRIAL
INSTRUMENTATION
BALL VALVES

• With Double O-RING STEM SEALS provide 20,000 leak-free performance cycles without leakage. Valves also have an exclusive stem seal design that never needs tightening and can be panel mounted for instrumentation applications. For systems with working pressures up to 1,500 p.s.i.g.

- TEFLON ® Ball Seats
- Blow Out Proof Stem Seal
- Double O-Ring
- Up to 1,500 P.S.I.

FEMALE X FEMALE



Part #	Size	List Price
46-830	1/8 x 1/8	80.42
46-832	1/4 x 1/4	78.94
46-833	3/8 x 3/8	170.16
46-834	1/2 x 1/2	193.55

FEMALE X MALE

Part #	Size	List Price
46-835	1/8 x 1/8	84.46
46-838	1/4 x 1/4	84.62
46-839	3/8 x 3/8	178.17
46-840	1/2 x 1/2	197.98

MALE X MALE

Part #	Size	List Price
46-841	1/8 x 1/8	88.50
46-843	1/4 x 1/4	88.73
46-845	3/8 x 3/8	179.02
46-846	1/2 x 1/2	202.41

HOSE BARB X MALE PIPE
THREAD

Part #	Size	List Price
46-849	1/4 x 1/4	95.96
46-850	3/8 x 1/4	95.96

INDUSTRIAL
INSTRUMENTATION
ANGLE BALL VALVES

FEMALE X FEMALE ANGLE



Part #	Size	List Price
46-875	1/8 x 1/8	79.18
46-876	1/8 x 1/4	76.38
46-877	1/4 x 1/8	76.53
46-878	1/4 x 1/4	79.49

FEMALE X MALE

Part #	Size	List Price
46-880	1/8 x 1/8	83.22
46-881	1/8 x 1/4	80.26
46-882	1/4 x 1/8	80.26
46-883	1/4 x 1/4	86.87
46-884	1/4 x 3/8	92.00
46-885	3/8 x 1/2	92.00

MALE X MALE PIPE THREADS

Part #	Size	List Price
46-886	1/8 x 1/8	87.26
46-887	1/8 x 1/4	84.23
46-888	1/4 x 1/8	84.23
46-889	1/4 x 1/4	87.72
46-891	3/8 x 1/4	85.39

HOSE BIB X MALE PIPE
THREAD

Part #	Size	List Price
46-893	1/4 x 1/8	95.34
46-894	1/4 x 1/4	95.34
46-895	3/8 x 1/8	92.54
46-896	3/8 x 1/4	101.40

BRASS FITTINGS

INDUSTRIAL
INSTRUMENTATION
3-WAY BALL VALVES

Part #	Size	List Price
46-951	1/8 FPT	84.23
46-956	1/4 FPT	84.30
46-959	3/8 FPT	190.75
46-960	1/2 FPT	203.34

Any size and Any combination of male pipe, female pipe, hose barb, compression or flare connections are available...just ask!

Some valves only available on made-to-order basis

"Sometimes when I reflect back on all the beer I drink I feel ashamed. Then I look into the glass and think about the workers in the brewery and all of their hopes and dreams. If I didn't drink this beer, they might be out of work and their dreams would be shattered. Then I say to myself, 'It is better that I drink this beer and let their dreams come true than be selfish and worry about my liver.'

- Jack Handy

**MIDLAND
METAL**

BRASS FITTINGS

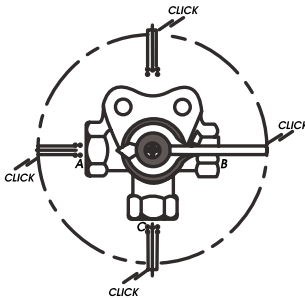
SPECIALTY VALVES BRASS FITTINGS

BRASS

THREE AND FOUR-WAY SELECTOR VALVES

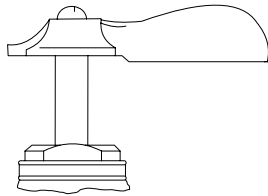
NON-LUBRICATED PLUG VALVES are designed to operate in systems where INSTANTANEOUS PORT SELECTION is desired. Since LUBRICANTS ARE NOT USED, relubrication is not required. There is no lubricant to freeze and lock the valve or to contaminate fine fluids. The O-RING SEALED CAP and STEM eliminate leakage to atmosphere. The mating BRASS BODY and CELCON PLUG produce a fine seal that WILL NOT SEIZE OR GALL.

Designed for PANEL or BRACKET MOUNTING. They are generally recommended for operation in GAS-OIL, OIL, AIR, WATER and DETERGENT systems from minus 40° to 180°F, at a maximum operating pressure of 30 p.s.i.g. The fluid port size is 9/32 (.281) diameter for 1/8 and 1/4 sizes, 5/16 (.312) diameter for the 3/8 size. (Consult factory for applications requiring a higher pressure).



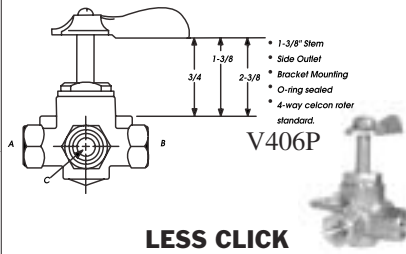
Type 1 (Standard)

A pronounced "click" may be felt at each position. Handle travel is not restricted.



PANEL MOUNTING AVAILABLE

THREE-WAY VALVES (Side Outlet)



LESS CLICK

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-247	1/4	1-3/8"	45.84
46-248	3/8	1-3/8"	45.38

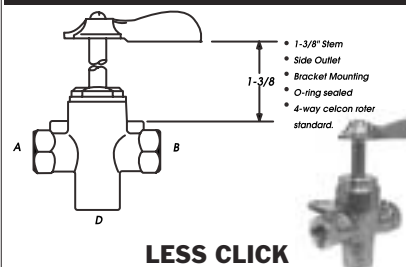
M-108-MID WITH CLICK 360°

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-250	1/8	1-3/8"	42.04
46-251	1/4	1-3/8"	37.30
46-252	3/8	1-3/8"	43.82

Openings:

Handle *Pointer* over A Valve Open A-C
 Handle *Pointer* over C Valve Open B-C
 Handle *Pointer* over B Valve "OFF"
 Handle *Pointer* over Bracket .. Valve "OFF"

THREE-WAY VALVES (Bottom Outlet)



LESS CLICK

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-241	1/4	1-3/8"	42.11

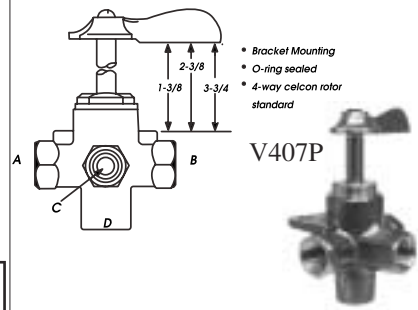
WITH CLICK 360°

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-243	1/8	1-3/8"	44.06
46-244	1/4	1-3/8"	44.06

Openings:

Handle *Pointer* over A Valve Open A-C
 Handle *Pointer* over C Valve Open B-C
 Handle *Pointer* over B Valve "OFF"

FOUR-WAY VALVES



LESS CLICK

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-257	1/4	1-3/8"	39.78

M-114-MID WITH CLICK (360°)

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-255	1/4	1-3/8"	51.31
46-256	3/8	1-3/8"	48.95

WITH 2-3/8" LONG STEM M-115-MID

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-260	1/4	2-3/8"	43.67

Direction of Flow on four way valves pointer at:

- a) A, D open
- b) C, D open
- c) B, D open
- bracket open

Openings:

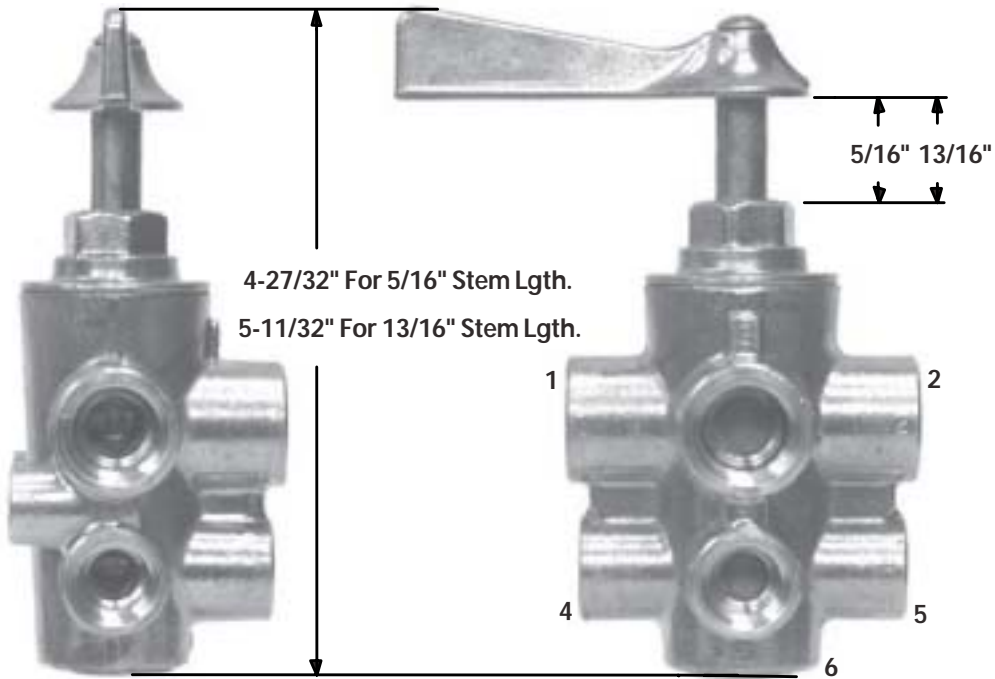
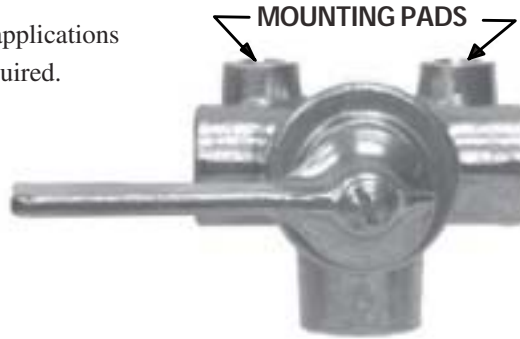
Handle *Pointer* over A Valve Open A-D
 Handle *Pointer* over C Valve Open C-D
 Handle *Pointer* over B Valve Open B-D
 Handle *Pointer* over Bracket .. Valve "OFF"



SIX PORT VALVES

BRASS

- Designed primarily for diesel engine applications where a fuel return or spill back is required.



Maximum Handle Travel 180° Mounting Pads for Bolt Mounting

Openings

With Handle Lever over 2:
(All Ports Closed)

With Handle Lever over 3:
(Open: 1-3 and 4-6, Closed: 2 and 5)

Part #	Ind. #	Female Pipe Thread of 1-2-3 4-5-6	Stem	Length Type	List Price
46-238	SK-1036	1/2 x 3/8	13/16	1	839.16

More sizes available...just ask!



BRASS FITTINGS

SPECIALTY VALVES

BRASS TRUCK VALVES



404V

HOSE TO MALE PIPE

Part #	Size	List Price
46-450	3/8 x 3/8	15.38
46-451	5/8 x 3/8	20.43



404V

HOSE TO MALE PIPE

Part #	Size	List Price
46-455	5/8 x 1/2	34.42
46-457	3/4 x 3/8	52.65
46-456	3/4 x 1/2	34.27



405V

FEMALE TO MALE PIPE

Part #	Size	List Price
46-465	3/8 x 3/8	20.98
46-466	3/8 x 1/2	36.44
46-467	1/2 x 1/2	32.94



409V

FLARE TO MALE PIPE

Part #	Size	List Price
46-475	1/2 x 1/2	44.13
46-476	5/8 x 1/2	34.81



412V

MALE PIPE TO FLARE

Part #	Size	List Price
46-485	1/2 x 5/8	27.66

SOLID BOTTOM VALVES

• Designed for instantaneous on-off operation.

• 360° rotation standard.

• 30 PSI

• Packed with grease.



1035D
M-70-SBV

O-RING SEALED MIP X FIP

Part #	Size	List Price
46-400	1/8	30.30
46-401	1/4	30.30
46-402	3/8	33.80



8875

#M-72-SBV FIP x FIP

Part #	Size	List Price
46-411	1/4	31.16



#M-75-SBV MIP x FLARE

Part #	Size	List Price
46-428	1/4 x 5/16	33.02
46-429	1/4 x 3/8	33.10

SOLID BOTTOM FUEL VALVES

• Approved for use on Motorcraft fuel lines

• Pointer lever.

• 90° turn stop mechanism to assure positive location of the on and off positions.

• Corrosion proofed internal construction assures maximum salt atmosphere protection.

• Port hole is 1/4 (.250) diameter.

• UL listed for use in fuel oils no. 1 & no. 2, LP gas and utility gas.



8980

PIPE

MALE X FEMALE

Part #	Size	List Price
46-400M	1/8 x 1/8	45.53
46-401M	1/4 x 1/4	41.18
46-402M	3/8 x 3/8	48.87



8990

PIPE

MALE x MALE

Part #	Size	List Price
46-406M	1/4 x 1/4	44.06



8975

PIPE

FEMALE X FEMALE

Part #	Size	List Price
46-411M	1/4 x 1/4	40.95



8948

MALE PIPE X FLARE

Part #	Size	List Price
46-429M	1/4 x 3/8	41.18
46-430M	3/8 x 3/8	52.76

BRASS



MINIATURE BALL VALVES

**BRASS DOMESTIC
MINIATURE BALL VALVES**

- Working Pressure up to 1000 P.S.I.G.
- ASTM B-16 Corrosion Resistant Brass Body.
- Non-Adjusting Viton O-Ring Stem Seal Design Never Needs Tightening.
- Highly Inert Teflon Seats.
- Long Life Nickel Plated Brass Ball.
- Blow-Out Proof Stem for Safety.
- Temperature: -40°F to 300°F
- 1/4 Turn Instantaneous On-Off Operation.
- Quarter Turn Handle Design.
- Water, Oil, and Air Pressure Systems.
- Ideal for tight, confined areas, or when routing aesthetics are desired. Applications include instrumentation, gas sampling systems, high pressure gauges, test stands, hydraulic and pneumatic service lines on capital equipment.



MALE X FEMALE

Part #	Size	List Price
46-900	1/8 x 1/8	19.43
46-903	1/4 x 1/4	25.41



MALE X MALE

Part #	Size	List Price
46-910	1/8 x 1/8	26.11
46-912	1/4 x 1/4	26.42



HOSE BARB X MALE PIPE

Part #	Size	List Price
47-042	1/4 x 1/8	27.43
47-043	3/8 x 1/8	27.66
46-980	1/4 x 1/4	27.43
46-981	3/8 x 1/4	27.43

46-920
46-921
46-922



46-922A
46-923



46-924



46-925



FEMALE X FEMALE

Part #	Size	List Price
46-920	1/8 x 1/8	26.11
46-921	1/8 x 1/4	27.58
46-922	1/4 x 1/4	22.38
46-922A	1/4 x 1/4	12.45
46-923	3/8 x 3/8	19.43
46-924	1/2 x 1/2	31.62
46-925	3/4 x 3/4	34.65

U.L. TWO WAY VALVES

- Buna-N Seal, Teflon Seat
- Plated metal handle, plated brass ball.
- 250 PSI Working Pressure



U.L. TWO WAY VALVES FNPT X FNPT

Part #	Size	List Price
46-440	1/4 x 1/4	24.40



U.L. TWO WAY VALVES FNPT X MNPT

Part #	Size	List Price
46-443	1/4 x 1/4	26.36

BRASS FITTINGS

MINI BALL VALVES

• See p. 160 for specifications



FEMALE X FEMALE

Part #	Size	List Price
46-920 I	1/8	13.59
46-922 I	1/4	11.32
46-923 I	3/8	13.59
46-924 I	1/2	11.77



MALE X FEMALE

Part #	Size	List Price
46-900 I	1/8	14.12
46-903 I	1/4	11.77
46-904 I	3/8	14.12
46-905 I	1/2	12.04

ECONOMY MINI BALL VALVES

- Max Working Pressure: 450psi
- Maximum Temperatures: 356°F at 142 psi
212°F at 355 psi
- 1/4 Turn Handle



FEMALE X FEMALE

Part #	Size	List Price
46-935	1/4	7.38
46-936	3/8	9.27



MALE X FEMALE

Part #	Size	List Price
46-931	1/4	7.38
46-932	3/8	9.27

See more mini valves on page ---



BRASS FITTINGS

CHECK VALVES/ MARINE FITTINGS

BRASS

BRASS CHECK VALVES

MAX. 2500 PSI
Cracking Pressure 1/3-3 PSI

- Opening diameter .187
- 180° max operating temp.



•SS ball and spring

MNPT X MNPT

Part #	Size	Opening Dia.	List Price
46-500	1/4 x 1/4	0.187	19.82

MAX. 2500 PSI

- Opening diameter .187
- 180° max operating temp.



•SS ball and spring

MNPT X FNPT

Part #	Size	Opening Dia.	List Price
46-505	1/4 x 1/4	0.187	23.12

MAX. 1200 PSI

- O-Ring poppet seal Bubble tight operation
- 180°F max operating temp.



FNPT X FNPT

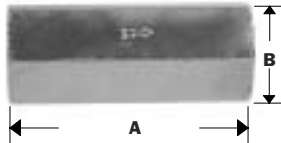
Part #	Size	Opening Dia.	List Price
46-510	1/4 x 1/4	0.25	22.49
46-511	3/8 x 3/8	0.375	29.74
46-512	1/2 x 1/2	0.437	36.05

PNEUMATIC CHECK VALVES

- Max Operating Pressure: 220 psi
- Working Pressure: 14.5-145 psi
- Cracking Pressure: 2.8 psi
- Maximum Temperatures: 140° F

Materials NPT- Inlet NPSM - Outlet

Body	Chrome plated Brass
Spring	Steel
O-Ring	NBR Rubber



Part #	Size	Dimensions (In.)		List Price
		A	B	
46-200	1/4	1.97	0.67	4.96
46-201	3/8	1.97	0.83	16.91
46-202	1/2	2.48	0.98	10.50

HIGH PRESSURE CHECK VALVES

- Operates in any position, and is available in mixed or matched end combinations.
- Standard cracking pressure 1 p.s.i (optional 3 or 7 p.s.i. available) with a maximum operating pressure of 3000 p.s.i. and a maximum operating temperature of 180°F using Buna-N seals.
- Buna-N seals standard, other seals available.
- Guided 316 stainless steel ball + spring.
- Fixed ringed seat prevents extrusion of seal.
- Opening diameter .28
- Approximate CV 1.2
- Water G.P.M. @ 10 p.s.i. is 4.0



FEMALE X FEMALE

Part #	Size	List Price
46-513	1/4	46.06
46-517	3/8	46.46



FEMALE X MALE

Part #	Size	List Price
46-514	1/4	43.82
46-518	3/8	46.46



MALE X FEMALE

Part #	Size	List Price
46-516	1/4	46.06
46-539	3/8	46.46



MALE X MALE

Part #	Size	List Price
46-515	1/4	49.73
46-519	3/8	48.80

MARINE FITTINGS

- Calibrated to support 30" column of gasoline



ANTI-SIPHON VALVES

NPT X NPT

Part #	Size	List Price
46-520	1/4 x 1/4	15.93
46-521	3/8 x 3/8	25.80



ANTI-SIPHON VALVES

BARB X NPT

Part #	Size	List Price
46-530	5/16 x 1/4	15.38
46-531	3/8 x 1/4	15.38
46-532	3/8 x 3/8	23.47
46-533	1/2 x 3/8	25.80



BULKHEAD FITTINGS

Part #	Size	List Price
46-540	5/16	12.20
46-541	3/8	12.20

Never doubt that a small group of thoughtful citizens can change the world. Indeed, it is the only thing that ever has."

-Margaret Mead



BRASS FITTINGS

SELF PIERCING SADDLE VALVES

FITS 3/8" OD
THUR 3/4" OD



SELF PIERCING

NEEDLE VALVE KIT #M-104-VSP

- INDIVIDUALLY BAGGED WITH NEEDLE VALVE

- SADDLE CLAMP

- 2 NUTS

- 2 BOLTS & WASHERS

Has brass sleeve for copper tube installation & delrin sleeve & brass insert for plastic tube installation.

Part #	Tube O.D.	Min Pkg Qty	List Price
46-090A	1/4	1	4.55

#M-302-BSV1.60



- Domestic
- Bag printed with instructions for installation

Part #	Size	Min Pkg Qty	List Price
46-090H	1/4" Hollow Pin	1	6.46

SADDLE VALVES



46-062 + 46-099S = 46-091

**PLAIN VALVE WITH
STEEL SADDLE #M-104-SSV**

HV104C
2050

Part #	Size	Min Pkg Qty	List Price
46-091	1/4	1	6.97
Comp. Humidifier Angle Valve			
46-062	1/4 x 1/8	1	6.44
Steel Saddle Clamp Kit			
46-099S+	1/8	1	1.46

Saddle Valves

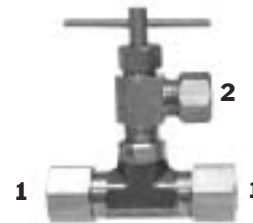


46-011 + 46-099B = 46-092

**NEEDLE VALVE WITH
BRASS SADDLE #M-104-BSV**

Part #	Tube O.D.	Min Pkg Qty	List Price
46-092	1/4	1	14.42

#M-302-BSV1.60



- Ice Makers
- Water Coolers
- Humidifiers

**WATER LINE TAKE OFF
VALVE AND TEE #M-78-HV**

Part #	1 x 2	Tee + Value	Min Pkg Qty	List Price
46-173	1/4 x 1/4	18-321 + 46-011	1	13.60
46-174	3/8 x 3/8	18-322 + 46-016	1	23.67
46-175	3/8 x 1/4	18-325 + 46-011	1	10.87
46-176	1/2 x 1/4	18-326 + 46-011	1	21.09
46-177	5/8 x 1/4	18-327 + 46-011	1	22.11
46-178	5/8 x 3/8	18-327 + 46-016	1	37.49

I don't know the key to success, but the key to failure is trying to please everybody.

- Bill Cosby

BRASS



GOODYEAR
RUBBER PRODUCTS INC.

Call Toll Free: **1-866-711-4673**

WebSales@GoodyearRubberProducts.com

**We Ship
World Wide**

GAS BALL VALVES

**ISO 9002 Manufacturer
FEATURES**

CSA 5 PSIG
C US
CSA AGA 3.88 5 PSIG

UL LISTED
Manual Valve
Threaded NPT
UL 842, UL 258, UL 125

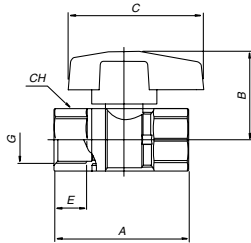
Made in China

VALVES

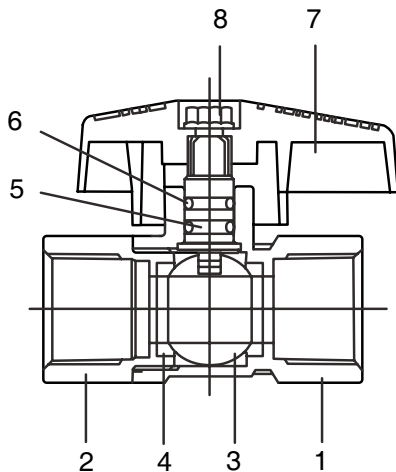
- Solid chrome plated brass ball
- Bottom entry
- Blow out proof design.
- Double viton o-rings stem seals
- Teflon seats for durability.
- Forged construction for greater strength
- Larger ports for increased flow capacity.
- For use with natural, manufactured, mixed Liquefied, petroleum and LP gas-air mixtures.

- Deeper thread connections. Smooth quarter-turn.
- Manufactured to ANSI Z21.15, C.G.A. 9.1-M81, 9.2-M88, 1/2 psig. 372 also to A.G.A. 3-8, C.G.A. CR91-002, 2 psig.
- Red handle.
- May be used with water 400 WOG.

**GAS BALL VALVES
FEMALE x FEMALE**



Part#	Size	Dimension Inches							PN in psi	Box	Case	List
	G	DN	A	B	C	E	CH					
943-312	1/2"	.31	1.96	1.57	3.43	.43	.98	600	20	240	7.25	
943-313	3/4"	.39	1.96	1.57	3.43	.43	1.22	600	14	140	11.50	



	Components	Materials
1	Body	Forged Brass
2	End Connection	Forged Brass
3	Ball	Forged Brass
4	Ball Seats	P.T.F.E.
5	Stem	Brass
6	O-Ring	NBR
7	Butterfly	Steel
8	Screw	UNI 5771 Steel

Life is not a journey to the grave with the intention of arriving safely in a well preserved body, but rather to skid in broad-side, thoroughly used up, totally worn out, and loudly proclaiming...
- WOW - What a ride!

- Andrew Hodes



GAS BALL VALVES

**ISO 9002 Manufacturer
FEATURES**

Made in Italy



CSA AGA 3.88 5 PSIG



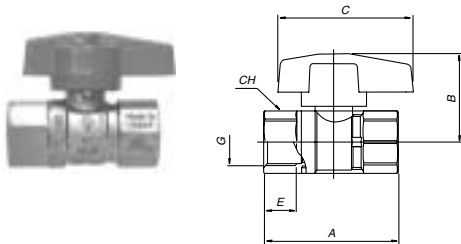
Manual Valve
LISTED
Threaded NPT
UL 842, UL 258, UL 125

VALVES

- Solid chrome plated brass ball
- Bottom entry
- Blow out proof design.
- Double viton o-rings stem seals
- Teflon seats for durability.
- Forged construction for greater strength
- Larger ports for increased flow capacity.
- For use with natural, manufactured, mixed Liquefied, petroleum and LP gas-air mixtures.

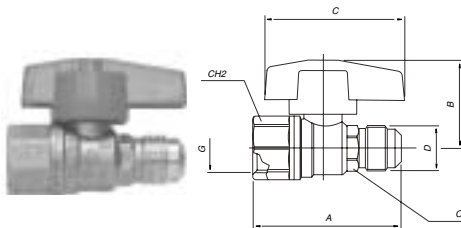
- Deeper thread connections. Smooth quarter-turn.
- Manufactured to ANSI Z21.15, C.G.A. 9.1-M81, 9.2-M88, 1/2 psig. 372 also to A.G.A. 3-8, C.G.A. CR91-002, 2 psig.
- Red Reversible handle.
- May be used with water 400 WOG.

**GAS BALL VALVES
FEMALE x FEMALE**



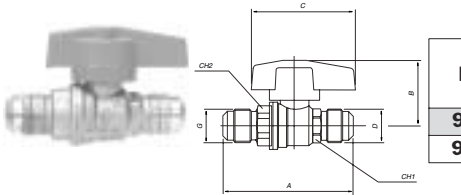
Part#	Size	Dimension Inches						PN in psi	Box	Case	List
	G	DN	A	B	C	E	CH				
943-212	1/2"	.31	1.96	1.57	3.43	.43	.98	600	20	240	11.32
943-213	3/4"	.39	1.96	1.57	3.43	.43	1.22	600	14	140	17.59

**APPLIANCE CONNECTOR VALVES
FLARE x FEMALE**

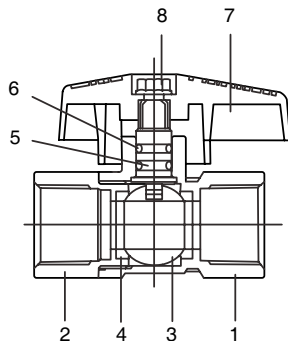


Part#	Size	Dimension Inches						Box	Case	List
	G	DN	A	B	C	CH1	CH2			
935-122	3/8 x 1/2	0.27	2.41	1.45	2.28	0.67	0.98	20	200	15.65
935-123	1/2 x 1/2	0.39	2.44	1.45	2.28	0.67	0.98	20	200	18.20
935-124	5/8 x 3/4	0.47	2.50	1.48	2.28	-	1.22	20	200	20.81

FLARE x FLARE



Part#	Size	Dimension Inches						PN in psi	Box	Case	List
	G	DN	A	B	C	CH1	CH2				
935-129	3/8 x 3/8	0.27	2.79	1.45	2.28	0.67	0.83	363	20	200	16.65
935-130	1/2 x 1/2	0.39	2.87	1.45	2.28	0.67	0.83	363	20	200	25.49



	Components	Materials
1	Body	Forged Brass
2	End Connection	Forged Brass
3	Ball	Forged Brass
4	Ball Seats	P.T.F.E.
5	Stem	Brass
6	O-Ring	NBR
7	Butterfly	Steel
8	Screw	UNI 5771 Steel



BALL VALVE PRIVATE LABEL PROGRAM



We will put your company name and logo on our ball valve handle for FREE. Simply place a minimum blanket order of 10 cases per size and we will stock them under a special part # for your access only. Please allow 90-120 days for delivery on the first shipment only: Then have them delivered as you need them!

VALVES

TEE HANDLES



Part #	Valve Size	List Price
43-200T	1/4" - 3/4"	1.94
43-204T	1"	3.89

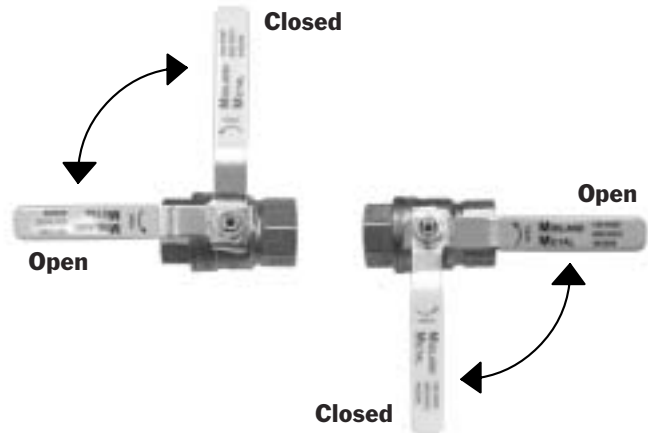
LOCKING HANDLES



Part #	Valve Size	List Price
43-200L	1/4" - 3/4"	13.21
43-204L	1" - 1 1/4"	18.26
43-206L	1 1/2" - 2"	30.69

Reversible Handles:

All regular ball valve handles are now reversible. You can take the handle off and "reverse" it, so it turns and opens over the opposite end of the valve in the opposite direction. Please let us know if this is a requirement when you order as some older stock may not have this feature.



FULL PORT 600WOG FORGED BRASS BALL VALVE

1/2" - 2" Sizes Gas Approved



ISO 9002 Manufacturer FEATURES

600 PSI non-shock cold water, gas, oil
- 150 PSI saturated steam

- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats
- Yellow vinyl insulator on heavy duty plated carbon steel handles
- Fast 1/4 turn open or close operation
- Low operating torque

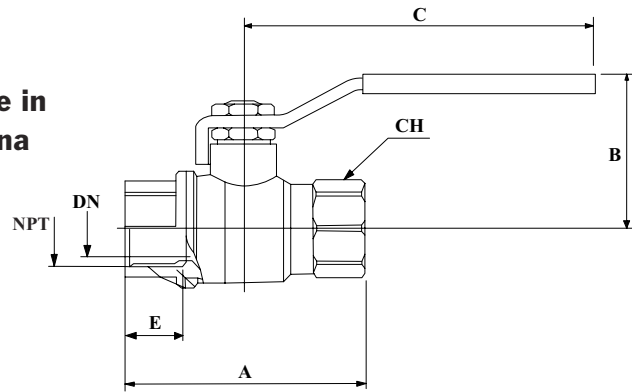
- Adjustable stem packing gland
- Maximum operating temperature: 302°F (150° C)
- Minimum operating temperature: -22°F (-30°C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections

VALVES



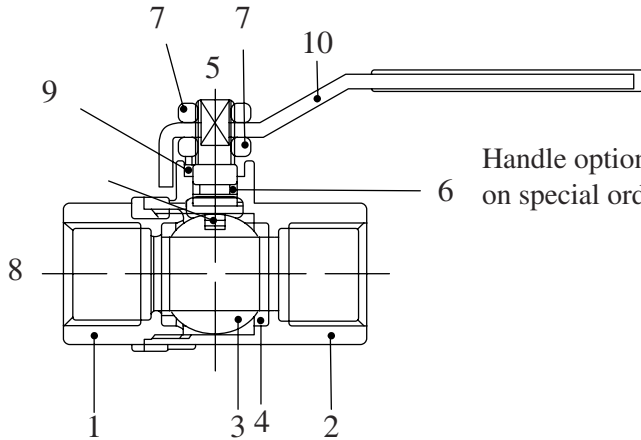
Made in China

Minimum order is Box Quantity



Part#	Size NPT	Dimension Inches						Box	Case	List
		DN	A	B	C	E	CH			
943-600	1/4"	0.39	1.75	1.75	3.54	0.46	0.79	18	180	5.75
943-601	3/8"	0.39	1.75	1.75	3.54	0.46	0.79	18	180	5.75
943-602	1/2"	0.59	2.05	1.91	3.74	0.49	0.96	15	120	8.63
943-603	3/4"	0.78	2.32	2.03	4.41	0.53	1.20	10	90	11.50
943-604	1"	0.98	2.73	2.44	4.41	0.61	1.48	6	60	18.40
943-605	1-1/4"	1.26	3.13	2.56	4.98	0.65	1.63	6	36	24.73
943-606	1-1/2"	1.57	3.54	3.01	5.79	0.67	2.10	4	24	46.46
943-607	2"	1.97	4.09	3.37	6.10	0.75	2.62	2	16	61.87

* Cast Brass on sizes 2-1/2", 3", 4"



Handle options are available on special order basis only.

POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Seat	P.T.F.E.	2
5	Stem	Brass	1
6	Gland	Brass	1
7	Nut	Steel	1
8	Spring Inseat	Steel	1
9	Stem Seal	P.T.F.E.	1
10	Handle	Steel	1



FULL PORT 600WOG FORGED BRASS BALL VALVE

- 600 PSI non-shock cold water, gas, oil
- 150 PSI saturated steam (WSP)
- IAMPO IGC 157 - 2004b

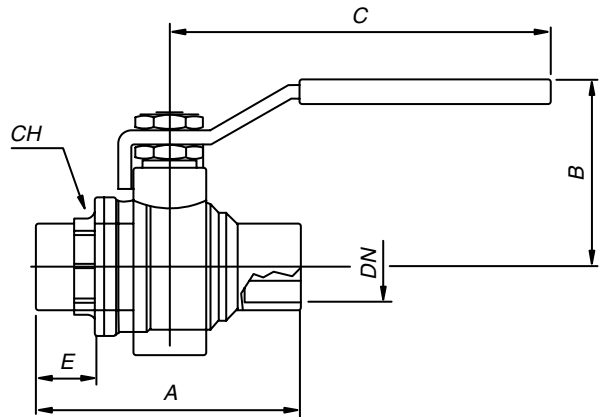
**ISO 9002 Manufacturer
FEATURES**

- Minimal pressure drop due to large full size ports.
- Bottom loaded, pressure retaining stem.
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150psi (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats.
- Vinyl insulator on heavy duty plated carbon steel handles.
- Fast 1/4 turn open or close operation
- Low operating torque
- Adjustable stem packing gland.

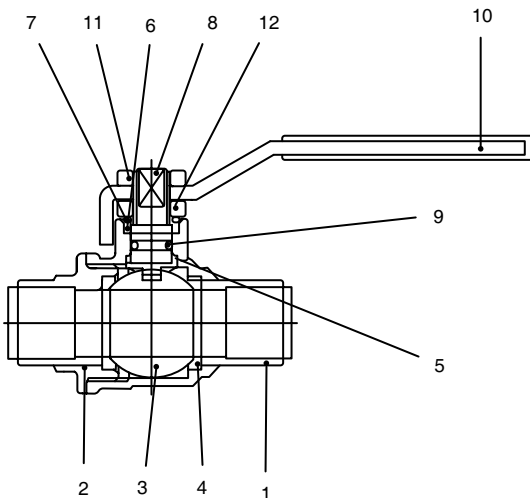
- Maximum operating temperature: 248°F (120° C) at 600 psi.
- Minimum operating temperature: -20°F (-40°C)
- Each valve individually tested.
- Forged Brass - for more strength.
- Tube ends to ANSI B16.22.
- Hard chromium plated solid ball.
- Bottom entry, blow-out proof stem.
- Use with ASTM B88 copper water tubing.



SWT x SWT



Part#	Size SWT	Dimension Inches						Box	Case	List
		DN	A	B	C	E	CH			
943-612	1/2" SWT	0.59	2.28	1.91	3.74	0.61	0.96	15	120	8.63
943-613	3/4" SWT	0.78	2.52	2.03	4.41	0.62	1.20	10	90	11.50
943-614	1" SWT	0.98	3.01	2.44	4.41	0.75	1.48	6	60	25.76
943-615	1-1/4" SWT	1.26	3.37	2.56	4.98	0.77	1.63	6	36	24.73
943-616	1-1/2" SWT	1.57	3.74	3.01	5.79	0.77	2.10	4	24	65.04
943-617	2" SWT	1.97	4.17	3.37	6.10	0.78	2.62	2	16	86.62



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Seats	P.T.F.E.	2
5	Stem	Brass	1
6	O-Ring	NBR 80	1
7	Handle	Steel	1
8	Nut	UNI 5771 Steel	1
9	Stem Seat	P.T.F.E.	1
10	Brass Ring	Brass	1
11	Stem Seat	P.T.F.E.	1
12	Nut	Brass	1

VALVES



FULL PORT 600WOG FORGED BRASS BALL VALVE



ISO 9002 Manufacturer FEATURES

600 PSI non-shock cold water, gas, oil
- 150 PSI saturated steam

CSA AGA 3.88 5 PSIG IAMPO IGC 157 - 2004b

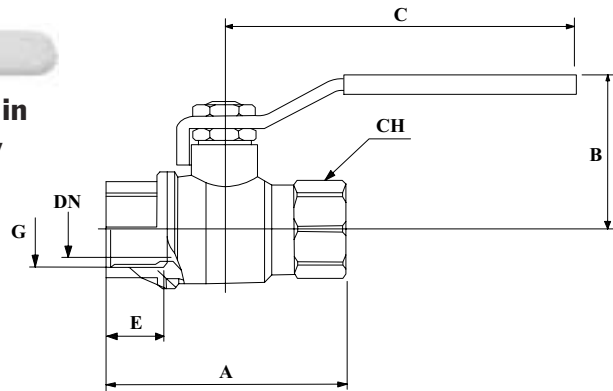
- **SOLID CHROME PLATED BRASS BALL**
- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats
- Yellow vinyl insulator on heavy duty plated carbon steel handles
- Fast 1/4 turn open or close operation
- Low operating torque
- Flow can go both directions

- Adjustable stem packing gland
- Maximum operating temperature: 248°F (120° C) at 600 PSI
- Minimum operating temperature: -20°F (-40°C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections

VALVES



Made in Italy

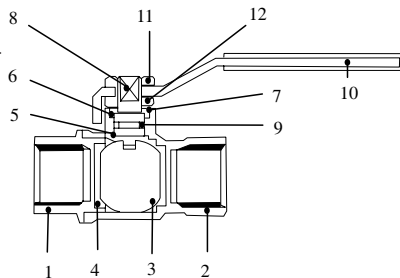


Female x Female

Part#	Size	Dimension Inches						Box	Case	List
		G	DN	A	B	C	E			
943-500	1/4"	.31	1.96	1.57	3.43	.43	.74	24	240	11.66
943-501	3/8"	.39	1.96	1.57	3.43	.43	.86	24	240	11.77
943-502	1/2"	.59	2.28	1.77	3.35	.61	.94	20	200	14.32
943-503	3/4"	.78	2.44	1.89	3.35	.64	1.22	14	140	20.81
943-504	1"	.98	3.03	2.20	4.61	.75	1.50	6	60	32.30
943-505	1-1/4"	1.26	3.46	2.36	4.61	.77	1.89	4	40	50.34
943-506	1-1/2"	1.57	3.94	3.15	6.30	.77	2.12	2	20	82.86
943-507	2"	1.97	4.45	3.15	6.30	.79	2.63	2	20	121.21
942-508	2-1/2"	2.48	5.94	4.17	7.48	1.06	3.30	2	12	239.59
943-509	3"	2.99	6.85	5.47	9.84	1.14	3.89	6	6	368.41
943-510	4"	3.54	7.67	5.88	9.84	1.50	4.80	3	3	602.29

See additional handle options on page ---

- Nickel plated body available upon special request.
- Optional stainless steel parts available upon special request.



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Stems	P.T.F.E.	2
5	Stem Antif. Seat	P.T.F.E.	1
6	Stem Seat	P.T.F.E.	1
7	Brass Ring	Brass	1
8	Stem	Brass	1
9	O-Ring	NBR 80	1
10	Handle	Steel	1
11	Nut	Steel	1
12	Nut	Brass	1



FULL PORT 600WOG FORGED BRASS BALL VALVE

ISO 9002 Manufacturer FEATURES

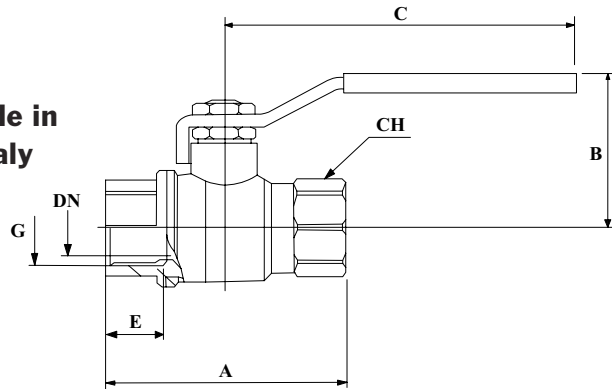
600 PSI non-shock cold water, gas, oil
- 150 PSI saturated steam

- Suitable for full range of liquids and gasses
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150psi (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats
- Vinyl insulator on heavy duty plated carbon steel handles
- Fast 1/4 turn open or close operation
- Low operating torque
- Adjustable stem packing gland
- Maximum operating temperature: 248°F (120° C)
- Minimum operating temperature: -20°F (-40°C)
- KV: Pressure drop m³/h
- Each valve individually tested
- Forged Brass - for more strength
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem

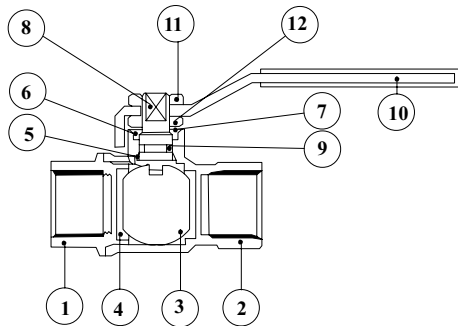


Sweat x Sweat

Made in Italy



Part #	Size	Dimension Inches									
		G	DN	A	B	C	E	CH	KV	Box	Case
943-512	1/2" SWT	.59	2.28	1.49	3.27	.60	.94	.64	14	140	14.10
943-513	3/4" SWT	.78	2.44	1.57	3.27	.64	1.22	1.16	14	120	20.81
943-514	1" SWT	.98	2.95	1.93	3.74	.75	1.50	1.69	6	60	32.25
943-515	1-1/4" SWT	1.26	3.46	2.36	4.61	.84	1.89	3.50	4	40	50.34
943-516	1-1/2" SWT	1.57	3.94	3.00	4.61	.84	2.12	9.05	2	20	82.86
943-517	2" SWT	1.97	4.44	2.95	4.61	1.01	2.63	1.04	1	10	121.38



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Seats	P.T.F.E	2
5	Stem Antif. Seat	P.T.F.E	1
6	Stem Seat	P.T.F.E	1
7	Brass Ring	Brass	1
8	Stem	Brass	1
9	O-Ring	NBR 80	1
10	Handle	Steel	1
11	Nut	Steel	1
12	Nut	Brass	1

VALVES



FORGED BRASS BALL VALVE - STANDARD PORT

1/2" Gas Approved



CSA AGA 3.88 5 PSIG

ISO 9002 Manufacturer FEATURES

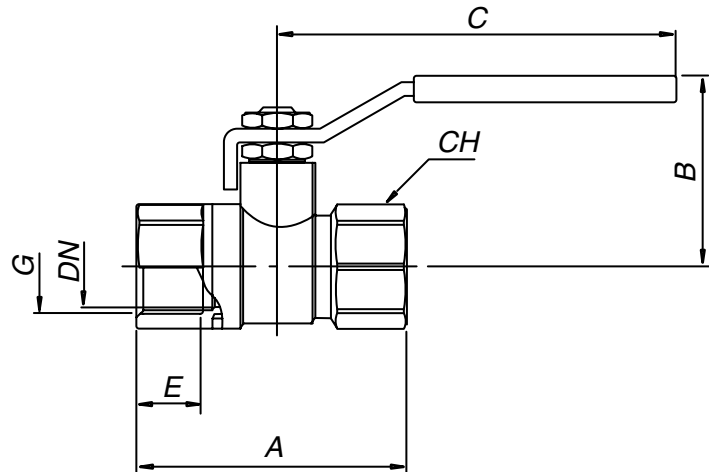
- 400 PSI non-shock cold water, gas, oil
- 150 PSI saturated steam (WSP)
 - Solid chrome plated brass ball
 - Threaded ends to ANSI B1.20.1
 - Each valve individually tested
 - Hard chromium plated solid ball
 - Bottom entry, blow-out proof stem
 - Double stem packing, Teflon seats.

VALVES



Yellow Handle

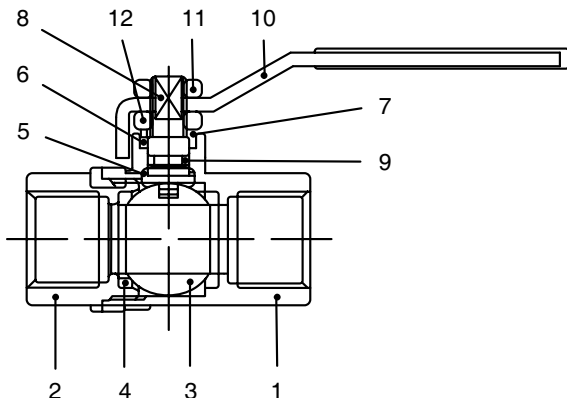
FIP x FIP



FORGED BRASS BALL VALVE IPS SCREWED ENDS

Part#	Size	Dimension Inches						Box	Case	List
	G	DN	A	B	C	E	CH			
940-241	1/2	0.47	2.26	1.51	3.27	0.61	0.98	20	200	19.27
940-242	3/4	0.59	2.50	1.59	3.27	0.63	1.22	14	140	25.25
940-243	1	0.78	2.87	1.88	3.74	0.75	1.49	6	60	40.71
940-244	1-1/4	0.98	3.46	2.08	4.61	0.77	1.89	4	40	66.12
940-245	1-1/2	1.26	3.52	2.45	4.61	0.77	2.13	2	20	99.22
940-246	2	1.57	4.05	2.65	4.61	0.79	2.64	1	10	143.05

See additional handle options on page 173



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Stems	P.T.F.E.	2
5	Stem Antif. Seat	P.T.F.E.	1
6	Stem Seat	P.T.F.E.	1
7	Brass Ring	Brass	1
8	Stem	Brass	1
9	O-Ring	NBR 80	1
10	Handle	Steel	1
11	Nut	Steel	1
12	Nut	Brass	1

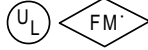


NSF 61 FULL PORT 600WOG FORGED BRASS BALL VALVE

**ISO 9002 Manufacturer
FEATURES**



1/4" - 2" Gas Approved



UL842, UL258, UL125, FM

NSF 61 CSA AGA 3.88 5 PSIG

• NSF approved for drinking water applications

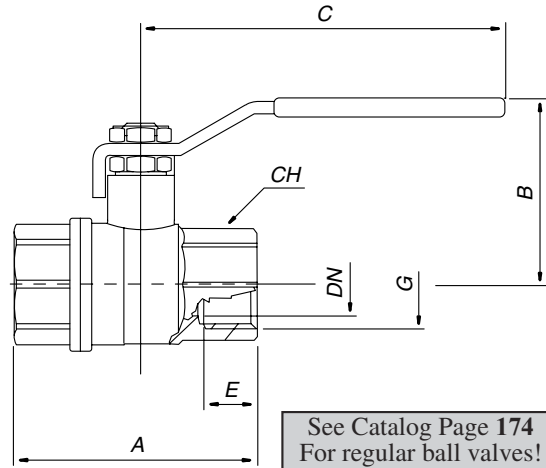
- 600 PSI non-shock cold water, gas, oil 150 PSI saturated steam
- Suitable for full range of liquids and gases
- Virgin TFE stem packing seal, thrust washer and seats
- Blue vinyl handle cover

- Solid chrome plated brass ball
- Adjustable stem packing gland
- Threaded ends to ANSI B1.20.1
- Bottom entry, blow-out proof stem



Female x Female

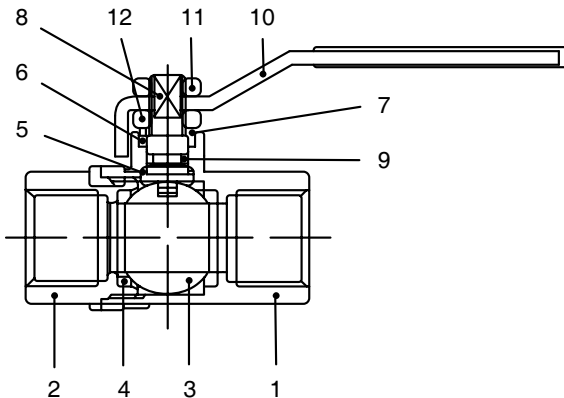
Made in Italy



See Catalog Page 174 For regular ball valves!

NSF 61 Approved Part#	Size	Dimension Inches						Box	Case	NSF 61 List
		G	DN	A	B	C	E			
943-220	1/4"	.31	1.96	1.57	3.43	.43	.74	24	240	15.45
943-221	3/8"	.39	1.96	1.57	3.43	.43	.86	24	240	15.85
943-222	1/2"	.59	2.40	1.77	3.43	.59	1.06	20	200	15.65
943-223	3/4"	.78	2.72	1.77	3.43	.64	1.26	14	140	22.98
943-224	1"	.98	3.28	2.20	4.72	.75	1.59	6	60	35.80
943-225	1-1/4"	1.25	3.86	2.36	4.72	.84	1.96	4	40	56.17
943-226	1-1/2"	1.57	4.25	3.12	6.33	.84	2.16	2	20	91.85
943-227	2"	1.96	5.03	3.12	6.33	1.01	2.76	2	12	134.87

See additional handle options on page 173



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Stems	P.T.F.E.	2
5	Stem Antif. Seat	P.T.F.E.	1
6	Stem Seat	P.T.F.E.	1
7	Brass Ring	Brass	1
8	Stem	Brass	1
9	O-Ring	NBR 80	1
10	Handle	Steel	1
11	Nut	Steel	1
12	Nut	Brass	1



FULL PORT 600WOG FORGED BRASS BALL VALVE

Gas Approved



CSA AGA 3.88 5 PSIG Made in Italy

ISO 9002 Manufacturer FEATURES

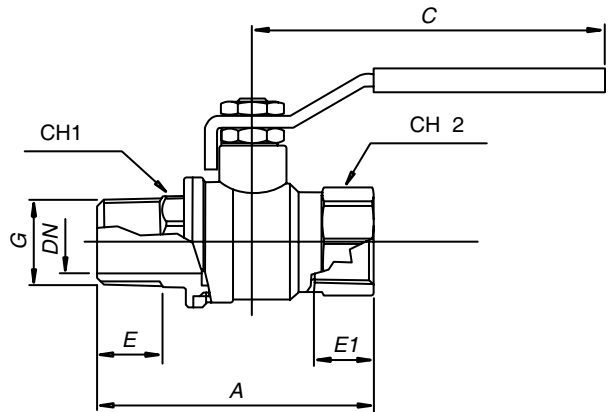
- Solid chrome plated brass ball
- Suitable for full range of liquids and gases.
- Minimal pressure drop due to large full size ports.
- Bottom loaded, pressure retaining stem.
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150psi (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats.
- Yellow vinyl insulator on heavy duty plated carbon steel handles.
- Fast 1/4 turn open or close operation.

- Low operating torque.
- Adjustable stem packing gland.
- Maximum operating temperature: 248°F (120°C) at 600 p.s.i
- Minimum operating temperature: -20°F (-40°C)
- KV: Pressure drop m³/h.
- Each valve individually tested.
- Forged Brass - for more strength.
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem.
- Deeper threads - for better connections.

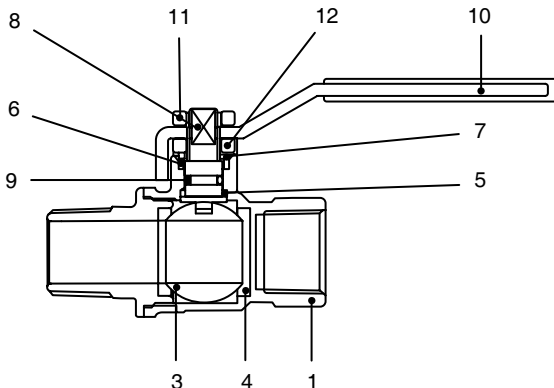
VALVES



MIP x FIP



Part#	Size	DN	A	B	C	E	E1	CH1	CH2	Box	Case	List
948-101	1/4	.31	2.28	1.49	3.35	.46	.51	.55	.74	24	240	17.17
948-102	3/8	.39	2.37	1.57	3.35	.46	.51	.71	.86	24	240	17.72
948-103	1/2	.59	2.28	1.49	3.35	.61	.59	.85	.96	20	200	20.82
948-104	3/4	.78	2.87	1.57	3.35	.66	.63	1.10	1.22	14	140	30.69
948-105	1	.98	3.42	1.93	5.20	.77	.75	1.36	1.50	6	60	47.94
948-106	1-1/4	1.26	3.94	2.36	4.72	.79	.76	1.69	1.89	4	40	74.59
948-107	1-1/2	1.57	4.25	3.00	6.34	.81	.76	2.12	2.12	2	20	123.08
948-108	2	1.97	4.96	2.95	6.34	.84	.76	2.40	2.63	2	12	180.65



POS	Components	Materials	N
1	Body	CW617N Forged Brass	1
2	End Connection	CW617N Forged Brass	1
3	Ball	CW617N CP Brass	1
4	Ball Stems	P.T.F.E.	2
5	Stem Antif. Seat	P.T.F.E.	1
6	Stem Seat	P.T.F.E.	1
7	Brass Ring	CW617N Brass	1
8	Stem	CW617N Brass	1
9	O-Ring	NBR 80	1
10	Handle	UNI EN 10025 Steel	1
11	Nut	UN 5771 Steel	1
12	Nut	CW617N Brass	1



CHROME PLATED BRASS MINI BALL VALUE

ISO 9002 Manufacturer

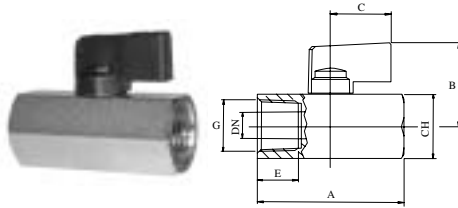
Made in Italy

- Solid chrome plated brass ball
- Max working pressure 235 psi
- Longer body style for longer, deeper thread connections
- One piece drawn sand blasted chrome plated body.
- Each valve is seal tested for maximum safety.
- Double seal system allows valve to be operated in both directions making installation easier.

FEATURES

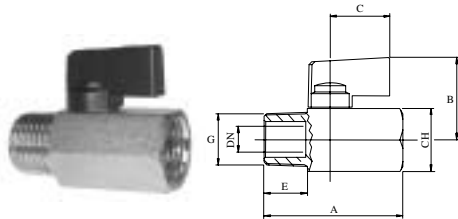
- Blowout-proof brass stem.
- NPT taper ANSI B1.20.1 threads.
- 32°F to +176°F temperature.
- 1/4 Turn Nylon handle with mechanical stop.
- NSF Approved valves available upon request!

Female x Female



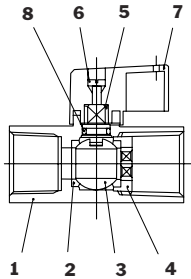
Part#	Size		Dimension Inches							
	G	DN	A	B	C	E	CH	BOX	CASE	LIST
46-920 I	1/8"	0.24	1.51	1.2	0.9	0.31	0.83	50	500	13.59
46-922 I	1/4"	0.31	1.88	1.2	0.9	0.51	0.83	50	500	11.32
46-923 I	3/8"	0.31	1.88	1.2	0.9	0.51	0.83	50	500	13.59
46-924 I	1/2"	0.39	2.18	1.28	0.9	0.61	0.96	40	400	11.77

Made in Italy

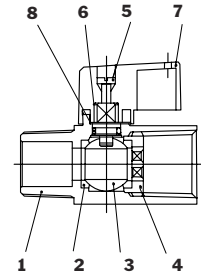


Male x Female

Part#	Size		Dimension Inches							
	G	DN	A	B	C	E	CH	BOX	CASE	LIST
46-900 I	1/8"	0.24	1.5	1.2	0.9	0.34	0.83	50	500	14.12
46-903 I	1/4"	0.31	1.77	1.2	0.9	0.48	0.83	50	500	11.77
46-904 I	3/8"	0.31	1.81	1.2	0.9	0.49	0.83	50	500	14.12
46-905 I	1/2"	0.39	2.15	1.28	0.9	0.65	0.96	40	400	12.04



POS	Components	Materials	N
1	Body	CW517N Forged Brass	1
2	Ball Seats	P.T.F.E	2
3	Ball	CW517N CP Brass	1
4	Ring Unit	CW614N Brass	1
5	Stem	CW614N Brass	1
6	Screw	UNI 5771 Steel	1
7	Handle	Nylon	1
8	O-Ring	NBR 80	1



ECONOMY MINI BALL VALVES

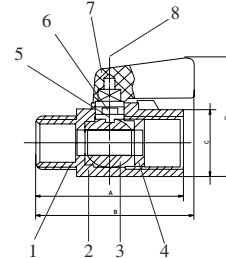
- Max Working Pressure: 450psi
- Maximum Temperatures: 356°F at 142 psi
212°F at 355 psi
- 1/4 Turn Handle

FEMALE X FEMALE



Part #	Size	Dimensions (In)				List Price
		A	B	C	D	
46-935	1/4	1.57	1.69	0.78	1.46	7.38
46-936	3/8	1.57	1.69	0.78	1.46	9.27

Send us your volume quotes!



MALE X FEMALE



Part #	Size	Dimensions (In)				List Price
		A	B	C	D	
46-931	1/4	1.57	1.69	0.78	1.46	7.38
46-932	3/8	1.57	1.69	0.78	1.46	9.27

Pos	Components	Materials	N
1	Body	CP Forged Brass	1
2	Ball Seats	P.T.F.E.	2
3	Ball	CP Brass	1
4	Ring Unit	Brass	1
5	Stern	Brass	1
6	O-Ring	NBR 80	1
7	Handle	ABS	1
8	Screw	Steel	1



MINI BALL VALVES

Forged brass Mini-Ball Valves

- 180° operational handle, blow out proof stem. Stem with double “O” Rings
- 200 WOG
- 125SWSP

NO	Part Name	Material	QTY
1	Nut	Steel	1
2	Handle	Steel	1
3	Cover	PVC	1
4	O-Ring	NBR	2
5	Stem	Brass	1
6	Body	Brass	1
7	Seat	Teflon	2
8	Ball Disc	Brass	1
9	End Plug	Brass	1

FEMALE X FEMALE



Part #	Size	List
944-116	1/4X1/4	8.53
944-118	1/4X1/2	9.19

MALE X FEMALE



Part #	Size	List
944-106	1/8X1/8	8.09
944-100	1/8X1/4	8.23
944-101	1/4X1/4	9.43
944-102	1/4X3/8	8.82

MALE X MALE



Part #	Size	List
944-108	1/8X1/4	8.82
944-111	1/4X1/2	8.82
944-112	1/2X1/2	13.45

BRASS VALVES

MALE X HOSE BARB



Part #	Size	List
944-126	1/8X3/8	8.82
944-138	1/4X1/4	7.43
944-128	1/4X3/8	7.43

HOSE BARB X HOSE BARB



Part #	Size	List
944-142	1/4X1/4	9.51
944-133	5/16X5/16	32.63
944-134	3/8X3/8	9.97

FEMALE X HOSE BARB



Part #	Size	List
944-135	1/8X1/8	9.51
944-120	1/8X3/8	11.03
944-136	1/4X1/4	11.03

“Man invented language to satisfy his deep need to complain.”

- Lily Tomlin



BRASS VALVES

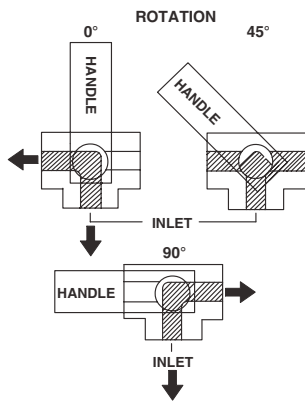
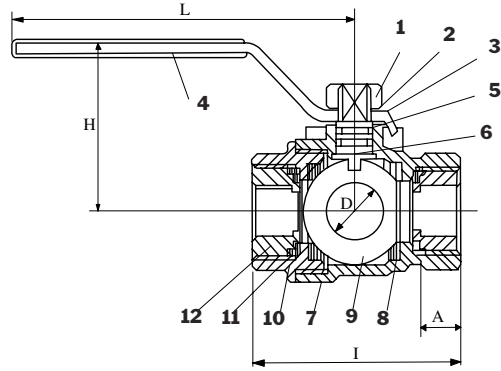
3-WAY VALVES

SIDE OUTLET 3 WAY BALL VALVE



- Forged Brass
- 200 WOG
- 125 WSP

• Side outlet



Nomenclature & Materials

NO	Part Name	Material	Qty
1	Nut	Steel	1
2	Spring Washer	Steel	1
3	Handle	Steel	1
4	Cover	PVC	1
5	O-Ring	NBR	2
6	Stem	Brass	1
7	Body	Forged Brass	1
8	Seat	Teflon	2
9	Ball Disc	Brass	1
10	End Plug	Brass	1
11	O-Ring	NBR	3
12	Socket	Brass	3

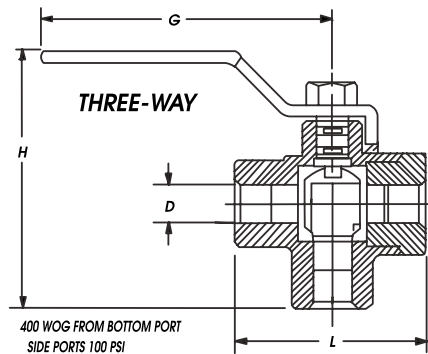
Part#	Size	I	H	D	L	A	Box	Case	List
940-464	1/4"	2.03	1.64	.51	3.35	.47	15	60	27.05
940-465	3/8"	2.03	1.64	.51	3.35	.47	15	60	39.76
940-461	1/2"	2.03	1.64	.51	3.35	.47	15	60	27.78
940-462	3/4"	2.32	2.11	.67	4.17	.51	10	40	47.47

BOTTOM OUTLET 3 WAY BALL VALVE

- Forged Brass
- Double O-Ring Seal
- Bottom Port is inlet 400 psi
- Blow out proof stem
- Side Ports are inlet 100 psi
- Made in USA



• Bottom outlet



Part#	Size	D	G	H	L	Cv	List
940-121	1/4"	.44	3.50	3.12	2.25	5.2	53.54
940-122	3/8"	.50	3.50	3.12	2.25	5.5	56.96
940-123	1/2"	.50	3.50	3.12	2.25	5.5	56.96

VALVES



MISC. VALVES

STAINLESS TRIM BALL VALVES

Full Port 600 WOG Forged Brass Ball Valves

- Nickel plated body
- Stainless steel tee handle and nut



CSA AGA 3.88 5 PSIG



Also with lever handle option

FEMALE X FEMALE

Part #	Size	List Price
948-154ST	3/4	16.18
948-154STL	3/4 Lever Handle	16.54
948-155ST	1	32.20
948-155STL	1 Lever Handle	30.87

Full Port 600 WOG Forged Brass Valves

- Nickel plated body
- Stainless steel lever handle and nut



CSA AGA 3.88 5 PSIG



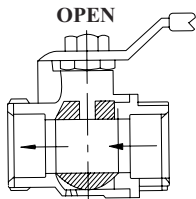
MALE X FEMALE

Part #	Size	List Price
948-104S	3/4	14.57

More options available ... just ask!

FULL PORT

AUTOMATIC DRAIN & LATCH LOCK HANDLE

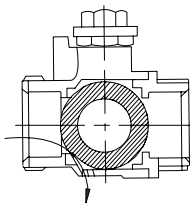


Valve - open position.
Drain vent shut off.

200 PSI



CLOSED



Valve - closed and draining occurs. Upstream seat prevents air flow.
Downstream system is vented to atmosphere.

Part#	Size	Box	Case	List
948-131	1/4"	12	192	34.42
948-132	3/8"	12	192	34.42
948-133	1/2"	10	120	36.83
948-134	3/4"	10	90	50.19
948-135	1"	6	60	71.10

BRASS VALVES

ANGLE SILLCOCKS 3/4" Hose Thread Outlet

- Notched flange for convenient installation
- Heavy brass construction
- Cast Iron handle



FEMALE IPS

Part #	Size	Box	List Price
942-142	1/2	12	8.30

HOSE BIBBS 3/4" Hose Thread Outlet



IPS

Part #	Size	Box	List Price
942-170	1/2 (1/2"C)	12	6.26
942-171	3/4	12	8.05

BALL OPERATED HOSE BIBBS

- Quarter turn operation
- Manual spherical shut-off valve
- 150 PSI water, oil or air
- 20° to 150 °F in continuous usage
- Up to 200°F in discontinuous usage
- Steel handle black epoxy painted
- Available with butterfly handle
- ISO 9002
- Chrome plated brass ball

Made in Italy



IPS

Part #	Size	Box	List Price
942-175	1/2 x 3/4	12	14.87
942-176	3/4 x 3/4	12	17.59

I'm not young enough to know everything.

- Oscar Wilde



BOILER DRAINS

BOILER DRAINS Angle Pattern



MIP

Part #	Size	Box	List Price
942-185	1/2(1/2"C)	12	6.96
942-187	3/4 x 3/4	12	7.65



FIP

Part #	Size	Box	List Price
942-188	1/2	12	7.42
942-189	3/4	12	8.93

BOILER DRAINS



MALE

Part #	Size	Box	List Price
942-162	1/2(1/2"Solder Inside)	12	8.65
942-163	3/4	12	8.93

STOP & WASTE VALVES Compression X Compression

- CPVC transition fitting available upon request



COMPRESSION X COMPRESSION

Part #	Size	Box	Case	List Price
941-210	1/2(5/8"OD)	12	72	9.86
941-211	3/4(7/8"OD)	12	72	16.50

VACUUM BREAKERS

- Male hose and female hose threads can be broken off for permanent attachment
- Set screw
- Vandal proof
- Rough brass construction
- Prevents back-siphonage on hoses to prevent potable water from getting contaminated
- Certified under ASSE Std. 1011
- UPC
- IAMPO



VACUUM BREAKERS

Part #	Size	Box	Case	List Price
947-055	3/4 X 3/4	10	200	8.13

FAUCET VALVES

BRONZE DRUM & BARREL FAUCET VALVE

- Die cast body w/ nylon seat and steel spring
- For use with all petroleum products except trichlorethylene
- Lockable handle

G261N



SELF-CLOSING STEEL DRUM & BARREL FAUCET

Part #	Size	List Price
46-270	3/4	11.95

HEATING AND RADIATOR VALVES

- Float type with single non-adjustable port
- 10 P.S.I.
- For use on one pipe systems not requiring proportional venting



CHROME PLATED RADIATOR-STEAM AIR VALVE

Part #	Size	Box	List Price
947-071	1/8 Angle MIP	12	12.45



943-284



943-287

RADIATOR AIR VALVES

COIN SLOT OR LOOSE KEY

Part #	Size	Box	List Price
943-284	1/8 MIP	100	1.84
943-287	Key Only	100	0.41

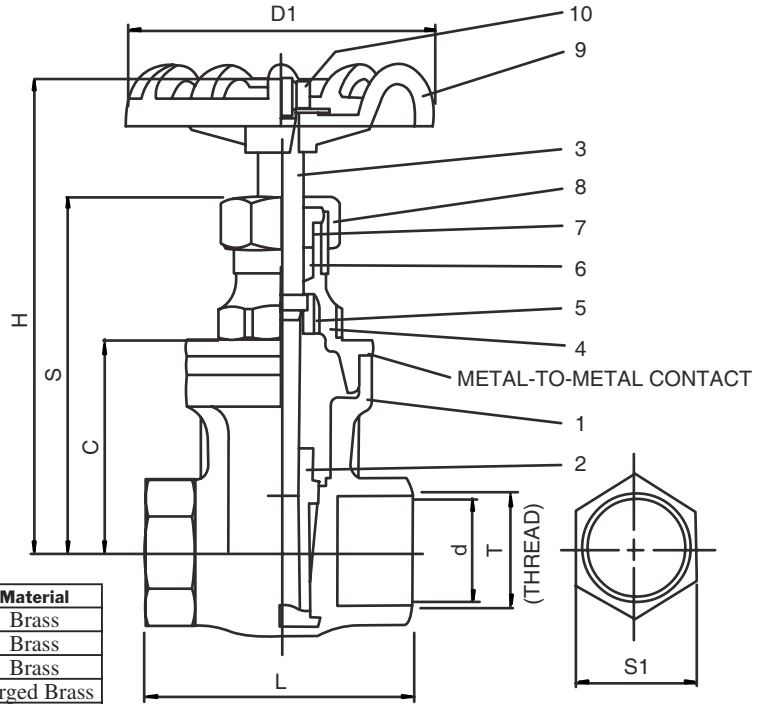
VALVES



FULL PORT BRASS GATE VALVE

VALVES

- **200 WOG (Cold water, oil, gas)**
- **125 WSP (Saturated Steam)**
- Brass Forged body/bonnet- stronger than sand castings.
- Superior quality and finish.
- Each valve individually tested.
- Threaded ends to ANSI B1.20.1, Solder ends to ANSI B16.18
- Non rising stem.
- Cast iron handle.



NO	Description	Material
1	Body	Brass
2	Disc	Brass
3	Stem	Brass
4	Bonnet	Forged Brass
5	Lock Nut	Brass
6	Packing	NBR
7	Gland	Brass
8	Packing Nut	Brass
9	Handwheel	Cast Iron
10	Handwheel Nut	SS41

BRASS GATE VALVES IPS

Part#	Size	L	H	D1	d	C	S	T	S1	Box	Case	List
940-130	1/4	1.57	2.91	2.09	.24	1.22	2.09	1/4-18 NPT	.85	10	120	15.21
940-131	3/8	1.61	2.91	2.09	.39	1.22	2.09	3/8-18 NPT	.85	10	120	13.36
940-132	1/2	1.69	2.99	2.09	.51	1.30	2.17	1/2-14 NPT	1.03	10	120	11.50
940-133	3/4	1.89	3.31	2.09	.75	1.54	2.52	3/4-14 NPT	1.26	10	120	12.28
940-134	1	2.09	3.78	2.28	.98	1.77	2.83	1-11.5 NPT	1.51	5	60	19.03
940-135	1-1/4	2.36	4.33	2.87	1.22	2.17	3.43	1-1/4-11.5 NPT	1.84	4	40	34.67
940-136	1-1/2	2.44	4.88	2.87	1.46	2.52	3.78	1-1/2-11.5 NPT	2.12	2	30	43.93
940-137	2	2.76	1.65	3.31	1.89	2.87	4.57	2-11.5 NPT	2.64	1	20	62.50
940-138	2-1/2	3.43	7.24	3.94	2.44	3.62	5.67	2-1/2-8 NPT	3.23	1	8	69.00
940-139	3	3.78	8.35	4.41	2.95	4.25	6.42	3-6 NPT	3.78	1	8	161.00
940-140	4	4.49	10.08	5.12	3.60	5.39	8.31	4-6 NPT	4.84	1	4	363.54

C X C

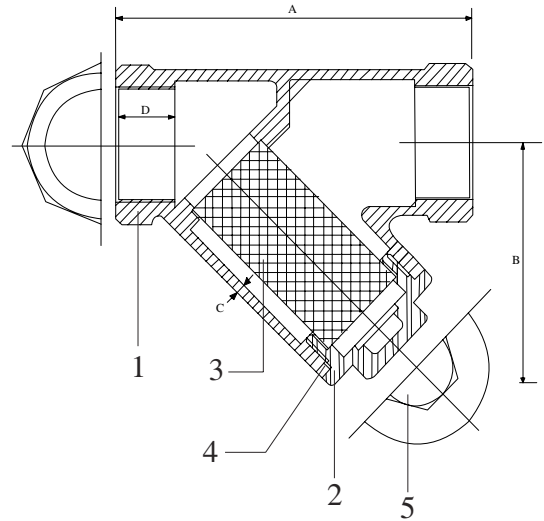
Part#	Size	Box	Case	List
940-142	1/2	10	120	13.36
940-143	3/4	10	90	16.40
940-144	1	5	60	28.43



CLASS 150 BRONZE Y-PATTERN STRAINER

- Protects regulators, pumps, meters and other controls from damage due to sediment scale, metal chips or other foreign materials
- Threaded ends
- 300 psi WOG non-shock
- 150 psi SATURATED STEAM
- Screwed cap is threaded & gasketed

- Tapped drain plug opening in cap
- 304 stainless steel screen #20 mesh
- Self cleaning
- Self cleaning can be accomplished by opening the valve or plug connected to the blow-off outlet
- Hydrostatic test pressures shell 450 P.S.I.



VALVES

Part#	Size	A	B	C	D	Plug Size	Box	Case	List
940-521	1/4"	2.60	1.89	.09	.41	1/4"	10	80	35.65
940-522	3/8"	2.60	1.89	.09	.41	1/4"	10	80	29.69
940-523	1/2"	3.13	2.28	.10	.39	1/4"	10	80	27.34
940-524	3/4"	3.43	2.36	.11	.55	1/4"	8	64	27.78
940-525	1"	4.09	2.83	.12	.63	3/8"	8	48	54.77
940-526	1-1/4"	4.90	3.23	.14	.79	3/8"	1	24	70.81
940-527	1-1/2"	5.59	3.74	.15	.80	1/2"	1	16	104.78
940-528	2"	6.69	4.72	.2	1.10	1/2"	1	12	180.30
940-529	2-1/2"	8.39	5.83	.21	.93	3/4"	1	6	505.24
940-530	3"	9.06	6.69	.22	1.12	3/4"	1	4	273.05

REPLACEMENT SCREENS

304 S.S. #20 Mesh

Part #	Size	List Price
940-521S	1/4	3.68
940-522S	3/8	3.68
940-523S	1/2	3.68
940-524S	3/4	2.79
940-525S	1	5.15
940-526S	1-1/4	5.95
940-527S	1-1/2	7.94
940-528S	2	15.51
940-529S	2-1/2	48.80
940-530S	3	62.18

Nomenclature & Materials

NO	Part Name	Material	Qty
1	Body	Bronze	1
2	Cap	Bronze	1
3	Screen	SS-304	1
4	Gasket	Non-Asbestos	1
5	Plug	Brass	1

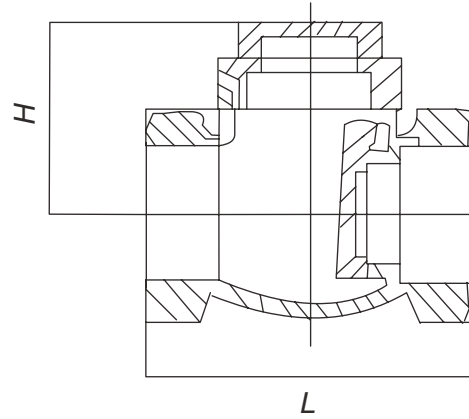


BRASS SWING CHECK VALVES

VALVES

- Working pressure non-shock: 200 psi W.O.G. (cold water, oil, gas) 125 psi WSP (saturated steam)
- Swing type disc.
- Screwed Cap.
- Hard Seat.
- 90° Straight Pattern.

- Used to prevent reverse flow in commercial and industrial applications.
- Threaded ends to ANSI B1.20.1
- Integral seat.



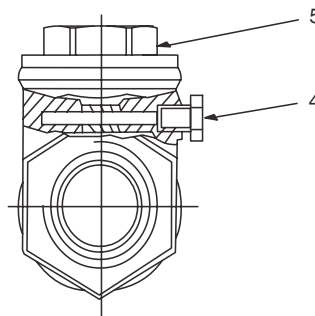
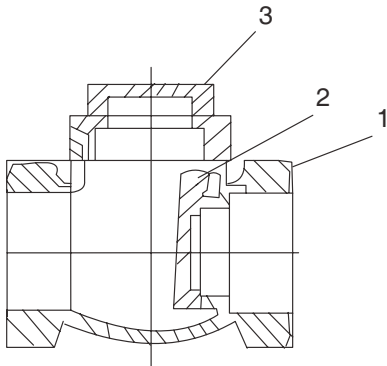
CAST BRASS SWING CHECK VALVES IPS SCREWED ENDS

Part #	Size	H	L	Box	Case	List
940-352	1/2	1.50	2.07	10	120	9.43
940-353	3/4	1.59	2.34	10	120	13.51
940-354	1	1.69	2.58	10	100	19.32
940-355	1-1/4	1.85	3.15	5	50	30.53
940-356	1-1/2	2.17	3.48	5	30	44.16
940-357	2	2.72	4.19	5	25	64.23
940-358	2-1/2	2.95	5.16	2	12	131.38
940-359	3	3.82	5.79	1	8	175.61
940-360	4	3.94	6.85	1	6	320.15

C X C



Part #	Size	Box	Case	List
940-362	1/2	10	100	11.32
940-363	3/4	10	120	13.51
940-364	1	10	100	23.18
940-365	1-1/4	5	50	36.64
940-366	1-1/2	5	30	44.16
940-367	2	5	25	64.23



NO	Description	Material
1	Body	Cast Brass
2	Disc	Forged Brass
3	Pin	Brass
4	Plug Screw	Brass
5	Cap Cover	Cast Brass



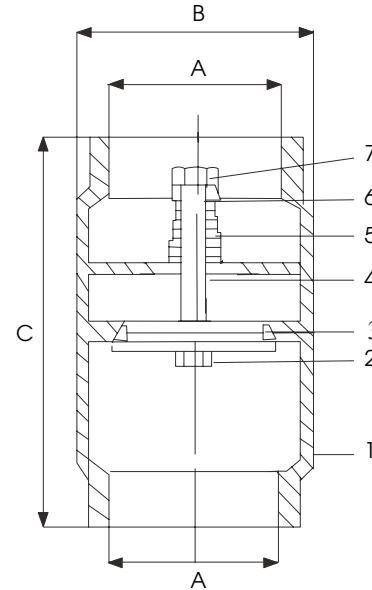
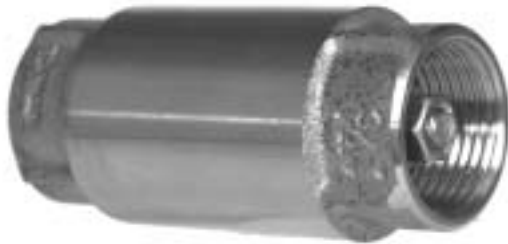
BRASS CHECK VALVES

S.S. SPRING LOADED BRONZE POPPET

For positive sealing & self-cleaning.

Insures against leakage.

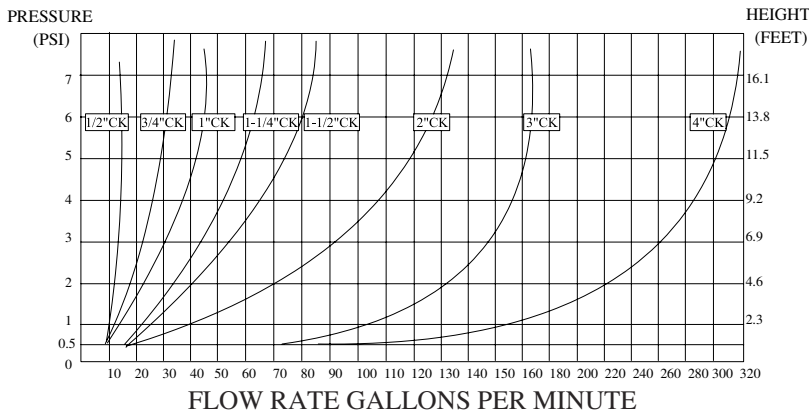
- 200 WOG
- Corrosion resistant material
- Cast Red Brass body
- S.S. Spring
- Neoprene O-Ring Seal
- Can be used vertically or horizontally
- Individually boxed
- Hydraulic Burst test result: 232 Kg/cm²



VALVES

Brass Check Valve (Inches)

Part#	Size	Enters Pipe Size	A NPT	B	C	Box	Case	List
944-428	1/4"	-	1/4"	1.26	2.28	24	192	11.45
944-429	3/8"	-	3/8"	1.50	2.28	21	168	15.53
944-430	1/2"	1-1/4"	1/2"	1.77	2.43	10	100	20.73
944-431	3/4"	1-1/4"	3/4"	2.13	2.72	10	80	25.26
944-432	1"	2"	1"	2.36	3.23	10	60	33.21
944-433	1-1/4"	2-1/2"	1-1/4"	3.03	3.62	5	40	54.82
944-434	1-1/2"	3"	1-1/2"	4.21	4.04	5	30	57.96
944-435	2"	3-1/2"	2"	5.51	5.04	5	20	96.60



NO	Part	Material
1	Body	Brass
2	Stopper	Brass
3	O-Ring	NBR
4	Washer	PE
5	Spring	S.S.
6	Cap	S.S.
7	Nut	S.S.

See more Check Valves on page 194



STANDARD PORT BALL VALVE

CARBON STEEL VALVES

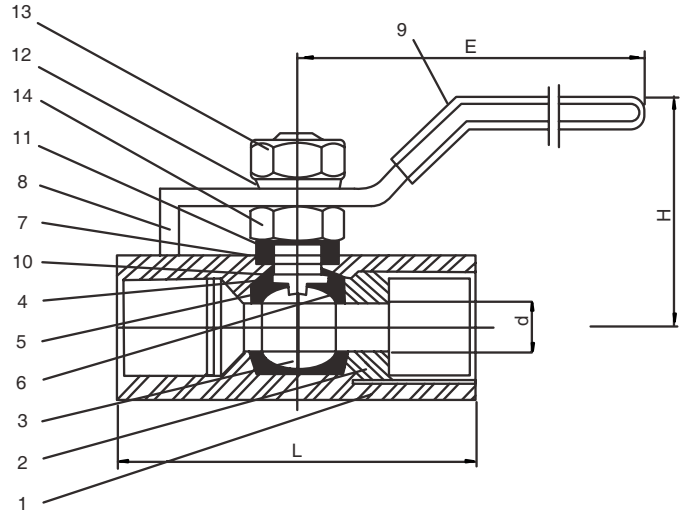
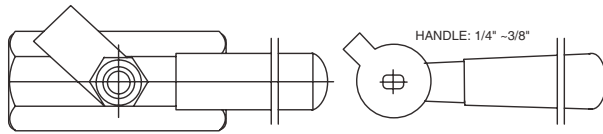
STANDARD PORT CARBON STEEL BALL VALVE

VALVES

- For chemical and industrial applications.
- Blow-out proof stem design.
- 100% air tested under water, at 100 psi, open and closed positions.

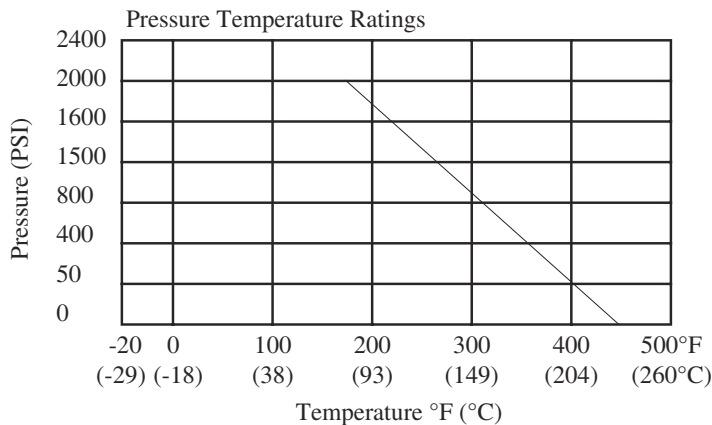
SPECIFICATIONS

- Working Pressure: 1/4" ~ 1" 2000 psi WOG,
1-1/4" ~ 2" 1500 psi WOG,
- Temperature Range: -60° to 450°F
- End types: Threaded
- 1 piece ball valve reducing bore
- Reinforced PTFE seat



2000 PSI STANDARD PORT

Part #	Size	d	H	E	L	Box	Case	List
949-121	1/4	.20	1.14	2.40	1.71	10	100	37.26
949-122	3/8	.28	1.38	3.55	1.87	10	100	37.26
949-123	1/2	.36	2.60	4.08	2.20	5	75	52.55
949-124	3/4	.49	2.72	4.21	2.58	5	60	53.66
949-125	1	.59	2.95	4.65	3.19	6	36	66.00
949-126	1-1/4	.78	3.07	5.83	3.62	4	20	100.70
949-127	1-1/2	1.02	3.39	5.83	3.78	3	15	106.58
949-128	2	1.26	3.86	5.90	4.49	3	12	186.76



Item	Parts	Material
1	Body	ASTM A108 CL. 1018 or AISI 1021 C.S.
2	Unscrewed Seat Retainer	
3	Ball	SS304
4	Stem	SS316
5	Ball Seat	RPTFE
6	Cap Seal	PTFE
7	Packing	PTFE
8	Handle	SS304
9	Handle Sleeve	Vinyl Grip
10	Thrust Washer	PTFE
11	Gland	SS304
12	Washer	SS304
13	Handle Nut	SS304
14	Stem Nut	SS304



Call Toll Free: 1-866-711-4673

WebSales@GoodyearRubberProducts.com

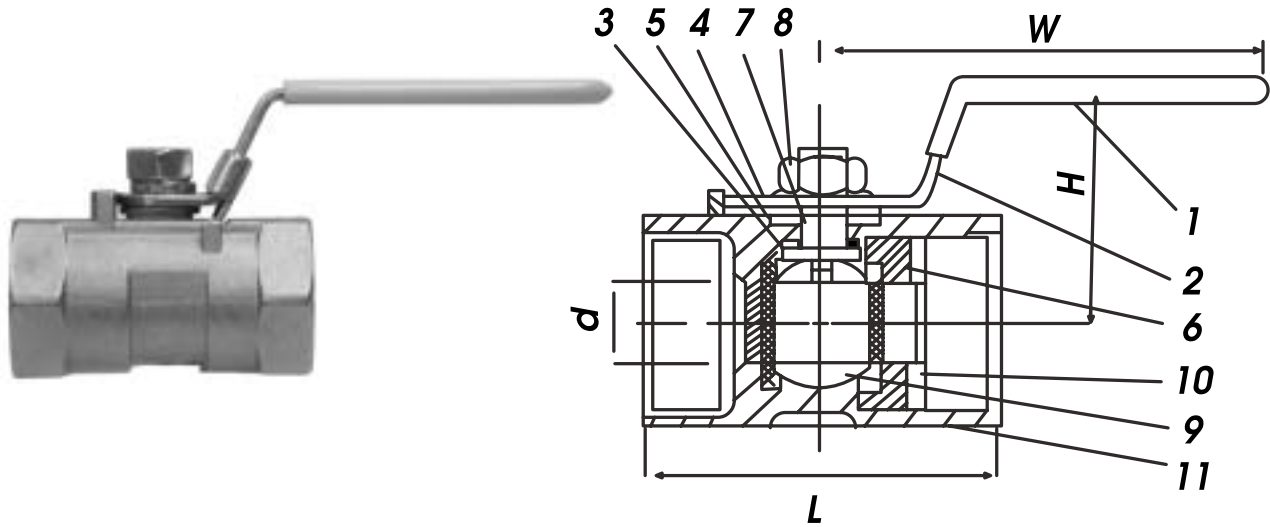
We Ship
World Wide

ONE PIECE STANDARD PORT BALL VALVE

316 Stainless Steel

1000 PSI

Yellow locking handle now standard



VALVES

dimensions (inches)

Part#	Size	D	L	H	W	List
949-101	1/4"	.18	2.24	1.54	3.15	17.98
949-102	3/8"	.27	2.24	1.73	3.15	25.17
949-103	1/2"	.36	2.48	2.20	3.62	26.72
949-104	3/4"	.49	2.95	2.32	3.62	33.09
949-105	1"	.59	3.50	2.80	4.13	42.91
949-106	1-1/4"	.79	4.13	3.07	4.13	64.05
949-107	1-1/2"	.98	4.65	3.27	5.08	81.04
949-108	2"	1.26	5.35	3.94	5.08	102.44

Larger sizes available on special order basis

*Private Label handles available.
See Page 173 for details*

Item	Parts	Material
1	Plastic Cover	Plastic
2	Handle	AISI 304 SS
3	Thrust Washer	PTFE
4	Packing Ring	AISI 304 SS
5	Stem Packing	PTFE
6	Seat	PTFE
7	Seat	AISI 316 SS
8	Stem Nut	AISI 304 SS
9	Ball	316SS ASTM-A351 CF8M
10	Cap	316SS ASTM-A351 CF8M
11	Body	316SS ASTM-A351 CF8M

SS = Stainless Steel



STAINLESS STEEL BALL VALVES

STAINLESS STEEL VALVES

1000 PSI 2 PC FULL PORT STAINLESS STEEL VALVE

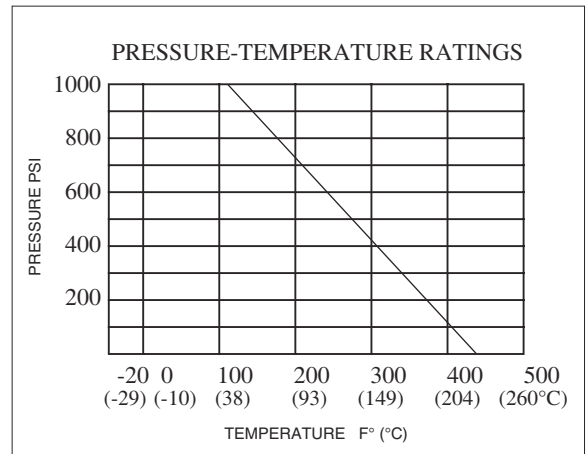
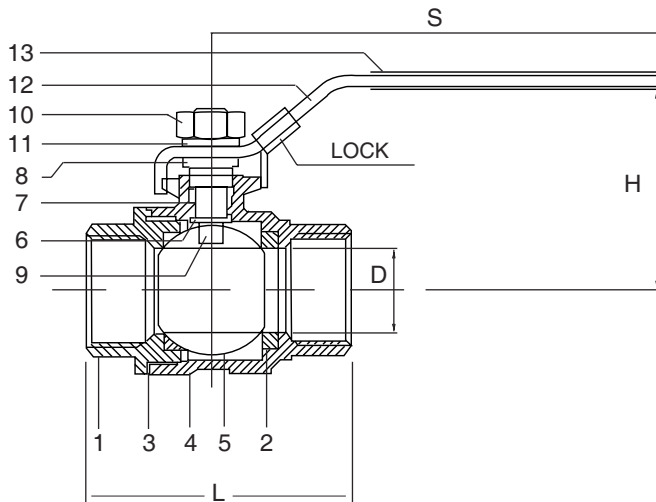
Materials: CFM8M (SS316), DIN 1.4408

Features:

- Investment Casting body
- Working pressure 1000 psi for W.O.G.
- Adjustable stem packing
- Pure teflon seals and seats
- Temperature range: -60 to 450°F
- Blow-out proof stem and safe pressure-reducing hole
- 100% leakage tested at 100 psi air under water
- Hydrostatic test pressure: 1500 psi
- Locking handle w/ yellow generic sleeve



VALVES



NO.	NAME	MATERIAL	QTY
1	CAP	316 SS	1
2	BALL SEAT	PTFE	2
3	JOINT GASKET	PTFE	1
4	BODY	316 SS	1
5	BALL	316 SS	1
6	THRUST WASHER	PTFE	1
7	STEM PACKING	PTFE	1
8	GLAND NUT	304 SS	1
9	STEM	316 SS	1
10	STEM NUT	304 SS	1
11	SPRING WASHER	304 SS	1
12	HANDLE	304	1
13	PLASTIC SLEEVE	PVC	1

Part #	Size	D	L	H	S	Approx. Wt. Lbs.	List Price
949-181	1/4"	0.46	1.84	1.89	4.06	0.44	28.37
949-182	3/8"	0.46	1.91	1.89	4.06	0.55	29.91
949-183	1/2"	0.59	2.28	1.89	4.06	0.66	31.24
949-184	3/4"	0.79	2.56	2.05	4.84	0.77	34.97
949-185	1"	0.98	3.03	2.45	4.84	1.43	54.39

Gigi's Axiom

If you can keep your head when all about you are losing theirs, maybe you just don't understand the situation.



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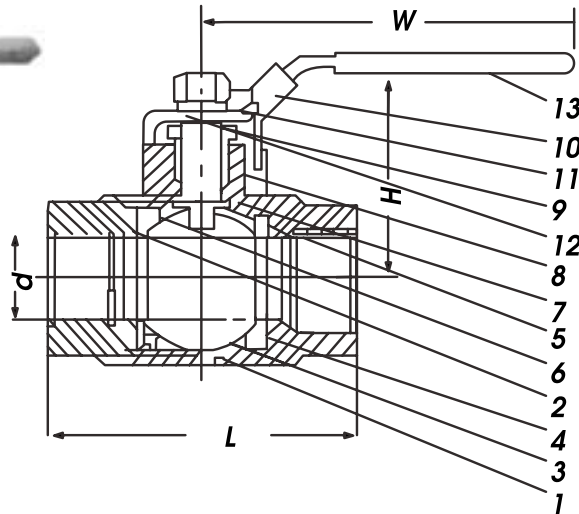
We Ship World Wide

TWO PIECE FULL PORT BALL VALVE

316 Stainless Steel

1000 PSI

Yellow locking handle now standard



dimensions (inches)

Part#	Size	D	L	H	W	List
949-161	1/4"	.46	2.24	1.93	4.13	32.31
949-162	3/8"	.50	2.24	1.93	4.13	33.59
949-163	1/2"	.59	2.48	2.01	4.13	35.92
949-164	3/4"	.78	2.95	2.28	5.12	51.23
949-165	1"	.98	3.50	2.76	5.71	67.80
949-166	1-1/4"	1.26	4.13	2.87	5.71	99.69
949-167	1-1/2"	1.50	4.65	3.29	7.48	132.56
949-168	2"	2	5.35	3.62	7.48	242.92

Larger sizes available on special order basis

*Private Label handles available.
See Page 173 for details*

Item	Parts	Material
1	Body	316SS ASTM-A351 CF8M
2	Body Cap	316SS ASTM-A351 CF8M
3	Ball	316SS ASTM-A351 CF8M
4	Seat	Reinforced PTFE
5	Stem	AISI 316 SS
6	Seal	Reinforced PTFE
7	Thrust Washer	Reinforced PTFE
8	Packing	Reinforced PTFE
9	Gland Nut	AISI 304SS
10/11	Nut & Washer	AISI 304SS
12	Handle	AISI 304SS
13	Plastic Cover	Plastic

SS = Stainless Steel

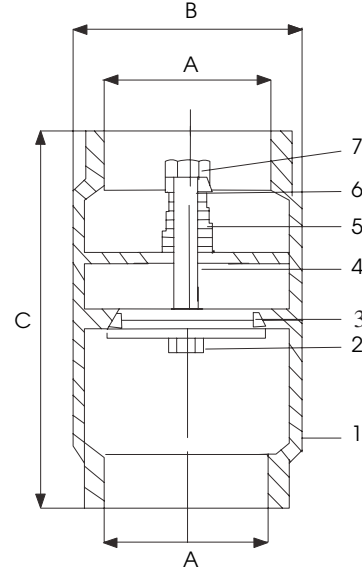
VALVES



**STAINLESS STEEL
Check Valve**

- No Lead
- Water wells need a check valve installed above the pumps between lengths of drop pipes

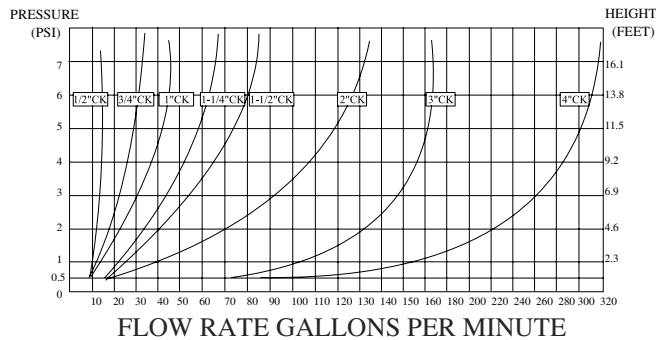
VALVES



Dimensions (Inches)

Part#	Size	A NPT	B	C	Box	Case	List
949-430	1/2"	1/2"	1.26	2.43	10	100	32.49
949-431	3/4"	3/4"	1.50	2.72	10	80	40.13
949-432	1"	1"	1.77	3.23	10	60	43.91

More sizes available on a special order basis.



NO	Part	Material
1	Body	S.S 304
2	Stopper	S.S 304
3	O-Ring	Viton
4	Washer	PE
5	Spring	S.S 304
6	Cap	S.S 304
7	Nut	S.S 304

See more Check Valves on page 189



STAINLESS STEEL VALVES

WHITE PVC BALL VALVES

- Quarter turn
- Solvent ends comply with ASTM D2466
- Designed for use in residential, commercial & industrial system as well as waste water, chemical, agricultural applications, marine, food processing, swimming pools
- Corrosion resistant
- EPDM seal
- EPDM O-ring
- Fits both Sch. 40 & 80 pipe
- NSF approved
- Rated for 150 PSI at 730
- Threaded ends comply with ANSI B1.20.1

CPVC Ball Valves White



Part#	Size	Min Pkg. Qty	List
940-281	1/2	1	7.32
940-282	3/4	1	12.56

MOLDED IN PLACE WHITE PIPE THREADS



Part#	Size	Box	Case	List
940-284	1/2	10	100	3.57
940-285	3/4	5	60	4.37
940-286	1	5	40	7.33
940-287	1-1/4	5	30	12.36
940-288	1-1/2	4	24	13.93
940-289	2	4	16	18.94
940-290	2-1/2	3	12	76.00
940-291	3	3	12	98.06
940-292	4	2	8	157.80

WHITE SOCKET SLIP X SLIP



Part #	Size	Box	Case	List
940-294	1/2	10	100	3.28
940-295	3/4	5	60	4.37
940-296	1	5	40	7.33
940-297	1 1/4	5	30	10.30
940-298	1 1/2	4	24	13.93
940-299	2	4	16	18.94

Grey also available in some sizes. Just change prefix to 941 instead of 940. Same Price.

PVC VALVES

PLASTIC DRUM FAUCETS

- Pipe threads to ANSI B1.20.1
- Hose threads to ANSI B 1.20.7



The FLO-RITE faucet has been engineered to meet the demand for greater chemical resistance, using linear polyethylene for the stem.

SPECIFICATION DATA

- Body made of high-density polyethylene for greater strength and more positive thread engagement. Stem made of low density for more positive seal
- Not affected by most acids, caustics or oils. Will eliminate chemical reaction and contamination of products in drums.
- Lightweight yet strong and rugged two-piece construction. Eliminates mechanical difficulty.

"FLO-RITE" DRUM FAUCET

Part #	Size	List Price
46-277	3/4	6.99



The FLO-KING faucet made of virgin polyethylene easily handles viscous materials. The faucet shoulder and gasket - made of EPDM material - provide a leakproof seal.

SPECIFICATION DATA

- Constructed of highest quality virgin polyethylene.
- Molded of attractive metallic gold plastic.
- Not affected by most acids, caustics or petroleum products.

"FLO-KING" DRUM FAUCET

Part #	Size	List Price
46-278	2	76.81

CAUTION: Never use this product in temperatures exceeding 125° F or with a heated container. Failure to follow these instructions can lead to a hazardous condition



BRASS NIPPLES

BRASS NIPPLES

We hereby certify that to the best of our knowledge and belief the CDA 230 alloy Red Brass Pipe from which our nipples are produced meet the requirements of ASTM Specifications B43-91 and is free of mercury contamination. The chemical analysis is 85% copper, 15% Zinc and conforms to federal Specifications WVN-35LA.

Our brass nipples meet ASTM B687-88 and MS51846 for standard brass and copper nipples, and MS51872 for extra heavy brass nipples and extra heavy copper nipples.

Threads: Nipples are threaded with American Standard taper pipe threads (NPT) in accordance with screw-thread standard for Federal Services Handbook H-28.

RED BRASS 85%

Pipe With Threaded Ends Specifications:

Pipe Size in Inches	Dimension in Inches		
	O.D.	I.D.	Wall Thickness
1/8"	.405	.281	.062
1/4"	.540	.376	.082
3/8"	.675	.495	.090
1/2"	.840	.626	.107
3/4"	1.050	.822	.114
1"	1.315	1.063	.126
1-1/4"	1.660	1.368	.146
1-1/2"	1.900	1.600	.150
2"	2.375	2.063	.156
2-1/2"	2.875	2.501	.187
3"	3.500	3.062	.219
3-1/2"	4.000	3.500	.250
4"	4.500	4.000	.250
4-1/2"	5.000	4.500	.250
5"	5.563	5.063	.250
6"	6.625	6.125	.250

Standard Size (Inches)	Allowable Pressure POUNDS PER SQUARE INCH			
	@ 100° F	@ 200° F	@ 300° F	@ 400° F
1/8"	370	370	320	140
1/4"	870	870	760	330
3/8"	890	890	780	340
1/2"	900	900	790	340
3/4"	810	810	710	310
1"	630	630	560	240
1-1/4"	690	690	610	260
1-1/2"	630	630	560	240
2"	540	540	480	210
2-1/2"	450	450	390	170
3"	510	510	450	190
3-1/2"	570	570	500	220
4"	510	510	440	190
5"	410	410	360	160
6"	340	340	300	130

NIPPLES & FITTINGS

Nipple Weight Chart

Diameter	Length of Close	Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"
1/8"	3/4"	1.4	3.0	3.8	5.2	6.2	7.2	8.4	9.2	11.0	12.2	13.2
1/4"	7/8"	2.4	4.8	6.4	8.2	10.4	12.2	14.0	16.0	18.0	20.2	22.0
3/8"	1"	3.8	6.2	8.6	11.0	13.4	16.2	18.4	20.4	23.4	25.6	28.0
1/2"	1-1/8"	5.6	8.6	11.6	16.2	19.4	22.4	27.4	29.6	33.0	37.4	40.4
3/4"	1-3/8"	10.2	11.8	16.2	21.4	22.6	31.0	35.6	40.2	45.6	50.0	55.0
1"	1-1/2"	15.6		23.4	29.6	37.0	44.2	52.6	59.2	68.4	74.8	76.8
1-1/4"	1-5/8"	26.5		36.0	45.0	56.5	68.0	81.0	92.0	98.5	110.5	125.0
1-1/2"	1-3/4"	35.0		42.0	55.5	67.0	81.0	95.5	108.0	121.5	131.0	144.0
2"	2"	54.5			72.0	88.5	107.0	125.0	143.5	155.0	179.0	190.0
2-1/2"	2-1/2"	90.0				116.5	148.5	168.5	180.0	218.5	239.5	262.0
3"	2-5/8"	134.5				170.0	210.0	239.0	268.5	314.0	349.0	390.0
4"	2-7/8"	226.3				253.1	307.0	357.5	422.5	450.0	516.3	563.8

Approximate weight per 100 pieces. Standard Brass Nipples.

For Extra Heavy Brass multiply above weight by 1.37

Pipe Threads

1/8"-27

1/4"-18

3/8"-18

1/2"-14

3/4"-14

1"-11 1/2

1-1/4"-11 1/2

1 1/2"- 11 1/2

2"-11 1/2

2 1/2"-8

3"-8

4"-8



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We Ship World Wide

BRASS NIPPLES

BRASS NIPPLES

1/8" Diameter



Part #	Size	List Price
40-001	Close (3/4)	2.00
40-002	x 1-1/2"	2.15
40-003	x 2"	2.20
40-004	x 2-1/2"	2.45
40-005	x 3"	2.68
40-006	x 3-1/2"	2.90
40-007	x 4"	3.91
40-008	x 4-1/2"	4.42
40-009	x 5"	5.58
40-010	x 5-1/2"	5.16
40-011	x 6"	6.65
40-012	x 7"	6.58
40-013	x 8"	8.45
40-014	x 9"	10.40
40-015	x 10"	11.38
40-016	x 11"	12.34
40-017	x 12"	13.13
40-018	x 14"	15.73
40-019	x 16"	18.80
40-218	x 12ft.	129.15

3/8" Diameter



Part #	Size	List Price
40-040	Close (1)	2.19
40-041	x 1-1/2"	2.60
40-042	x 2"	3.15
40-043	x 2-1/2"	3.42
40-044	x 3"	4.18
40-045	x 3-1/2"	4.89
40-046	x 4"	5.36
40-047	x 4-1/2"	6.65
40-048	x 5"	7.51
40-049	x 5-1/2"	8.16
40-050	x 6"	7.36
40-051	x 7"	10.72
40-052	x 8"	12.01
40-053	x 9"	14.21
40-054	x 10"	14.32
40-055	x 11"	15.63
40-056	x 12"	16.95
40-237	x 6ft.	216.00
40-238	x 12ft.	360.00

1/4" Diameter



Part #	Size	List Price
40-020	Close (7/8)	2.12
40-021	x 1-1/2"	2.75
40-022	x 2"	3.00
40-023	x 2-1/2"	3.25
40-024	x 3"	3.52
40-025	x 3-1/2"	3.83
40-026	x 4"	4.50
40-027	x 4-1/2"	4.89
40-028	x 5"	5.33
40-029	x 5-1/2"	5.78
40-030	x 6"	6.50
40-031	x 7"	8.89
40-032	x 8"	9.73
40-033	x 9"	10.82
40-034	x 10"	11.88
40-035	x 11"	12.97
40-036	x 12"	14.03
40-227	x 6ft.	180.00
40-228	x 12ft.	228.00

1/2" Diameter



Part #	Size	List Price
40-060	Close (1-1/8)	2.92
40-061	x 1-1/2"	3.39
40-062	x 2"	3.97
40-063	x 2-1/2"	4.73
40-064	x 3"	5.55
40-065	x 3-1/2"	6.33
40-066	x 4"	7.25
40-067	x 4-1/2"	7.87
40-068	x 5"	8.67
40-069	x 5-1/2"	9.52
40-070	x 6"	10.56
40-071	x 7"	14.68
40-072	x 8"	17.10
40-073	x 9"	18.25
40-074	x 10"	20.18
40-075	x 11"	22.08
40-076	x 12"	24.01
40-247	x 6ft.	252.00
40-248	x 12ft.	396.00

NIPPLES & FITTINGS



BRASS NIPPLES

3/4" Diameter



Part #	Size	List Price
40-080	Close (3/4)	4.21
40-081	x 1-1/2"	4.49
40-082	x 2"	5.30
40-083	x 2-1/2"	6.15
40-084	x 3"	7.09
40-085	x 3-1/2"	7.96
40-086	x 4"	9.25
40-087	x 4-1/2"	10.06
40-088	x 5"	11.10
40-089	x 5-1/2"	12.14
40-090	x 6"	13.51
40-091	x 7"	19.00
40-092	x 8"	17.83
40-093	x 9"	23.69
40-094	x 10"	21.76
40-095	x 11"	28.49
40-096	x 12"	25.89
40-257	x 6ft.	294.00
40-258	x 12ft.	420.00

BRASS NIPPLES

1-1/4" Diameter



Part #	Size	List Price
40-120	Close (1)	9.37
40-121	x 2"	10.70
40-122	x 2-1/2"	14.51
40-123	x 3"	14.31
40-124	x 3-1/2"	20.09
40-125	x 4"	18.85
40-126	x 4-1/2"	25.05
40-127	x 5"	23.02
40-128	x 5-1/2"	30.22
40-129	x 6"	27.50
40-130	x 7"	38.93
40-131	x 8"	44.10
40-132	x 9"	52.30
40-133	x 10"	54.54
40-134	x 11"	62.43
40-135	x 12"	65.23
40-277	x 6ft.	531.94
40-278	x 12ft.	840.00

1" Diameter



Part #	Size	List Price
40-100	Close (1-1/2)	6.21
40-101	x 2"	7.66
40-102	x 2-1/2"	8.93
40-103	x 3"	10.29
40-104	x 3-1/2"	11.91
40-105	x 4"	13.40
40-106	x 4-1/2"	17.93
40-107	x 5"	16.52
40-108	x 5-1/2"	18.10
40-109	x 6"	19.73
40-110	x 7"	27.65
40-111	x 8"	26.31
40-112	x 9"	35.22
40-113	x 10"	34.00
40-114	x 11"	42.15
40-115	x 12"	40.00
40-267	x 6ft.	420.00
40-268	x 12ft.	720.00

1-1/2" Diameter



Part #	Size	List Price
40-140	Close (1-3/4)	12.18
40-141	x 2"	13.10
40-142	x 2-1/2"	18.83
40-143	x 3"	18.04
40-144	x 3-1/2"	24.86
40-145	x 4"	23.50
40-146	x 4-1/2"	31.68
40-147	x 5"	29.21
40-148	x 5-1/2"	38.35
40-149	x 6"	34.71
40-150	x 7"	48.68
40-151	x 8"	55.30
40-152	x 9"	61.91
40-153	x 10"	68.51
40-154	x 11"	75.14
40-155	x 12"	81.73
40-287	x 6ft.	570.00

NIPPLES & FITTINGS



BRASS NIPPLES

BRASS NIPPLES

2" Diameter



Part #	Size	List Price
40-160	Close (2)	18.54
40-161	x 2-1/2"	20.02
40-162	x 3"	23.11
40-163	x 3-1/2"	31.91
40-164	x 4"	30.23
40-165	x 4-1/2"	40.44
40-166	x 5"	37.37
40-167	x 5-1/2"	49.19
40-168	x 6"	44.63
40-169	x 7"	62.63
40-170	x 8"	59.53
40-171	x 9"	79.65
40-172	x 10"	73.73
40-173	x 11"	95.59
40-174	x 12"	87.94
40-175	x 18"	135.97
40-176	x 24"	198.97
40-177	x 30"	229.95
40-178	x 36"	326.30
40-298	x 12ft.	1290.00

2-1/2" Diameter



Part #	Size	List Price
40-180	Close (2-1/2)	58.73
40-181	x 3"	61.39
40-182	x 3-1/2"	69.56
40-183	x 4"	77.33
40-184	x 4-1/2"	82.96
40-185	x 5"	91.26
40-186	x 5-1/2"	98.29
40-187	x 6"	107.62
40-188	x 7"	122.60
40-189	x 8"	140.80
40-190	x 9"	156.29
40-191	x 10"	172.69
40-192	x 11"	186.07
40-193	x 12"	204.14

3" Diameter



Part #	Size	List Price
40-200	Close (2-5/8)	66.55
40-201	x 3"	82.99
40-202	x 3-1/2"	93.88
40-203	x 4"	88.12
40-204	x 4-1/2"	116.24
40-205	x 5"	127.89
40-206	x 5-1/2"	138.97
40-207	x 6"	125.88
40-208	x 7"	176.26
40-209	x 8"	167.34
40-210	x 9"	219.89
40-211	x 10"	243.94
40-212	x 11"	265.27
40-213	x 12"	292.18

4" Diameter



Part #	Size	List Price
40-220	Close (2-7/8)	120.16
40-221	x 3"	122.03
40-222	x 3-1/2"	137.02
40-223	x 4"	130.23
40-224	x 4-1/2"	168.80
40-225	x 5"	186.43
40-226	x 5-1/2"	198.80
40-234	x 6"	182.93
40-229	x 8"	285.86
40-233	x 12"	417.13

Extra Heavy Schedule 80 Red Brass Nipples and Chrome Plated Brass Available upon request

Weiler's Law

Nothing is impossible for the man who does not have to do it himself.

NIPPLES & FITTINGS



BRONZE FITTINGS

BRONZE FITTINGS

Class 125 (150) For steam, water, gas, oil and air service

Standard specifications

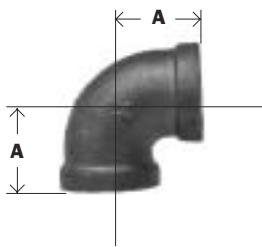
Materials - ASTM B62-82 (85,5,5,5)

Dimensions - ANSI B 16.15

Threads - ANSI B2.1 or BA 21 and Fed. WW-P-460

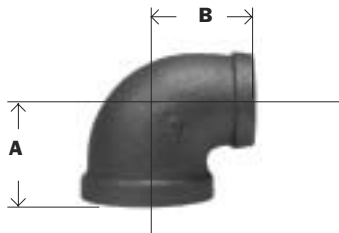
Bronze threaded fittings are manufactured from smooth-cored castings, designed to provide full flow with minimum restriction. All threads are accurately machined and gauged to ensure a perfect fit with the pipe. All fittings are individually tested under water to ensure quality.

90° ELBOWS



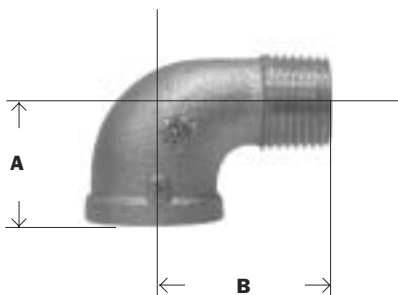
Part #	Size	A	Approx. Wt. Lbs.	List Price
44-100	1/8"	0.55	0.08	3.46
44-101	1/4"	0.72	0.10	2.89
44-102	3/8"	0.83	0.17	3.46
44-103	1/2"	1.03	0.24	4.32
44-104	3/4"	1.19	0.35	5.88
44-105	1"	1.43	0.59	9.03
44-106	1-1/4"	1.71	0.96	14.41
44-107	1-1/2"	1.87	1.33	18.01
44-108	2"	2.14	2.34	29.27
44-109	2-1/2"	2.74	3.79	78.14
44-110	3"	3.10	5.21	85.54
44-112	4"	3.80	8.59	198.03

90° REDUCING ELBOWS



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
44-120	1/4" x 1/8"	0.67	0.81	0.10	6.05
44-123	1/2" x 1/4"	0.67	1.17	0.19	6.58
44-124	1/2" x 3/8"	0.81	1.17	0.22	5.64
44-127	3/4" x 1/2"	1.17	1.42	0.31	7.69
44-131	1" x 3/4"	1.42	1.72	0.56	11.26
44-134	1-1/4" x 1"	1.72	2.10	0.81	23.93
44-137	1-1/2" x 1"	1.72	2.38	1.02	30.26
44-140	2" x 1"	1.72	2.92	1.30	47.36

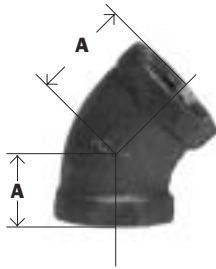
90° STREET ELLS



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
44-160	1/8"	0.55	0.92	0.07	4.32
44-161	1/4"	0.72	1.11	0.11	4.32
44-162	3/8"	0.83	1.24	0.16	4.32
44-163	1/2"	1.03	1.51	0.21	5.42
44-164	3/4"	1.19	1.66	0.34	7.66
44-165	1"	1.43	1.98	0.65	12.62
44-166	1-1/4"	1.71	2.26	1.11	19.38
44-167	1-1/2"	1.87	2.46	1.16	25.22
44-168	2"	2.14	2.98	2.09	42.77
44-169	2-1/2"	2.74	3.92	3.79	75.62
44-170	3"	3.10	4.45	6.38	132.33

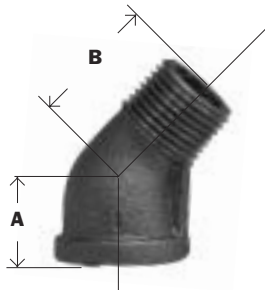


45° ELBOWS



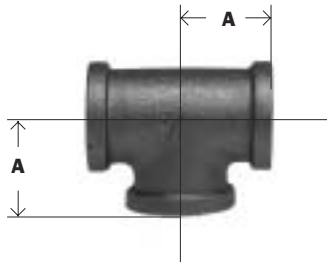
Part #	Size	A	Approx. Wt. Lbs.	List Price
44-180	1/8"	0.43	0.05	3.77
44-181	1/4"	0.55	0.08	3.77
44-182	3/8"	0.63	0.12	3.77
44-183	1/2"	0.79	0.22	3.98
44-184	3/4"	0.91	0.34	5.88
44-185	1"	1.07	0.57	9.93
44-186	1-1/4"	1.23	0.90	19.02
44-187	1-1/2"	1.31	1.08	23.79
44-188	2"	1.47	1.54	32.22

45° STREET ELBOWS



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
44-200	1/8"	0.26	0.43	0.06	6.05
44-201	1/4"	0.35	0.56	0.11	5.18
44-202	3/8"	0.37	0.63	0.13	5.18
44-203	1/2"	0.45	0.79	0.18	6.51
44-204	3/4"	0.52	0.91	0.28	9.19
44-205	1"	0.60	1.07	0.52	15.14
44-206	1-1/4"	0.67	1.23	0.77	27.13
44-207	1-1/2"	0.70	1.31	0.97	30.26
44-208	2"	0.76	1.47	2.04	51.32

TEES



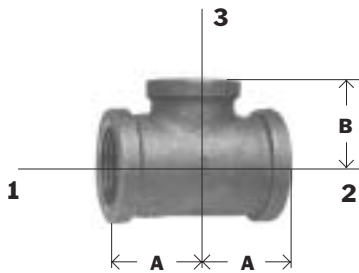
Part #	Size	A	Approx. Wt. Lbs.	List Price
44-250	1/8"	0.55	0.09	4.78
44-251	1/4"	0.72	0.16	3.98
44-252	3/8"	0.83	0.25	4.78
44-253	1/2"	1.03	0.31	5.04
44-254	3/4"	1.19	0.48	7.20
44-255	1"	1.43	0.84	12.82
44-256	1-1/4"	1.71	1.18	18.01
44-257	1-1/2"	1.87	1.69	24.76
44-258	2"	2.14	2.69	40.53
44-259	2-1/2"	2.74	4.70	107.12
44-260	3"	3.10	6.69	117.05

REASON FIVE NOT TO MESS WITH A CHILD.

A Kindergarten teacher: was observing her classroom of children while they were drawing. She would occasionally walk around to see each child's work. As she got to one little girl who was working diligently, she asked what the drawing was. The girl: replied, "I'm drawing God." The teacher: paused and said, "But no one knows what God looks like." Without missing a beat, or looking up from her drawing, the girl: replied, "They will in a minute."



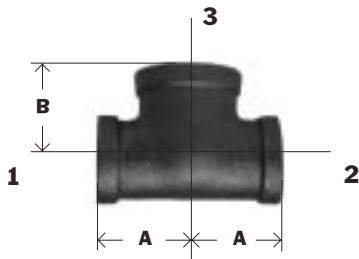
REDUCING TEES



REDUCING ON THE BRANCH

Part #	Size (1 & 2) x 3	A	B	Approx. Wt. Lbs.	List Price
44-276	1/2" x 1/4"	0.87	0.87	0.28	7.24
44-282	3/4" x 1/4"	1.05	1.08	0.38	10.37
44-283	3/4" x 3/8"	1.00	1.00	0.46	12.10
44-286	3/4" x 1/2"	1.08	1.11	0.40	8.64
44-291	1" x 1/2"	1.20	1.24	0.73	18.37
44-298	1" x 3/4"	1.30	1.31	0.71	15.31
44-301	1-1/4" x 1/2"	1.34	1.53	1.18	30.26
44-303	1-1/4" x 3/4"	1.30	1.31	1.08	30.26
44-306	1-1/4" x 1"	1.58	1.67	1.23	30.26

BULLHEAD TEES

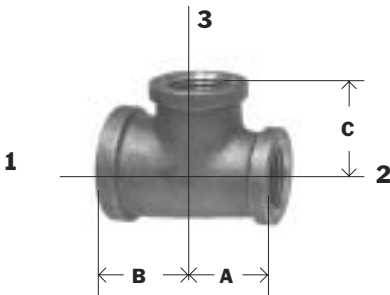


LARGER BRANCH

Part #	Size 1x2x3	A	B	Approx. Wt. Lbs.	List Price
44-280	1/2" x 1/2" x 3/4"	1.22	1.20	0.48	6.83

* Many sizes available...just ask!

REDUCING TEES

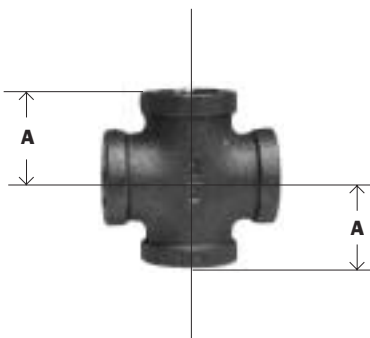


REDUCING ON THE RUN

Part #	Size 1x2x3	A	B	C	Approx. Wt. Lbs.	List Price
44-287	3/4" x 1/2" x 1/2"	1.12	1.20	1.22	0.37	10.70
44-296	1" x 3/4" x 3/4"	1.31	1.37	1.45	0.71	20.28

* Many sizes available...just ask!

CROSSES



Part #	Size	A	Approx. Wt. Lbs.	List Price
44-391	1/4"	0.72	0.20	7.78
44-392	3/8"	0.83	0.29	7.78
44-393	1/2"	1.03	0.43	9.74
44-394	3/4"	1.19	0.59	14.05
44-395	1"	1.19	1.15	21.61
44-396	1-1/4"	1.71	1.70	37.84
44-397	1-1/2"	1.87	1.97	50.44
44-398	2"	2.14	2.52	86.45

NIPPLES & FITTINGS



COUPLINGS



Part #	Size	A	Approx. Wt. Lbs.	List Price
44-410	1/8"	0.80	0.06	3.46
44-411	1/4"	0.80	0.08	2.89
44-412	3/8"	1.05	0.14	3.46
44-413	1/2"	1.29	0.21	3.61
44-414	3/4"	1.43	0.29	4.78
44-415	1"	1.68	0.45	7.20
44-416	1-1/4"	1.86	0.80	11.26
44-417	1-1/2"	1.92	0.98	15.31
44-418	2"	2.20	1.56	25.22
44-420	3"	3.18	3.63	78.76

REDUCING COUPLINGS



Part #	Size	A	Approx. Wt. Lbs.	List Price
44-430	1/4" x 1/8"	0.88	0.08	3.68
44-431	3/8" x 1/8"	0.92	0.10	3.68
44-432	3/8" x 1/4"	0.92	0.12	3.68
44-433	1/2" x 1/8"	1.17	0.14	5.04
44-434	1/2" x 1/4"	1.17	0.17	4.64
44-435	1/2" x 3/8"	1.17	0.17	3.87
44-436	3/4" x 1/4"	1.35	0.24	6.83
44-437	3/4" x 3/8"	1.35	0.24	6.83
44-438	3/4" x 1/2"	1.35	0.27	5.69
44-440	1" x 3/8"	1.56	0.40	14.49
44-441	1" x 1/2"	1.56	0.36	9.48
44-442	1" x 3/4"	1.56	0.45	9.48
44-444	1-1/4" x 1/2"	1.77	0.60	20.34
44-445	1-1/4" x 3/4"	1.77	0.67	15.31
44-446	1-1/4" x 1"	1.77	0.65	15.31
44-447	1-1/2" x 1/2"	1.80	0.77	25.39
44-448	1-1/2" x 3/4"	1.80	0.70	21.16
44-449	1-1/2" x 1"	1.80	0.74	19.38
44-450	1-1/2" x 1-1/4"	1.80	0.83	19.38
44-458	2" x 1/2"	2.03	1.07	44.11
44-451	2" x 3/4"	2.03	1.25	31.52
44-452	2" x 1"	2.03	1.32	31.52
44-453	2" x 1-1/4"	2.03	1.37	34.58
44-454	2" x 1-1/2"	2.03	1.74	28.82
44-461	2-1/2" x 1-1/2"	3.15	1.94	69.32
44-462	2-1/2" x 2"	3.15	2.37	69.32
44-456	3" x 2"	3.69	2.40	88.22
44-463	3" x 2-1/2"	3.69	3.82	88.22

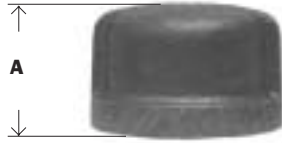
Korman's conclusion

The trouble with resisting temptation is it may never come your way again.

NIPPLES & FITTINGS



CAPS



Part #	Size	A	Approx. Wt. Lbs.	List Price
44-470	1/8"	0.53	0.03	2.60
44-471	1/4"	0.58	0.06	2.60
44-472	3/8"	0.66	0.09	2.60
44-473	1/2"	0.75	0.13	2.89
44-474	3/4"	0.87	0.20	3.79
44-475	1"	1.03	0.29	5.96
44-476	1-1/4"	1.10	0.47	9.03
44-477	1-1/2"	1.12	0.61	12.17
44-478	2"	1.35	1.10	24.84
44-480	3"	1.83	2.64	81.96

UNIONS



Part #	Size	A	Approx. Wt. Lbs.	List Price
44-600	1/8"	1.18	0.13	12.19
44-601	1/4"	1.26	0.22	10.16
44-602	3/8"	1.50	0.39	12.19
44-603	1/2"	1.57	0.47	11.07
44-604	3/4"	1.89	0.69	15.31
44-605	1"	2.13	1.01	20.29
44-606	1-1/4"	2.36	1.48	29.73
44-607	1-1/2"	2.68	1.92	35.11
44-608	2"	2.99	3.04	54.03
44-609	2-1/2"	3.35	4.80	138.64
44-610	3"	3.74	6.49	153.04

REASON SIX NOT TO MESS WITH A CHILD.

A teacher was giving a lesson on the circulation of the blood. Trying to make the matter clearer, she said, "Now, class, if I stood on my head, the blood, as you know, would run into it, and I would turn red in the face.." "Yes," the class said. "Then why is it that while I am standing upright in the ordinary position the blood doesn't run into my feet?" A little fellow shouted,

"Cause your feet ain't empty."



HEX BUSHINGS



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
44-500	1/4" x 1/8"	0.58	0.66	0.03	2.19
44-501	3/8" x 1/8"	0.64	0.72	0.06	2.19
44-502	3/8" x 1/4"	0.64	0.75	0.06	1.83
44-503	1/2" x 1/8"	0.75	0.92	0.11	2.73
44-504	1/2" x 1/4"	0.75	0.93	0.10	2.28
44-505	1/2" x 3/8"	0.75	0.92	0.09	2.28
44-506	3/4" x 1/8"	0.87	1.15	0.17	3.79
44-507	3/4" x 1/4"	0.85	1.14	0.17	3.14
44-508	3/4" x 3/8"	0.85	1.14	0.16	3.14
44-509	3/4" x 1/2"	0.85	1.15	0.14	3.14
44-510	1" x 1/4"	1.05	1.43	0.30	5.76
44-511	1" x 3/8"	1.05	1.50	0.26	6.91
44-512	1" x 1/2"	1.00	1.40	0.27	4.78
44-513	1" x 3/4"	1.00	1.43	0.22	4.78
44-514	1-1/4" x 1/4"	1.22	1.10	0.34	11.70
44-515	1-1/4" x 3/8"	1.19	1.84	0.29	13.65
44-516	1-1/4" x 1/2"	1.14	1.33	0.47	11.70
44-517	1-1/4" x 3/4"	1.08	1.75	0.46	8.11
44-518	1-1/4" x 1"	1.08	1.76	0.33	8.11
44-519	1-1/2" x 1/4"	1.09	2.12	0.29	17.19
44-520	1-1/2" x 3/8"	1.35	2.16	0.44	14.74
44-521	1-1/2" x 1/2"	1.20	2.10	0.51	12.62
44-522	1-1/2" x 3/4"	1.20	2.12	0.51	12.62
44-523	1-1/2" x 1"	1.14	2.08	0.61	10.35
44-524	1-1/2" x 1-1/4"	1.14	2.12	0.40	10.35
44-527	2" x 1/2"	1.27	1.32	1.10	22.16
44-528	2" x 3/4"	1.27	1.62	0.77	18.47
44-529	2" x 1"	1.29	1.95	0.88	18.47
44-530	2" x 1-1/4"	1.22	2.47	0.97	15.31
44-531	2" x 1-1/2"	1.22	2.50	0.77	15.31
44-532	2-1/2" x 1"	1.53	1.94	1.19	21.01
44-534	2-1/2" x 1-1/2"	1.50	2.38	1.15	36.76
44-535	2-1/2" x 2"	1.43	2.97	1.12	30.64
44-537	3" x 1-1/2"	1.61	2.68	2.44	64.84
44-538	3" x 2"	1.61	3.70	1.82	45.00
44-539	3" x 2-1/2"	1.53	3.70	2.11	54.01

NIPPLES & FITTINGS

The Whispered Rule

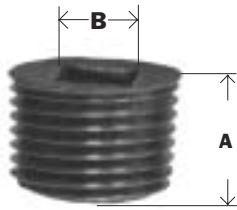
People will believe anything if you whisper it.

Maugham's Thought

Only a mediocre person is always at his best.



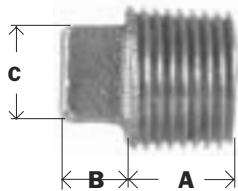
BRONZE COUNTERSUNK PLUGS



Part #	Size	A	Socket Size	Approx. Wt. Lbs.	List Price
44-633	1/2"	0.57	0.43	0.06	2.03
44-634	3/4"	0.58	0.47	0.11	2.33
44-635	1"	0.75	0.59	0.22	3.65
44-636	1-1/4"	0.74	0.72	0.33	7.28
44-637	1-1/2"	0.79	0.72	0.50	9.11
44-638	2"	0.80	0.85	0.88	14.84
44-639	2-1/2"	1.06	1.12	1.56	36.41
44-640	3"	1.12	1.35	2.47	49.43

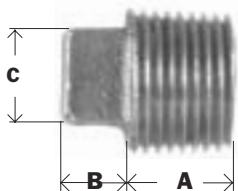
NIPPLES & FITTINGS

CORED SQUARE HEAD PLUGS



Part #	Size	A	B	C	Approx. Wt. Lbs.	List Price
44-650	1/8"	0.27	0.24	0.28	0.02	1.89
44-651	1/4"	0.41	0.28	0.37	0.04	1.89
44-652	3/8"	0.41	0.31	0.43	0.07	2.27
44-653	1/2"	0.54	0.38	0.56	0.11	3.00
44-654	3/4"	0.55	0.44	0.62	0.17	3.45
44-655	1"	0.69	0.50	0.81	0.25	4.51
44-656	1-1/4"	0.71	0.56	0.93	0.39	6.75
44-657	1-1/2"	0.73	0.62	1.12	0.51	8.57
44-658	2"	0.76	0.68	1.31	0.83	13.54
44-659	2-1/2"	1.07	0.74	1.50	1.26	27.02
44-660	3"	1.13	0.80	1.68	1.49	43.23
44-662	4"	1.22	0.92	2.25	3.20	91.97

SOLID SQUARE HEAD PLUGS



Part #	Size	A	B	C	Approx. Wt. Lbs.	List Price
44-670	1/8"	0.27	0.24	0.28	0.04	2.58
44-671	1/4"	0.41	0.28	0.37	0.05	2.27
44-672	3/8"	0.41	0.31	0.43	0.08	2.27
44-673	1/2"	0.54	0.38	0.56	0.12	4.33
44-674	3/4"	0.55	0.44	0.62	0.18	5.64
44-675	1"	0.69	0.50	0.81	0.28	9.59
44-676	1-1/4"	0.71	0.56	0.93	0.40	17.33
44-677	1-1/2"	0.73	0.62	1.12	0.56	22.48
44-678	2"	0.76	0.68	1.31	0.90	35.67

REASON SEVEN NOT TO MESS WITH A CHILD.

The children were lined up in the cafeteria of a Catholic elementary school for lunch. At the head of the table was a large pile of apples. The nun made a note, and posted on the apple tray:

"Take only ONE. God is watching."

Moving further along the lunch line, at the other end of the table was a large pile of chocolate chip cookies. A child had written a note,

"Take all you want. God is watching the apples."

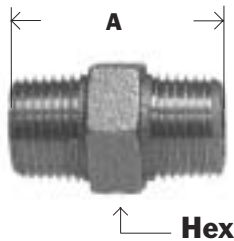


HEX LOCKNUTS



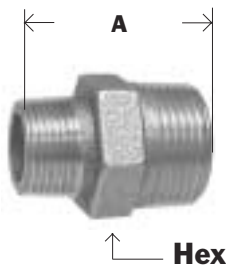
Part #	Size	A	Thickness	Approx. Wt. Lbs.	List Price
44-700	1/8"	0.50	0.19	0.02	1.91
44-701	1/4"	0.66	0.25	0.03	1.64
44-702	3/8"	0.77	0.28	0.04	1.64
44-703	1/2"	0.97	0.31	0.10	2.73
44-704	3/4"	1.23	0.34	0.13	3.28
44-705	1"	1.50	0.38	0.20	5.68
44-706	1-1/4"	1.86	0.42	0.28	8.60
44-707	1-1/2"	2.12	0.47	0.52	11.10
44-708	2"	2.63	0.53	0.64	17.67

HEX NIPPLES



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
44-720	1/8"	1.25	0.50	0.05	5.01
44-721	1/4"	1.25	0.61	0.06	5.01
44-723	1/2"	1.65	1.03	0.18	6.79
44-724	3/4"	1.77	1.21	0.24	7.45
44-725	1"	2.06	1.46	0.36	11.92
44-726	1-1/4"	2.12	1.81	0.47	15.30
44-727	1-1/2"	2.25	2.07	0.76	18.36
44-728	2"	2.50	2.41	1.50	25.71
44-729	2-1/2"	2.80	3.10	2.10	47.67

REDUCING NIPPLES



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
44-740	1/4" x 1/8"	1.22	0.68	0.06	5.37
44-741	3/8" x 1/4"	1.27	0.75	0.08	4.73
44-742	1/2" x 3/8"	1.49	0.97	0.20	8.82
44-743	3/4" x 1/2"	1.65	1.18	0.26	9.00
44-744	1" x 1/2"	1.87	1.41	0.32	11.26
44-745	1" x 3/4"	1.95	1.50	0.37	9.38
44-748	1-1/4" x 1"	2.48	1.75	0.69	30.62
44-750	1-1/2" x 1"	2.28	2.10	0.70	38.91
44-753	1-1/2" x 1-1/4"	2.47	1.96	1.10	38.91
44-760	2" x 1-1/2"	2.83	2.43	1.36	60.97

TWO HYDROGEN ATOMS MEET. ONE SAYS "I'VE LOST MY ELECTRON."
 THE OTHER SAYS "ARE YOU SURE?"
 THE FIRST REPLIES "YES, I'M POSITIVE."

NIPPLES & FITTINGS



Chrome Plated Nipples/ Fittings**CHROME PLATED NIPPLES**

Part #	Size	List Price
41-040	X Close	5.66
41-041	x 1-1/2"	6.70
41-042	x 2"	8.13
41-043	x 2-1/2"	8.82
41-044	x 3"	8.99
41-045	x 3-1/2"	16.88
41-046	x 4"	11.54
41-047	x 4-1/2"	14.75
41-048	x 5"	16.18
41-049	x 5-1/2"	17.59
41-050	x 6"	15.85

25 Per box

CHROME PLATED NIPPLES

Part #	Size	List Price
41-060	X Close	7.55
41-061	x 1-1/2"	8.74
41-062	x 2"	8.55
41-063	x 2-1/2"	12.21
41-064	x 3"	11.95
41-065	x 3-1/2"	16.36
41-066	x 4"	15.62
41-067	x 4-1/2"	20.35
41-068	x 5"	22.42
41-069	x 5-1/2"	24.62
41-070	x 6"	22.76

25 Per box

ELBOWS 90°

Part #	Size	Min Pkg Qty	List Price
45-102	3/8"	1	3.16
45-103	1/2"	1	4.83
45-104	3/4"	1	10.88
45-105	1"	1	13.15

90° STREET ELLS

Part #	Size	Min Pkg Qty	List Price
45-162	3/8"	1	5.82
45-163	1/2"	1	9.23

Bronze Fittings**45° ELBOWS**

Part #	Size	Min Pkg Qty	List Price
45-182	3/8"	1	6.40
45-183	1/2"	1	5.26

TEES

Part #	Size	Min Pkg Qty	List Price
45-252	3/8"	1	5.19
45-253	1/2"	1	10.19

COUPLINGS

Part #	Size	Min Pkg Qty	List Price
45-412	3/8"	1	5.46
45-413	1/2"	1	4.83

REDUCING COUPLINGS

Part #	Size	Min Pkg Qty	List Price
45-435	1/2" x 3/8"	1	5.80
45-438	3/4" x 1/2"	1	8.29

CAPS

Part #	Size	Min Pkg Qty	List Price
45-472	3/8"	1	4.13
45-473	1/2"	1	5.80

UNIONS

Part #	Size	Min Pkg Qty	List Price
45-603	1/2"	1	18.28

HEX BUSHINGS

Part #	Size	Min Pkg Qty	List Price
45-502	3/8" x 1/4"	1	3.89
45-505	1/2" x 3/8"	1	3.33
45-509	3/4" x 1/2"	1	4.58

**MIDLAND
METAL**

STAINLESS STEEL

Schedule 40 Welded
NPT threaded both ends

See Brass Nipple Section header
for detailed specifications
(They are the same)



1/8" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-001	1.50	X Close (3/4")	49-001	1.74
48-002	1.98	x 1-1/2"	49-002	2.44
48-003	2.33	x 2"	49-003	2.98
48-004	2.72	x 2-1/2"	49-004	3.50
48-005	3.09	x 3"	49-005	4.03
48-006	3.46	x 3-1/2"	49-006	4.84
48-007	3.86	x 4"	49-007	5.11
48-008	4.23	x 4-1/2"	49-008	5.97
48-009	4.59	x 5"	49-009	6.18
48-010	5.29	x 5-1/2"	49-010	7.11
48-011	6.63	x 6"	49-011	8.25
48-015	8.51	x 10"		



1/4" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-020	1.65	X Close (7/8")	49-020	1.96
48-021	2.11	x 1-1/2"	49-021	2.51
48-022	2.51	x 2"	49-022	3.06
48-023	3.00	x 2-1/2"	49-023	3.65
48-024	3.47	x 3"	49-024	4.24
48-025	3.93	x 3-1/2"	49-025	4.84
48-026	4.14	x 4"	49-026	5.47
48-027	5.17	x 4-1/2"	49-027	6.05
48-028	5.33	x 5"	49-028	6.64
48-029	5.84	x 5-1/2"	49-029	7.66
48-030	6.31	x 6"	49-030	7.82
48-032	8.30	x 8"		
48-034	10.17	x 10"		
48-036	13.97	x 12"		

STAINLESS STEEL NIPPLES



3/8" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-040	2.03	X Close (1")	49-040	2.42
48-041	2.48	x 1-1/2"	49-041	3.02
48-042	2.99	x 2"	49-042	3.71
48-043	3.56	x 2-1/2"	49-043	4.45
48-044	4.14	x 3"	49-044	5.19
48-045	4.68	x 3-1/2"	49-045	5.93
48-046	5.26	x 4"	49-046	6.67
48-047	6.21	x 4-1/2"	49-047	8.20
48-048	7.01	x 5"	49-048	8.15
48-049	7.94	x 5-1/2"	49-049	9.89
48-050	8.54	x 6"	49-050	10.63
48-052	9.98	x 8"		
48-054	12.23	x 10"		



1/2" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-060	2.46	X Close (1")	49-060	3.22
48-061	3.16	x 1-1/2"	49-061	3.96
48-062	3.56	x 2"	49-062	4.85
48-063	4.77	x 2-1/2"	49-063	5.87
48-064	4.97	x 3"	49-064	6.88
48-065	6.03	x 3-1/2"	49-065	7.89
48-066	6.41	x 4"	49-066	8.94
48-067	7.56	x 4-1/2"	49-067	10.53
48-068	8.29	x 5"	49-068	10.85
48-069	9.10	x 5-1/2"	49-069	11.98
48-070	9.86	x 6"	49-070	12.89
48-071	11.42	x 7"		
48-072	12.92	x 8"		
48-073	15.38	x 9"		
48-074	16.02	10"		
48-075	17.52	x 11"		
48-076	18.90	x 12"		

NIPPLES & FITTINGS



STAINLESS STEEL NIPPLES

STAINLESS STEEL



3/4" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-080	3.31	X Close (1-3/8")	49-080	4.20
48-081	3.76	x 1-1/2"	49-081	4.49
48-082	4.50	x 2"	49-082	5.48
48-083	5.40	x 2-1/2"	49-083	6.63
48-084	6.15	x 3"	49-084	7.78
48-085	7.27	x 3-1/2"	49-085	9.46
48-086	7.86	x 4"	49-086	10.07
48-087	9.03	x 4-1/2"	49-087	11.88
48-088	9.61	x 5"	49-088	12.37
48-089	10.91	x 5-1/2"	49-089	14.31
48-090	11.82	x 6"	49-090	14.63
48-091	13.64	x 7"		
48-092	15.46	x 8"		
48-094	19.07	x 10"	49-094	23.96
48-096	22.70	x 12"		



1" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-100	4.37	X Close (1-1/2")	49-100	5.84
48-101	5.81	x 2"	49-101	7.40
48-102	6.94	x 2-1/2"	49-102	8.88
48-103	8.06	x 3"	49-103	10.43
48-104	9.22	x 3-1/2"	49-104	11.99
48-105	10.39	x 4"	49-105	13.56
48-106	11.56	x 4-1/2"	49-106	16.00
48-107	12.81	x 5"	49-107	16.69
48-108	13.89	x 5-1/2"	49-108	19.32
48-109	15.17	x 6"	49-109	18.63
48-110	17.64	x 7"		
48-111	19.98	x 8"		
48-113	24.62	x 10"		



1-1/4" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-120	6.23	X Close (1-5/8")	49-120	7.98
48-121	7.33	x 2"	49-121	9.49
48-122	8.76	x 2-1/2"	49-122	12.04
48-123	10.18	x 3"	49-123	13.39
48-124	11.66	x 3-1/2"	49-124	16.31
48-125	13.12	x 4"	49-125	17.43
48-126	15.59	x 4-1/2"	49-126	20.57
48-127	19.88	x 5"	49-127	21.57
48-128	20.00	x 5-1/2"	49-128	24.83
48-129	19.18	x 6"	49-129	25.48
48-131	24.99	x 8"		
48-135	37.11	x 12"		



1-1/2" Diameter

304 Stainless			316 Stainless	
Part # 304 S.S.	List Price	Length	Part # 316 S.S.	List Price
48-140	7.44	X Close (2")	49-140	9.86
48-141	8.37	x 2"	49-141	10.90
48-142	10.18	x 2-1/2"	49-142	13.29
48-143	11.86	x 3"	49-143	15.67
48-144	13.60	x 3-1/2"	49-144	19.10
48-145	14.85	x 4"	49-145	20.43
48-146	18.22	x 4-1/2"	49-146	24.13
48-147	18.83	x 5"	49-147	25.18
48-148	20.59	x 5-1/2"	49-148	29.16
48-149	22.32	x 6"	49-149	29.94
48-151	29.70	x 8"		
48-152	32.99	x 9"		

Allen's Law

Almost anything is easier to get into than out of.

NIPPLES & FITTINGS

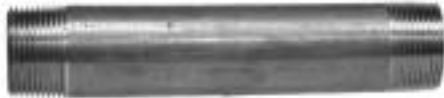


STAINLESS STEEL



2" Diameter

304 Stainless			316 Stainless	
Part #	List Price	Length	Part #	List Price
304 S.S.			316 S.S.	
48-160	11.14	X Close (2")	49-160	15.30
48-161	13.28	x 2-1/2"	49-161	17.50
48-162	15.57	x 3"	49-162	20.46
48-163	17.54	x 3-1/2"	49-163	23.59
48-164	19.96	x 4"	49-164	26.73
48-165	22.24	x 4-1/2"	49-165	31.60
48-166	24.37	x 5"	49-166	34.92
48-167	26.64	x 5-1/2"	49-167	36.14
48-168	28.92	x 6"	49-168	39.27
48-169	33.90	x 7"	49-169	48.66
48-170	38.72	x 8"		
48-171	45.87	x 9"		
48-172	47.87	x 10"		



2-1/2" Diameter

304 Stainless			316 Stainless	
Part #	List Price	Length	Part #	List Price
48-180	24.18	X Close (2-1/2")		
48-193	98.34	x 12"		
		x 5-1/2"	49-186	59.39

STAINLESS STEEL NIPPLES



3" Diameter

304 Stainless			316 Stainless	
Part #	List Price	Length	Part #	List Price
304 S.S.			316 S.S.	
48-200	32.92	X Close (2-5/8")		
48-201	37.31	x 3"		
48-203	50.88	x 4"	49-203	62.27
48-205	53.87	x 5"		
48-207	62.98	x 6"		
		x 7"	49-208	95.04
48-209	85.26	x 8"		
48-213	122.26	x 12"		



4" Diameter

304 Stainless			316 Stainless	
Part #	List Price	Length	Part #	List Price
304 S.S.			316 S.S.	
48-220	43.18	X Close (2-7/8")		
		x 5"	49-225	95.48
48-227	80.71	x 6"		

More sizes available

Other Stainless Steel Nipples Available

- Schedule 80 welded
- Schedule 80 & 40 seamless

NIPPLES & FITTINGS

An engineer, doctor, and pastor golfing

A pastor, a doctor and an engineer were waiting one morning for a particularly slow group of golfers.

Engineer: What's with these guys? We must have been waiting for 15 minutes!

Doctor: I don't know, but I've never seen such ineptitude!

Pastor: Hey, here comes the greens keeper. Let's have a word with him. [dramatic pause] Hi George. Say, what's with that group ahead of us? They're rather slow, aren't they?

George: Oh, yes, that's a group of blind fire fighters. They lost their sight saving our clubhouse from a fire last year, so we always let them play for free anytime. The group was silent for a moment.

Pastor: That's so sad. I think I will say a special prayer for them tonight.

Doctor: Good idea. And I'm going to contact my ophthalmologist buddy and see if there's anything he can do for them.

Engineer: Why can't these guys play at night?



304 & 316 150# STAINLESS STEEL FITTINGS

90° ELBOWS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-100	3.62	1/8"	63-100	3.93
62-101	3.62	1/4"	63-101	3.93
62-102	4.00	3/8"	63-102	4.33
62-103	4.41	1/2"	63-103	5.61
62-104	6.29	3/4"	63-104	7.48
62-105	9.21	1"	63-105	10.96
62-106	13.99	1-1/4"	63-106	18.77
62-107	18.01	1-1/2"	63-107	20.83
62-108	28.87	2"	63-108	32.37
62-109	90.78	2-1/2"		
62-110	80.78	3"		
62-112	141.37	4"		

90° STREET ELLS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-160	4.94	1/8"	63-160	5.53
62-161	4.94	1/4"	63-161	5.53
62-162	5.39	3/8"	63-162	6.22
62-163	6.17	1/2"	63-163	7.32
62-164	8.65	3/4"	63-164	10.61
62-165	11.92	1"	63-165	14.64
62-166	18.27	1-1/4"	63-166	20.42
62-167	22.93	1-1/2"	63-167	25.64
62-168	36.01	2"	63-168	40.28

45° ELBOWS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-180	4.54	1/8"	63-180	4.93
62-181	4.54	1/4"	63-181	4.93
62-182	5.14	3/8"	63-182	5.59
62-183	5.98	1/2"	63-183	5.67
62-184	8.77	3/4"	63-184	9.51
62-185	12.12	1"	63-185	13.16
62-186	17.64	1-1/4"	63-186	19.71
62-187	23.50	1-1/2"	63-187	26.29
62-188	36.34	2"	63-188	39.43

STAINLESS STEEL

TEES



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-250	4.98	1/8"	63-250	5.49
62-251	4.61	1/4"	63-251	5.49
62-252	5.53	3/8"	63-252	6.18
62-253	6.12	1/2"	63-253	7.28
62-254	8.53	3/4"	63-254	10.46
62-255	12.37	1"	63-255	14.70
62-256	19.46	1-1/4"	63-256	21.76
62-257	23.04	1-1/2"	63-257	27.39
62-258	38.13	2"	63-258	45.31
62-260	109.53	3"		

CROSSES



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
		1/8"	63-390	9.01
62-391	8.07	1/4"	63-391	9.01
62-392	9.18	3/8"	63-392	12.31
62-393	10.78	1/2"	63-393	13.26
62-394	15.62	3/4"	63-394	18.09
62-395	20.09	1"	63-395	22.46
62-396	32.32	1-1/4"	63-396	38.54
62-397	37.71	1-1/2"	63-397	42.17
62-398	62.42	2"	63-398	74.44

STAINLESS STEEL OD MACHINED COUPLINGS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-410B	2.75	1/8"	63-410B	3.20
62-411B	2.68	1/4"	63-411B	3.20
62-412B	3.16	3/8"	63-412B	3.49
62-413B	3.70	1/2"	63-413B	4.90
62-414B	5.12	3/4"	63-414B	6.88
62-415B	10.06	1"	63-415B	11.18
62-416B	13.14	1-1/4"	63-416B	15.68
62-417B	17.53	1-1/2"	63-417B	19.60
62-418B	25.43	2"	63-418B	29.39

NIPPLES & FITTINGS



Call Toll Free: **1-866-711-4673**

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**We Ship
World Wide**

STAINLESS STEEL

304 & 316 150# STAINLESS STEEL FITTINGS

COUPLINGS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-413	4.46	1/2"	63-413	4.99
62-414	6.23	3/4"	63-414	6.98
62-415	8.90	1"	63-415	9.96
62-416	14.51	1-1/4"	63-416	16.23
62-417	17.40	1-1/2"	63-417	19.48
62-418	28.18	2"	63-418	31.51
62-419	44.53	2-1/2"	63-419	77.46
62-420	62.33	3"	63-420	76.66
62-421	113.97	4"	63-421	119.48

REDUCING COUPLINGS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-430	3.70	1/4" x 1/8"	63-430	4.14
62-431	4.20	3/8" x 1/8"		
62-432	4.20	3/8" x 1/4"	63-432	4.68
62-433	4.20	1/2" x 1/8"		
62-434	4.90	1/2" x 1/4"	63-434	5.49
62-435	4.90	1/2" x 3/8"	63-435	5.49
62-455	5.56	3/4" x 1/8"		
62-436	6.87	3/4" x 1/4"	63-436	7.67
62-437	6.87	3/4" x 3/8"	63-437	7.67
62-438	6.87	3/4" x 1/2"	63-438	7.67
62-440	11.09	1" x 3/8"		
62-441	11.09	1" x 1/2"	63-441	11.94
62-442	11.09	1" x 3/4"	63-442	11.94
62-445	18.58	1-1/4" x 3/4"	63-445	20.77
62-446	18.58	1-1/4" x 1"	63-446	19.48
62-447	20.89	1-1/2" x 1/2"	63-447	23.37
62-448	20.89	1-1/2" x 3/4"	63-448	23.37
62-449	20.89	1-1/2" x 1"	63-449	23.37
62-450	20.89	1-1/2" x 1-1/4"	63-450	23.37
62-452	31.00	2" x 1"	63-452	34.66
62-453	31.00	2" x 1-1/4"	63-453	34.66
62-454	31.00	2" x 1-1/2"	63-454	34.66

CAPS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-470	2.97	1/8"	63-470	3.17
62-471	2.77	1/4"	63-471	3.17
62-472	3.07	3/8"	63-472	3.51
62-473	3.66	1/2"	63-473	4.18
62-474	5.47	3/4"	63-474	5.87
62-475	6.94	1"	63-475	7.96
62-476	12.78	1-1/4"	63-476	14.64
62-477	16.67	1-1/2"	63-477	15.92
62-478	22.68	2"	63-478	24.49
62-480	56.21	3"		

HEX CAPS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-075	1.38	1/8"	63-075	2.48
62-076	1.38	1/4"	63-076	2.48
62-077	1.38	3/8"	63-077	2.48
62-078	1.87	1/2"	63-078	2.97
62-079	2.75	3/4"	63-079	3.85
62-080	3.58	1"	63-080	4.68
62-081	5.50	1-1/4"	63-081	6.49
62-082	7.15	1-1/2"	63-082	7.87
62-083	11.00	2"		

Andrew Carnegie:

As I grow older I pay less attention to what men say. I just watch what they do.

NIPPLES & FITTINGS



304 & 316 150# STAINLESS STEEL FITTINGS

STAINLESS STEEL

HEX BUSHINGS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-500	2.50	1/4" x 1/8"	63-500	2.79
		3/8" x 1/8"	63-501	3.14
62-502	2.64	3/8" x 1/4"	63-502	3.14
62-503	4.62	1/2" x 1/8"		
62-504	3.10	1/2" x 1/4"	63-504	3.68
62-505	3.00	1/2" x 3/8"	63-505	3.68
		3/4" x 1/4"	63-507	5.12
62-508	4.59	3/4" x 3/8"	63-508	5.47
62-509	4.17	3/4" x 1/2"	63-509	4.82
62-512	6.04	1" x 1/2"	63-512	7.18
62-513	5.85	1" x 3/4"	63-513	7.18
		1-1/4" x 1/2"	63-516	13.16
62-517	9.79	1-1/4" x 3/4"	63-517	13.16
62-518	9.89	1-1/4" x 1"	63-518	13.16
62-521	14.90	1-1/2" x 1/2"	63-521	16.67
62-522	14.90	1-1/2" x 3/4"	63-522	16.67
62-532	14.90	1-1/2" x 1"	63-523	16.67
62-524	14.90	1-1/2" x 1-1/4"	63-524	16.67
62-527	21.64	2" x 1/2"		
62-528	21.64	2" x 3/4"	63-528	24.20
62-529	21.64	2" x 1"	63-529	24.20
62-530	21.64	2" x 1-1/4"	63-530	24.20
62-531	20.95	2" x 1-1/2"	63-531	24.20
62-534	37.40	2-1/2" x 1-1/2"	63-534	38.33
62-535	37.40	2-1/2" x 2"	63-535	38.33
62-538	49.21	3" x 2"	63-538	55.01
62-539	49.21	3" x 2-1/2"		
62-543	78.81	4" x 3"		

UNIONS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-600	11.49	1/8"	63-600	12.84
62-601	11.49	1/4"	63-601	12.84
62-602	12.29	3/8"	63-602	13.73
62-603	14.02	1/2"	63-603	13.89
62-604	15.47	3/4"	63-604	18.38
62-605	23.04	1"	63-605	27.38
62-606	34.10	1-1/4"	63-606	38.12
62-607	39.78	1-1/2"	63-607	53.28
62-608	60.28	2"	63-608	67.40
62-610	173.09	3"	63-610	209.54

HEX HEAD PLUGS



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-630	2.89	1/8"	63-630	3.23
62-631	2.89	1/4"	63-631	2.95
62-632	3.26	3/8"	63-632	3.64
62-633	3.83	1/2"	63-633	4.29
62-634	5.12	3/4"	63-634	5.73
62-635	8.34	1"	63-635	7.72
62-636	12.82	1-1/4"	63-636	14.33
62-637	16.14	1-1/2"	63-637	18.03
62-638	25.38	2"	63-638	28.37

HEX NIPPLES



Part # 304 S.S.	List Price	Size	Part # 316 S.S.	List Price
62-720	3.21	1/8"	63-720	3.59
62-721	3.02	1/4"	63-721	3.59
62-722	3.57	3/8"	63-722	3.59
62-723	4.23	1/2"	63-723	4.73
62-724	5.20	3/4"	63-724	6.18
62-725	7.61	1"	63-725	8.51
62-726	11.66	1-1/4"	63-726	13.90
62-727	14.73	1-1/2"	63-727	16.49
62-728	33.62	2"	63-728	23.66

Franklin D. Roosevelt:

**When you come to the end of your rope,
tie a knot and hang on.**

**NIPPLES &
FITTINGS**



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STAINLESS STEEL

304 & 316 150# STAINLESS STEEL FITTINGS

SQUARE HEAD PLUGS



Part # 304 S.S	List Price	Size	Part # 316 S.S.	List Price
62-670		1/8"	63-670	2.54
62-671		1/4"	63-671	2.54
62-672		3/8"	63-672	2.89
62-653		1/2"	63-653	3.39
62-654		3/4"	63-654	4.23
62-655		1"	63-655	6.07
62-656		1-1/4"	63-656	9.06
62-657		1-1/2"	63-657	12.78
62-658		2"	63-658	20.10
62-660		3"		

HEX LOCKNUTS



Part # 304 S.S	List Price	Size	Part # 316 S.S.	List Price
62-701	2.67	1/4"	63-701	2.98
62-702	3.03	3/8"	63-702	3.61
62-703	3.34	1/2"	63-703	3.73
62-704	4.01	3/4"	63-704	4.49
62-705	4.82	1"	63-705	5.33
62-706	5.76	1-1/4"	63-706	6.43
62-707	6.81	1-1/2"	63-707	8.12
62-708	10.74	2"	63-708	12.00

STAINLESS STEEL HALF COUPLINGS



Part # 304 S.S	List Price	Size	Part # 316 S.S.	List Price
62-771	2.59	1/4"	63-771	2.89
62-772	2.99	3/8"	63-772	3.33
62-773	3.70	1/2"	63-773	4.12
62-774	4.59	3/4"	63-774	5.12
62-775	6.42	1"	63-775	7.64
62-776	12.26	1-1/4"	63-776	14.61
62-777	13.89	1-1/2"	63-777	15.53
62-778	18.70	2"	63-778	20.90

HOSE NIPPLES



Part # 304 S.S	List Price	Hose I.D. x Male Pipe	Part # 316 S.S.	List Price
73-951	5.37	1/4"	973-951	6.01
73-952	8.37	3/8"	973-952	7.71
73-953	8.11	1/2"	973-953	13.76
73-954	10.54	3/4"	973-954	12.57
73-955	13.46	1"	973-955	17.32
73-956	23.34	1-1/4"	973-956	23.54
73-957	24.36	1-1/2"	973-957	40.92
73-958	37.30	2"	973-958	43.59
73-959	70.44	2-1/2"	973-959	121.53
73-960	87.28	3"	973-990	149.72
73-961	222.22	4"	973-991	356.56

REDUCING HOSE NIPPLES - 304 S.S.



Part # 304 S.S	Hose I.D. x Male Pipe	List Price
73-970	1/4" x 1/8"	5.47
73-971	3/8" x 1/4"	6.32
73-972	1/2" x 3/8"	9.44
73-973	1/2" x 1/4"	9.76
73-974	3/4" x 1/2"	12.46
73-975	1" x 3/4"	14.07
73-976	1" x 1/2"	16.26
73-977	1-1/4" x 1"	22.67
73-978	1-1/4" x 3/4"	23.94
73-979	1-1/2" x 1-1/4"	35.63
73-980	1-1/2" x 1"	25.67
73-981	2" x 1-1/2"	11.72
73-982	2" x 1-1/4"	35.40

Albert Schweitzer:

Example is not the main thing in
influencing others. It is the only thing.

NIPPLES &
FITTINGS



Black and Galvanized Steel Nipples

Product Specifications

Welded steel pipe nipples both galvanized and black in diameters ranging from 1/8" up to 4" in lengths from close to 12" and cut-pipe up to 120".

Technical Specifications

Standards: Product complies with ASTM A-53, A-733 and ANSI B1.20.1 for threading, dimensions and pipe specifications.

Pipe: Complies with ASTM A-53 mill tested schedule 40 and 80. Meets ANSI B36.1. All pipe is hydrostatic tested.

Galvanized: Zinc coating applied by hot dipped. Galvanized complying with ASTM A-123.

Black: Protected against oxidation with varnish coating.

Cutting Procedure:

All pipe is roller cut. A visual inspection of seams, excessive galvanizing, mid-welds, poor galvanizing, bends, our of roundness, under and over weight of the pipe is made at the time it is cut. This is done for every length of pipe. Pipe lengths are cut to a tolerance of + or - 1/16" of the actual length.

Threading Procedure:

All pipe is chaser thread cut to American Standard Tapered Pipe Thread standards. This is 3/4" taper per foot. Pipe is visually inspected for roundness of threads and other visual faults as it is removed from the threading machine.

Steel and Wrought Iron Welded

Nominal Size	Outside Diameter	Schedule 40 Standard			Schedule 80 Extra Heavy		
		Wall Thickness	Inside Diameter	Weight per Foot P.E.	Wall Thickness	Inside Diameter	Weight per Foot P.E.
1/8"	.405	.068	.269	.24	.095	.215	.31
1/4"	.540	.088	.364	.42	.119	.302	.54
3/8"	.675	.091	.493	.57	.126	.423	.74
1/2"	.840	.109	.622	.85	.147	.546	1.09
3/4"	1.050	.113	.824	1.13	.154	.742	1.47
1"	1.315	.133	1.049	1.68	.179	.957	2.17
1-1/4"	1.660	.140	1.380	2.27	.191	1.278	3.00
1-1/2"	1.900	.145	1.610	2.72	.200	1.500	3.63
2"	2.375	.154	2.067	3.65	.218	1.939	5.02
2-1/2"	2.875	.203	2.469	5.79	.276	2.323	7.66
3"	3.500	.216	3.068	7.58	.300	2.900	10.25
3-1/2"	4.000	.226	3.548	9.11	.318	3.364	12.51
4"	4.500	.237	4.026	10.79	.337	3.826	14.98
5"	5.563	.258	5.047	14.62	.375	4.813	20.78
6"	6.625	.280	6.065	18.97	.432	5.761	28.57

Chemical Composition

Maximum%

C 0.25

Mn 0.95

Tensile Requirements

	Kg/ Mm2	PSI	MPA
Tensile Strength Min.	33.7	48000	331
Tensile Strength Min.	20.0	28500	196

Pounds per 100 pcs. approximate

Diam	Length close/RC	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	7"	8"	9"	10"	11"	12"
1/8"	1.3	2.4	3.5	4.4	5.4	6.8	7.4	8.5	9.5	11.2	11.4	13.4	15.4	17.4	19.1	20.8	23.1
1/4"	2.4	4.3	6.1	8.3	9.0	11.8	13.5	16.1	16.8	19.1	19.9	24.7	28.7	32.0	35.1	38.1	41.4
3/8"	3.6	6.0	7.8	9.9	13.4	15.4	17.8	20.3	22.7	24.9	28.4	32.6	36.6	40.8	44.8	48.7	52.9
1/2"	6.1	8.7	12.7	15.9	19.3	24.2	26.0	31.6	34.5	39.2	43.1	50.0	58.0	66.1	74.5	82.3	89.0
3/4"	11.0	12.2	21.8	23.1	26.1	31.6	37.0	41.6	47.1	52.6	55.9	65.4	79.1	79.6	94.9	111.9	116.9
1"	15.3		22.0	28.4	37.0	44.2	52.1	59.4	66.6	76.5	79.7	94.8	111.6	124.5	136.3	153.6	175.0
1-1/4"	22.7		32.0	41.9	51.3	61.9	68.1	81.9	90.7	98.2	115.1	133.4	149.3	174.8	199.2	219.3	236.6
1-1/2"	29.9		37.9	46.8	80.6	72.6	85.8	99.1	112.7	120.3	134.5	162.1	184.9	208.5	219.4	247.5	277.8
2"	51.8			63.1	82.1	97.1	110.0	128.4	142.0	165.0	166.9	208.5	246.7	276.9	303.2	334.4	369.2
2-1/2"	82.6				109.0	133.5	156.2	172.9	209.9	232.8	253.4	318.9	337.3	408.1	457.6	514.2	554.4
3"	116.5				147.2	181.6	210.4	247.7	274.1	213.6	338.0	389.2	469.4	555.1	599.2	649.4	747.1
4"	172.7						265.3	326.2	344.4	405.7	451.7	547.3	632.2	721.8	832.7	927.1	1057.0
6"																	

Available Upon Request



STEEL NIPPLES

BLACK & GALVANIZED SCHEDULE 40

1/8" DIAMETER



Part # Galv	List Price	Length	Part # Black	List Price
56-001	1.19	X Close (3/4")	57-001	1.05
56-002	1.35	x 1-1/2"	57-002	1.19
56-003	1.45	x 2"	57-003	1.28
56-004	1.56	x 2-1/2"	57-004	1.37
56-005	1.65	x 3"	57-005	1.46
56-006	1.91	x 3-1/2"	57-006	1.98
56-007	2.20	x 4"	57-007	1.94
56-008	2.74	x 4-1/2"	57-008	2.74
56-009	3.11	x 5"	57-009	2.73
56-010	3.53	x 5-1/2"	57-010	3.64
56-011	4.07	x 6"	57-011	4.07
56-012	4.79	x 7"	57-012	4.79
56-013	4.94	x 8"	57-013	4.30
56-014	6.23	x 9"	57-014	5.26
56-015	6.18	x 10"	57-015	5.49
56-016	5.28	x 11"	57-016	4.70
56-017	5.40	x 12"	57-017	4.72

1/4" Diameter



Part # Galv	List Price	Length	Part # Black	List Price
56-020	1.23	X Close (7/8")	57-020	1.10
56-021	1.40	x 1-1/2"	57-021	1.23
56-022	1.48	x 2"	57-022	1.31
56-023	1.59	x 2-1/2"	57-023	1.40
56-024	1.77	x 3"	57-024	1.56
56-025	2.18	x 3-1/2"	57-025	1.92
56-026	2.45	x 4"	57-026	1.80
56-027	3.11	x 4-1/2"	57-027	2.73
56-028	3.20	x 5"	57-028	2.83
56-029	3.53	x 5-1/2"	57-029	3.12
56-030	3.86	x 6"	57-030	3.40
56-031	4.68	x 7"	57-031	3.98
56-032	4.99	x 8"	57-032	4.29
56-033	5.16	x 9"	57-033	4.60
56-034	5.40	x 10"	57-034	4.90
56-035	5.73	x 11"	57-035	4.38
56-036	5.82	x 12"	57-036	4.80
56-038	14.97	x 18"		
56-037	13.98	x 24"		

More sizes available

3/8" DIAMETER



Part # Galv	List Price	Length	Part # Black	List Price
56-040	1.48	X Close (1")	57-040	1.31
56-041	1.65	x 1-1/2"	57-041	1.22
56-042	1.76	x 2"	57-042	1.55
56-043	2.00	x 2-1/2"	57-043	1.76
56-044	2.20	x 3"	57-044	1.94
56-045	2.40	x 3-1/2"	57-045	2.12
56-046	2.70	x 4"	57-046	2.39
56-047	3.98	x 4-1/2"	57-047	3.01
56-048	3.61	x 5"	57-048	3.19
56-049	4.63	x 5-1/2"	57-049	4.08
56-050	4.45	x 6"	57-050	3.28
56-051	5.86	x 7"	57-051	5.11
56-052	6.39	x 8"	57-052	5.49
56-053	6.97	x 9"	57-053	4.17
56-054	6.38	x 10"	57-054	5.63
56-055	6.49	x 11"	57-055	5.72
56-056	7.00	x 12"	57-056	5.87
56-430	7.57	x 18"	57-430	6.23
56-431	9.41	x 24"	57-431	7.77
56-432	18.59	x 30"	57-432	9.00
56-433	13.09	x 36"	57-433	10.32
56-234	20.27	x 42"	57-234	17.85
56-235	21.00	x 48"	57-235	19.60
56-236	33.34	x 60"	57-236	28.00
56-237	37.80	x 72"	57-237	31.64

Abraham Lincoln:

No man has a good enough memory to make a successful liar.

Always bear in mind that your own resolution to succeed is more important than any other thing.

You cannot help men permanently by doing for them what they could and should do for themselves.

NIPPLES & FITTINGS



BLACK & GALVANIZED SCHEDULE 40

STEEL NIPPLES

1/2" DIAMETER



Part # Galv	List Price	Length	Part # Black	List Price
56-060	0.73	X Close (1-1/8")	57-060	0.65
56-061	0.83	x 1-1/2"	57-061	0.72
56-062	0.88	x 2"	57-062	0.78
56-063	1.13	x 2-1/2"	57-063	0.83
56-064	1.00	x 3"	57-064	0.89
56-065	1.54	x 3-1/2"	57-065	1.13
56-066	1.33	x 4"	57-066	1.17
56-067	1.84	x 4-1/2"	57-067	1.36
56-068	1.65	x 5"	57-068	1.45
56-069	2.13	x 5-1/2"	57-069	1.56
56-070	1.79	x 6"	57-070	1.58
56-071	3.19	x 7"	57-071	2.31
56-072	3.55	x 8"	57-072	2.61
56-073	4.06	x 9"	57-073	3.58
56-074	4.21	x 10"	57-074	3.09
56-075	4.59	x 11"	57-075	4.04
56-076	3.98	x 12"	57-076	3.51
56-240	8.75	x 18"	57-240	6.86
56-241	10.29	x 24"	57-241	7.17
56-242	14.79	x 30"	57-242	10.34
56-243	15.75	x 36"	57-243	12.07
56-244	26.06	x 42"	57-244	12.25
56-245	22.29	x 48"	57-245	15.28
56-246	27.35	x 60"	57-246	18.75
56-247	27.70	x 72"	57-247	22.23

3/4" DIAMETER



Part # Galv	List Price	Length	Part # Black	List Price
56-080	0.88	X Close (1-3/8")	57-080	0.78
56-081	1.21	x 1-1/2"	57-081	0.89
56-082	1.09	x 2"	57-082	0.96
56-083	1.41	x 2-1/2"	57-083	1.04
56-084	1.32	x 3"	57-084	1.17
56-085	1.77	x 3-1/2"	57-085	1.56
56-086	1.94	x 4"	57-086	1.43
56-087	2.15	x 4-1/2"	57-087	1.90
56-088	2.44	x 5"	57-088	2.15
56-089	2.69	x 5-1/2"	57-089	2.38
56-090	2.45	x 6"	57-090	2.17
56-091	3.72	x 7"	57-091	3.27
56-092	3.57	x 8"	57-092	3.78
56-093	5.39	x 9"	57-093	4.08
56-094	4.94	x 10"	57-094	4.36
56-095	5.59	x 11"	57-095	4.92
56-096	4.79	x 12"	57-096	4.23
56-250	8.32	x 18"	57-250	7.95
56-251	10.71	x 24"	57-251	9.65
56-252	15.45	x 30"	57-252	12.67
56-253	18.32	x 36"	57-253	14.85
56-254	35.29	x 42"	57-254	28.12
56-255	27.76	x 48"	57-255	19.10
56-256	34.14	x 60"	57-256	27.35
56-257	40.52	x 72"	57-257	32.42

NIPPLES & FITTINGS

A nun arrives at the local bar

John was sitting outside his local pub one day, enjoying a quiet pint and generally feeling good about himself, when a nun suddenly appears at his table and starts decrying the evils of drink.

“You should be ashamed of yourself young man! Drinking is a Sin! Alcohol is the blood of the devil!”

Now John gets pretty annoyed about this, and goes on the offensive.

“How do you know this, Sister?”

“My Mother Superior told me so.”

“But have you ever had a drink yourself? How can you be sure that what you are saying is right?”

“Don’t be ridiculous--of course I have never taken alcohol myself”

“Then let me buy you a drink - if you still believe afterwards that it is evil I will give up drink for life”

“How could I, a Nun, sit outside this public house drinking?!”

“I’ll get the barman to put it in a teacup for you, then no one will ever know.”

The Nun reluctantly agrees, so John goes inside to the bar.

“Another pint for me, and a triple vodka on the rocks”, then he lowers his voice and says to the barman “and could you put the vodka in a teacup?”

“Oh no! It’s not that Nun again is it?”



STEEL NIPPLES**BLACK & GALVANIZED SCHEDULE 40****1" DIAMETER**

Part # Galv	List Price	Length	Part # Black	List Price
56-100	1.43	X Close (1-1/2")	57-100	1.26
56-101	1.56	x 2"	57-101	1.38
56-102	2.02	x 2-1/2"	57-102	1.49
56-103	1.79	x 3"	57-103	1.58
56-104	2.69	x 3-1/2"	57-104	2.38
56-105	2.93	x 4"	57-105	2.15
56-106	3.26	x 4-1/2"	57-106	2.88
56-107	3.49	x 5"	57-107	2.57
56-108	3.64	x 5-1/2"	57-108	3.21
56-109	3.30	x 6"	57-109	2.92
56-110	4.88	x 7"	57-110	4.31
56-111	6.00	x 8"	57-111	5.29
56-112	6.58	x 9"	57-112	5.82
56-113	6.98	x 10"	57-113	6.16
56-114	8.48	x 11"	57-114	7.70
56-115	6.60	x 12"	57-115	5.83
56-260	13.11	x 18"	57-260	8.97
56-261	16.85	x 24"	57-261	13.72
56-262	24.11	x 30"	57-262	19.55
56-263	39.70	x 36"	57-263	23.00
56-264	44.98	x 42"	57-264	39.02
56-265	37.38	x 48"	57-265	29.88
56-266	46.52	x 60"	57-266	36.88
56-267	54.91	x 72"	57-267	43.76

1-1/4" DIAMETER

Part # Galv	List Price	Length	Part # Black	List Price
56-120	2.04	X Close (1-5/8")	57-120	1.79
56-121	2.33	x 2"	57-121	2.07
56-122	2.59	x 2-1/2"	57-122	2.28
56-123	2.83	x 3"	57-123	2.50
56-124	3.22	x 3-1/2"	57-124	2.85
56-125	3.64	x 4"	57-125	3.21
56-126	4.07	x 4-1/2"	57-126	3.60
56-127	4.53	x 5"	57-127	3.99
56-128	4.92	x 5-1/2"	57-128	4.34
56-129	4.34	x 6"	57-129	3.83
56-130	7.30	x 7"	57-130	6.44
56-131	7.43	x 8"	57-131	6.56
56-132	9.62	x 9"	57-132	8.49
56-133	8.82	x 10"	57-133	7.78
56-134	11.05	x 11"	57-134	8.36
56-135	10.12	x 12"	57-135	8.94
56-270	20.26	x 18"	57-270	23.74
56-271	26.24	x 24"	57-271	21.18
56-272	32.11	x 30"	57-272	25.93
56-273	38.09	x 36"	57-273	30.60
56-274	84.99	x 42"	57-274	46.83
56-275	50.15	x 48"	57-275	40.11
56-276	62.12	x 60"	57-276	49.64
56-277	74.25	x 72"	57-277	59.06

NIPPLES & FITTINGS**“Things You Should Have Learned By The Time You Reach Middle Age”**

If you're too open-minded, your brains will fall out.

Age is a very high price to pay for maturity.

Going to church doesn't make you a Christian, any more than standing in a garage makes you a car.

If you must choose between two evils, pick the one you've never tried before.

Not one shred of evidence supports the notion that life is serious.

For every action, there is an equal and opposite government program.

If you look like your passport picture, you probably need the trip.

Bills travel through the mail at twice the speed of checks.

Men are from earth. Women are from earth. Deal with it.

Opportunities always look bigger going than coming.

Junk is something you've kept for years and throw away three weeks before you need it.

There is always one more imbecile than you counted on.



BLACK & GALVANIZED SCHEDULE 40**STEEL NIPPLES****1-1/2" DIAMETER****2" DIAMETER**

Part # Galv	List Price	Length	Part # Black	List Price
56-140	2.00	X Close (1-3/4")	57-140	1.76
56-141	2.83	x 2"	57-141	2.50
56-142	3.26	x 2-1/2"	57-142	2.88
56-143	3.12	x 3"	57-143	2.95
56-144	3.27	x 3-1/2"	57-144	3.10
56-145	4.04	x 4"	57-145	3.56
56-146	4.67	x 4-1/2"	57-146	4.13
56-147	5.20	x 5"	57-147	4.59
56-148	6.19	x 5-1/2"	57-148	5.46
56-149	6.36	x 6"	57-149	5.68
56-150	7.07	x 7"	57-150	6.23
56-151	9.10	x 8"	57-151	8.04
56-152	10.22	x 9"	57-152	9.01
56-153	10.61	x 10"	57-153	9.36
56-154	11.31	x 11"	57-154	9.99
56-155	12.99	x 12"	57-155	10.64
56-280	22.49	x 18"	57-280	17.83
56-281	28.97	x 24"	57-281	23.20
56-282	35.76	x 30"	57-282	28.27
56-283	42.45	x 36"	57-283	33.53
56-284	57.23	x 42"	57-284	48.99
56-285	55.82	x 48"	57-285	45.19
56-286	62.29	x 60"	57-286	54.30
56-287	82.77	x 72"	57-287	64.74

Part # Galv	List Price	Length	Part # Black	List Price
56-160	2.85	X Close (2")	57-160	2.51
56-161	4.04	x 2-1/2"	57-161	3.56
56-162	3.83	x 3"	57-162	3.39
56-163	5.20	x 3-1/2"	57-163	4.59
56-164	4.86	x 4"	57-164	4.29
56-165	6.43	x 4-1/2"	57-165	5.68
56-166	7.11	x 5"	57-166	5.23
56-167	8.27	x 5-1/2"	57-167	7.30
56-168	6.93	x 6"	57-168	6.11
56-169	10.15	x 7"	57-169	8.96
56-170	12.21	x 8"	57-170	8.98
56-171	15.89	x 9"	57-171	14.30
56-172	12.07	x 10"	57-172	10.65
56-173	15.55	x 11"	57-173	13.72
56-174	14.02	x 12"	57-174	12.37
56-290	27.18	x 18"	57-290	21.24
56-291	39.67	x 24"	57-291	31.40
56-292	44.11	x 30"	57-292	38.64
56-293	53.85	x 36"	57-293	45.79
56-294	71.42	x 42"	57-294	64.99
56-295	80.67	x 48"	57-295	67.37
56-296	86.14	x 60"	57-296	74.96
56-297	120.14	x 72"	57-297	89.56

NIPPLES & FITTINGS

Thou shalt not weigh more than thy refrigerator.

Someone who thinks logically provides a nice contrast to the real world.

It ain't the jeans that make your butt look fat.

Many people will walk in and out of your life. But only true friends will leave footprints in your heart.

To handle yourself, use your head; To handle others, use your heart.

Anger is only one letter short of danger.

If someone betrays you once, it is his fault; If he betrays you twice, it is your fault.

Great minds discuss ideas; Average minds discuss events; Small minds discuss people.

He, who loses money, loses much; He, who loses a friend, loses much more; He, who loses faith, loses all.

Beautiful young people are accidents of nature.

Learn from the mistakes of others. You can't live long enough to make them all yourself.

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STEEL NIPPLES

BLACK & GALVANIZED SCHEDULE 40

2-1/2" DIAMETER



Part # Galv	List Price	Length	Part # Black	List Price
56-180	6.71	X Close (2-1/2")	57-180	5.92
56-181	7.71	x 3"	57-181	6.81
56-182	8.71	x 3-1/2"	57-182	7.97
56-183	9.77	x 4"	57-183	8.61
56-184	10.76	x 4-1/2"	57-184	9.50
56-185	11.90	x 5"	57-185	10.50
56-186	16.12	x 5-1/2"	57-186	14.22
56-187	13.60	x 6"	57-187	12.28
56-188	19.84	x 7"	57-188	17.49
56-189	22.72	x 8"	57-189	20.85
56-190	26.77	x 9"	57-190	22.98
56-191	28.05	x 10"	57-191	24.74
56-192	30.39	x 11"	57-192	26.82
56-193	31.99	x 12"	57-193	28.43



4" DIAMETER

Part # Galv	List Price	Length	Part # Black	List Price
56-220	14.46	X Close (2-7/8")	57-220	12.75
56-223	18.28	x 4"	57-223	16.12
56-224	23.49	x 4-1/2"	57-224	20.73
56-225	32.30	x 5"	57-225	22.95
56-226	38.69	x 5-1/2"	57-226	26.85
56-227	26.08	x 6"	57-227	23.01
56-330	37.45	x 7"	57-330	33.05
56-229	43.78	x 8"	57-229	33.11
56-331	48.63	x 9"	57-331	43.30
56-332	52.03	x 10"	57-332	39.35
56-228	51.71	x 12"		

3" DIAMETER



Part # Galv	List Price	Length	Part # Black	List Price
56-200	7.73	X Close (2-5/8")	57-200	6.81
56-201	10.12	x 3"	57-201	8.94
56-202	11.44	x 3-1/2"	57-202	8.98
56-203	10.70	x 4"	57-203	9.43
56-204	14.15	x 4-1/2"	57-204	12.56
56-205	15.65	x 5"	57-205	13.81
56-206	21.21	x 5-1/2"	57-206	16.04
56-207	15.27	x 6"	57-207	13.47
56-208	26.29	x 7"	57-208	23.20
56-209	30.83	x 8"	57-209	19.26
56-210	34.18	x 9"	57-210	30.16
56-211	31.29	x 10"	57-211	23.22
56-212	40.32	x 11"	57-212	35.24
56-213	32.59	x 12"	57-213	26.71
		x 24"	57-311	91.56



6" DIAMETER

Part # Galv	List Price	6" Dia.	Part # Black	List Price
56-300	70.00	Close	57-300	56.00

Henry Ford:

Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young. The greatest thing in life is to keep your mind young.

Nothing is particularly hard if you divide it into small jobs.



Product Specifications

Welded steel couplings both galvanized and black in diameters from 1/8" up to 4"

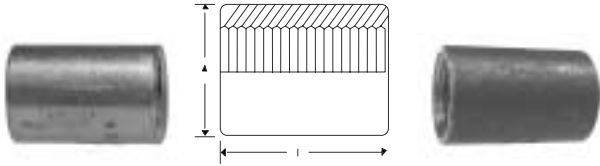
Technical Specifications

Standards: Product complies with ASTM A-53, A-733 and ANSI B1.20.1 for threading, dimensions and pipe specifications.

Pipe: Complies with ASTM A-53 milltested schedule 40 and 80. Meets ANSI B36.1. All pipe is hydrostatic tested.

Galvanized: Zinc coating applied by hot dipping. Galvanized complying with ASTM-A-123.

MERCHANT COUPLINGS



Galvanized

Black

Part # Galv	List Price	Size	Part # Black	List Price
64-770	1.12	1/8	65-770	1.06
64-771	1.37	1/4	65-771	0.94
64-772	1.50	3/8	65-772	1.24
64-773	1.84	1/2	65-773	1.20
64-774	2.45	3/4	65-774	1.63
64-775	3.86	1	65-775	2.53
64-776	4.77	1-1/4	65-776	3.68
64-777	5.95	1-1/2	65-777	3.88
64-778	7.02	2	65-778	5.47
64-779	24.20	2-1/2	65-779	18.96
64-780	37.63	3	65-780	24.59
64-781	60.58	4	65-781	33.93

HALF MERCHANT COUPLINGS



Galvanized

Black

Part # Galv	List Price	Size	Part # Black	List Price
		1/4	65-771H	0.74
		3/8	65-772H	0.76
64-773H	1.31	1/2	65-773H	0.94
64-774H	1.85	3/4	65-774H	1.19
64-775H	2.93	1	65-775H	1.86
64-776H	3.41	1-1/4	65-776H	2.63
64-777H	4.24	1-1/2	65-777H	3.84
64-778H	6.01	2	65-778H	4.34
		2-1/2	65-779H	11.58
		3	65-780H	15.99
		4	65-781H	22.06

MERCHANT COUPLINGS SPECIFICATIONS

Size	Outside Diam.	Length	Weight 100 pcs approx.	Quantity per box	Threads per Inch	Threads
		Inches	Pounds			Type
1/8"	.59"	.78	3.5	1000	27	Straight
1/4"	.73"	1.18	7.5	500	18	Straight
3/8"	.86"	1.18"	9	600	18	Straight
1/2"	1.063"	1-9/16"	13.0	100	14	Straight
3/4"	1.313"	1-5/8"	28.3	50	14	Straight
1"	1.576"	2"	40.1	30	11-1/2	Straight
1-1/4"	1.900"	2-1/16"	49.5	25	11-1/2	Straight
1-1/2"	2.200"	2-1/16"	71.48	25	11-1/2	Straight
2"	2.750"	2-1/8"	112.0	20	11-1/2	Straight
2-1/2"	3.250"	3-1/8"	231.2	8	8	Taper Tapped
3"	4.000"	3-1/4"	353.8	5	8	Taper Tapped
4"	5.000"	3-1/2"	471.8	4	8	Taper Tapped



STEEL NIPPLES

STEEL NIPPLE ASSORTMENTS



B "6" ASSORTMENTS

Black		LENGTH											Wt. Lbs.	Total Pieces	List Prices
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-567	1/2"	6	6	6	6	6	6	6	6	6	6	6	20	66	90.53
973-568	3/4"	6	6	6	6	6	6	6	6	6	6	6	27	66	118.70
973-569	1"	6		6	6	6	6	6	6	6	6	6	34	60	145.44

Galv.		LENGTH											Wt. Lbs.	Total Pieces	List Prices
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-667	1/2"	6	6	6	6	6	6	6	6	6	6	6	20	66	105.89
973-668	3/4"	6	6	6	6	6	6	6	6	6	6	6	27	66	138.98
973-669	1"	6		6	6	6	6	6	6	6	6	6	34	60	174.04

"A" ASSORTMENTS

Black		LENGTH											Wt. Lbs.	Total Pieces	List Prices
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-570	1/2"	20	10	15	10	10	5	10	5	5	5	5	16	100	144.30
973-571	3/4"	20	10	15	10	10	5	10	5	5	5	5	22	100	168.10
973-572	1"	13		12	5	12	3	12	3	5	5	5	31	75	190.55

Galv.		LENGTH											Wt. Lbs.	Total Pieces	List Prices
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-670	1/2"	20	10	15	10	10	5	10	5	5	5	5	16	100	174.35
973-671	3/4"	20	10	15	10	10	5	10	5	5	5	5	22	100	191.22
973-672	1"	13		12	5	12	3	12	3	5	5	5	31	75	192.89

C "25" ASSORTMENTS

Black		LENGTH											Wt. Lbs.	Total Pieces	List Prices
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-693	1/2"	4	3	3	3	2	2	2	1	2	1	2	16	25	18.86
973-694	3/4"	4	3	3	3	2	2	2	1	2	1	2	22	25	27.99
973-695	1"	5		5	3	2	2	2	1	2	1	2	31	25	80.70

Black		LENGTH											Wt. Lbs.	Total Pieces	List Prices
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-696	1/2"	4	3	3	3	2	2	2	1	2	1	2	16	25	24.92
973-697	3/4"	6		4	3	2	2	2	1	2	1	2	22	25	52.75
973-698	1"	5		5	3	2	2	2	1	2	1	2	31	25	98.23

NIPPLES & FITTINGS



Standard Specifications

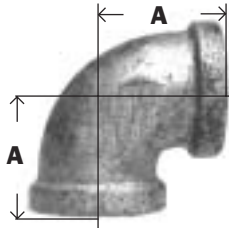
Material: ASTM A 197 Cupola Malleable Iron. ASTM A 153 Zinc Coating. ANSI B16.3 Malleable Iron Fittings

Dimension: ANSI B 16.14 Ferrous Pipe, Plugs, Bushings, Etc. ANSI B 16.39 Malleable Iron Threaded Pipe Unions

Thread: ANSI B 2.1 or BS 21

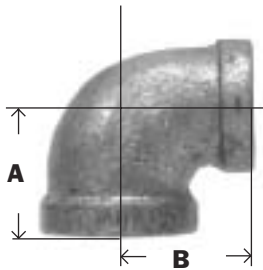
ISO 9002 Manufacturer

ELBOWS 90°



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-100	1.36	1/8"	0.69	50/600	0.06	65-100	1.11
64-101	1.36	1/4"	0.81	35/420	0.11	65-101	1.10
64-102	1.36	3/8"	0.95	45/540	0.16	65-102	1.11
64-103	1.02	1/2"	1.12	50/400	0.24	65-103	0.83
64-104	1.47	3/4"	1.31	35/210	0.37	65-104	1.20
64-105	2.27	1"	1.50	20/120	0.59	65-105	1.85
64-106	3.40	1-1/4"	1.75	20/80	0.94	65-106	2.77
64-107	4.54	1-1/2"	1.94	10/60	1.15	65-107	3.69
64-108	6.81	2"	2.25	8/32	1.76	65-108	5.54
64-109	11.92	2-1/2"	2.70	6/18	2.90	65-109	11.64
64-110	18.15	3"	3.08	7/14	5.41	65-110	14.77
64-112	32.90	4"	3.79	2/6	9.07	65-112	26.78
64-114	182.66	6"	5.13	1/2	18.92	65-114	148.67

REDUCING ELBOWS 90°



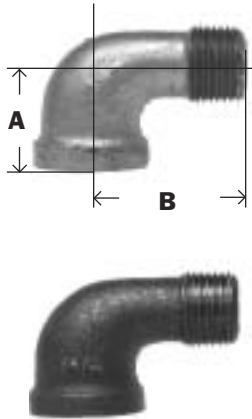
Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-121	1.91	3/8" x 1/8"	0.81	0.85	70/840	0.13	65-121	1.58
64-122	2.03	3/8" x 1/4"	0.88	0.90	60/720	0.14	65-122	1.55
64-123	1.86	1/2" x 1/4"	0.97	0.98	40/480	0.18	65-123	1.38
64-124	1.75	1/2" x 3/8"	1.04	1.03	50/400	0.21	65-124	1.22
64-126	2.31	3/4" x 3/8"	1.12	1.13	25/300	0.28	65-126	2.00
64-127	1.98	3/4" x 1/2"	1.20	1.22	30/240	0.32	65-127	1.34
64-130	2.99	1" x 1/2"	1.26	1.40	30/180	0.44	65-130	2.44
64-131	2.99	1" x 3/4"	1.37	1.45	25/150	0.52	65-131	2.44
64-133	6.01	1-1/4" x 3/4"	1.45	1.62	15/120	0.70	65-133	3.93
64-134	4.83	1-1/4" x 1"	1.58	1.67	10/80	0.81	65-134	3.93
64-136	6.99	1-1/2" x 3/4"	1.52	1.75	15/90	0.74	65-136	5.32
64-137	5.99	1-1/2" x 1"	1.65	1.80	10/80	0.66	65-137	5.69
64-138	7.44	1-1/2" x 1-1/4"	1.82	1.88	15/60	1.27	65-138	5.69
64-139	8.85	2" x 3/4"	1.60	1.97	10/60	1.21	65-139	8.57
64-140	8.61	2" x 1"	1.73	2.02	14/56	1.22	65-140	8.57
64-141	8.85	2" x 1-1/4"	1.90	2.10	10/40	1.43	65-141	8.95
64-142	10.04	2" x 1-1/2"	2.02	2.16	10/40	1.38	65-142	8.41
64-145	20.06	2-1/2" x 1-1/2"	2.16	2.51	8/24	2.20	65-145	16.32
64-146	20.06	2-1/2" x 2"	2.39	2.60	8/24	2.70	65-146	16.32
64-148	45.91	3" x 1-1/2"	2.28	2.83	6/18	4.50	65-148	23.41
		3" x 2-1/2"	2.83	2.99	8/16	5.00	65-151	26.60
		4" x 2"	2.72	3.43	1/12	8.00	65-152	116.40
		4" x 2-1/2"	3.03	3.50	1/8	8.00	65-153	63.53
		4" x 3"	3.27	3.58	1/9	9.00	65-154	65.67



MALLEABLE FITTINGS

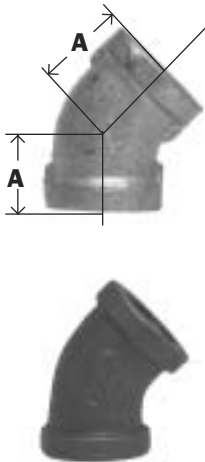
BLACK & GALVANIZED MALLEABLE IRON 150#

90° STREET ELBOWS



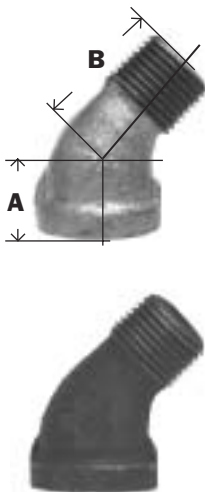
Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-160	1.50	1/8"	0.69	1.00	60/720	0.06	65-160	1.22
64-161	1.50	1/4"	0.80	1.17	35/420	0.10	65-161	1.22
64-162	1.25	3/8"	0.95	1.48	40/480	0.17	65-162	1.22
64-163	1.13	1/2"	1.10	1.59	60/360	0.25	65-163	0.92
64-164	1.65	3/4"	1.28	1.85	35/210	0.42	65-164	1.34
64-165	2.44	1"	1.47	2.10	30/120	0.57	65-165	1.99
64-166	5.11	1-1/4"	1.75	2.57	25/75	1.01	65-166	3.46
64-167	5.22	1-1/2"	1.90	2.63	9/54	1.32	65-167	4.25
64-168	7.38	2"	2.21	3.19	10/30	2.22	65-168	6.00
64-169	19.74	2-1/2"	2.65	3.78	9/18	2.83	65-169	16.07
64-170	25.53	3"	3.02	4.42	7/14	5.71	65-170	20.78
64-171	42.55	4"	3.72	5.57	2/6	10.47	65-171	41.56

ELBOWS 45°



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-180	1.50	1/8"	0.63	50/600	0.07	65-180	1.22
64-181	1.50	1/4"	0.73	30/360	0.11	65-181	1.22
64-182	1.50	3/8"	0.80	50/600	0.16	65-182	1.22
64-183	1.22	1/2"	0.88	50/400	0.24	65-183	0.83
64-184	1.84	3/4"	0.98	40/240	0.56	65-184	1.50
64-185	2.72	1"	1.12	20/120	0.35	65-185	2.22
64-186	4.43	1-1/4"	1.29	20/80	0.85	65-186	3.60
64-187	5.44	1-1/2"	1.43	10/60	1.11	65-187	4.43
64-188	6.81	2"	1.68	12/36	1.80	65-188	5.54
64-189	17.02	2-1/2"	1.95	9/27	2.68	65-189	13.85
64-190	25.87	3"	2.17	10/20	4.33	65-190	17.54
64-191	44.25	4"	2.61	2/16	7.54	65-191	36.02
64-192	163.39	6"	3.46	1/2	12.76	65-192	132.99

45° STREET ELBOWS

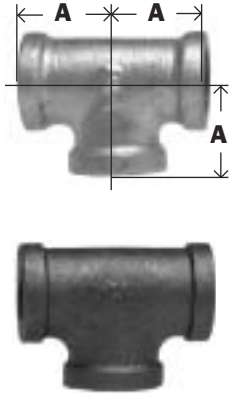


Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-200	2.05	1/8"	0.63	0.83	70/840	0.05	65-200	1.94
64-201	2.39	1/4"	0.73	0.94	40/480	0.13	65-201	1.67
64-202	2.39	3/8"	0.80	1.03	50/600	0.13	65-202	1.94
64-203	2.05	1/2"	0.86	1.30	75/450	0.23	65-203	1.67
64-204	3.65	3/4"	0.96	1.48	40/240	0.33	65-204	2.55
64-205	4.15	1"	1.10	1.69	25/150	0.55	65-205	3.38
64-206	6.81	1-1/4"	1.26	1.87	10/80	0.76	65-206	5.54
64-207	8.17	1-1/2"	1.40	2.05	10/60	1.13	65-207	6.65
64-208	13.61	2"	1.65	2.38	12/36	1.76	65-208	9.23
64-209	31.77	2-1/2"	1.95	2.72	12/24	2.57	65-209	26.37
64-210	40.84	3"	2.17	3.16	6/18	3.52	65-210	34.56
64-211	71.48	4"	2.61	3.90	7/7	8.29	65-211	

NIPPLES & FITTINGS

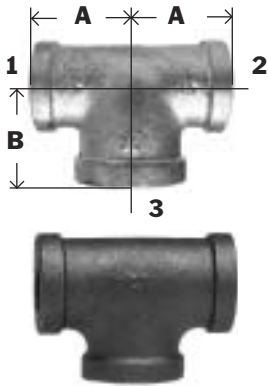


TEES



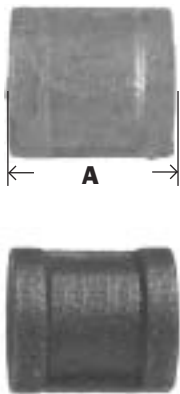
Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-250	1.70	1/8"	0.69	80/960	0.09	65-250	1.39
64-251	1.70	1/4"	0.81	50/600	0.16	65-251	1.39
64-252	1.70	3/8"	0.95	30/360	0.24	65-252	1.39
64-253	1.31	1/2"	1.12	40/240	0.35	65-253	1.28
64-254	1.87	3/4"	1.31	35/140	0.55	65-254	1.83
64-255	2.95	1"	1.50	20/80	0.84	65-255	2.88
64-256	5.31	1-1/4"	1.75	14/56	1.37	65-256	4.34
64-257	5.68	1-1/2"	1.94	15/45	1.74	65-257	5.54
64-258	10.21	2"	2.26	10/30	2.54	65-258	8.31
64-259	21.79	2-1/2"	2.70	8/16	3.76	65-259	17.73
64-260	28.59	3"	3.08	6/12	6.36	65-260	23.27
64-261	51.74	4"	3.79	2/6	11.69	65-261	42.11
64-262	214.43	6"	5.13	1/2	24.55	65-262	174.52

BULLHEAD TEES



Part # Galvanized	List Price	Size (1&2) x 3	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-280	3.26	1/2" x 3/4"	1.22	1.20	30/180	0.43	65-280	2.27
64-733	4.89	1/2" x 1"	1.36	1.26	40/160	0.48	65-733	4.16
64-289	4.89	3/4" x 1"	1.45	1.37	20/120	0.67	65-289	4.16
64-734	11.65	3/4" x 1-1/4"	0.00	0.00	12/36	0.00	65-734	10.32
64-299	7.23	1" x 1-1/4"	1.67	1.58	15/60	0.91	65-299	6.26
64-300	9.31	1" x 1-1/2"	1.80	1.65	15/60	1.16	65-300	7.92
64-317	9.31	1-1/4" x 1-1/2"	1.88	1.82	14/56	1.45	65-317	7.92
64-319	12.87	1-1/2" x 2"	2.12	1.98	8/32	1.98	65-319	11.70

COUPLINGS

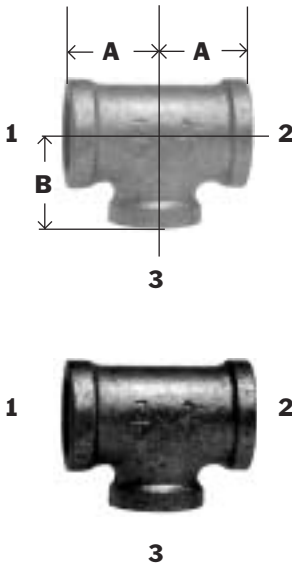


Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-410	1.02	1/8"	0.96	70/840	0.06	65-410	0.83
64-411	1.02	1/4"	1.06	40/480	0.09	65-411	0.83
64-412	1.02	3/8"	1.16	50/600	0.06	65-412	0.83
64-413	0.95	1/2"	1.34	40/480	0.19	65-413	0.78
64-414	1.26	3/4"	1.52	50/300	0.30	65-414	1.06
64-415	2.18	1"	1.67	25/150	0.45	65-415	1.78
64-416	3.07	1-1/4"	1.93	16/128	0.65	65-416	2.49
64-417	3.75	1-1/2"	2.15	18/72	0.90	65-417	3.05
64-418	4.82	2"	2.54	12/48	1.39	65-418	4.21
64-419	10.21	2-1/2"	2.88	8/32	2.42	65-419	8.31
64-420	14.98	3"	3.18	12/24	3.40	65-420	12.19
64-421	24.51	4"	3.69	6/12	6.23	65-421	19.95
64-422	87.36	6"	4.23	2/6	11.22	65-422	60.94



REDUCING TEES

(SAME SIZE ON RUN, REDUCING ON BRANCH)

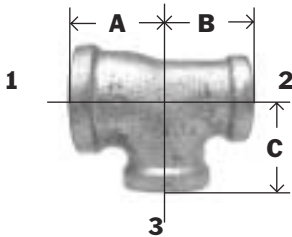


Part # Galvanized	List Price	Size (1&2) x 3	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-273	2.40	3/8" x 1/4"	0.81	0.90		0.20	65-273	5.23
64-276	2.71	1/2" x 1/4"	0.97	0.98	75/150	0.26	65-276	2.34
64-279	1.93	1/2" x 3/8"	1.04	1.03	75/150	0.29	65-279	2.34
64-282	3.47	3/4" x 1/4"	1.05	1.08	125	0.35	65-282	2.65
64-283	3.26	3/4" x 3/8"	1.12	1.13	55/110	0.40	65-283	2.71
64-286	2.79	3/4" x 1/2"	1.20	1.18	50/100	0.47	65-286	1.90
64-268	5.00	1" x 1/4"	1.11	1.22	40/80	0.52	65-268	4.16
64-269	5.00	1" x 3/8"	1.18	1.27	40/80	0.60	65-269	4.16
64-291	4.29	1" x 1/2"	1.26	1.40	40/80	0.70	65-291	2.91
64-298	3.57	1" x 3/4"	1.37	1.45	35/70	0.77	65-298	2.91
64-301	8.03	1-1/4" x 1/2"	1.34	1.45	20/40	0.97	65-301	4.38
64-303	7.54	1-1/4" x 3/4"	1.45	1.62	20/40	1.00	65-303	5.26
64-306	6.47	1-1/4" x 1"	1.58	1.66	35	1.10	65-306	5.26
64-316	6.81	1-1/2" x 3/4"	1.41	1.75	15/30	1.25	65-316	6.65
64-318	9.53	1-1/2" x 1"	1.65	1.88	15/30	1.41	65-318	6.65
64-322	8.17	1-1/2" x 1-1/4"	1.65	1.88	25	1.58	65-322	6.65
		2" x 1/2"	1.49	1.88	10/20	1.61	65-327	9.42
64-328	11.57	2" x 3/4"	1.60	1.97	10/20	1.77	65-328	9.42
64-330	11.57	2" x 1"	1.73	2.02	15	1.97	65-330	7.85
64-334	13.50	2" x 1-1/4"	1.86	2.06	15	1.92	65-334	9.42
64-336	13.50	2" x 1-1/2"	1.98	2.12	15	2.08	65-336	9.42
64-343	27.80	2-1/2" x 1-1/2"	2.16	2.51	4/8	3.38	65-343	22.63
64-351	39.71	3" x 2"	2.52	2.89	3/16	4.54	65-351	27.70

NIPPLES & FITTINGS

REDUCING TEES

(REDUCING ON RUN)



Part # Galvanized	List Price	Size 1 x 2 x 3	A	B	C	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-287	2.79	3/4" x 1/2" x 1/2"	1.18	1.18	1.20	30/180	0.45	65-287	2.27
64-288	2.79	3/4" x 1/2" x 3/4"	1.28	1.20	1.28	40/160	0.52	65-288	2.27
		1" x 3/4" x 3/4"	1.34	1.28	1.42	25/100	0.66	65-296	3.49
		1-1/4" x 1" x 1"	1.55	1.47	1.63	18/72	0.98	65-309	5.26

LOCKNUTS



Part # Galvanized	Size	Hex	Thickness	Box/ Case	Approx. Wt. Lbs.	List Price
64-703	1/2"	1.18	0.32	100/1200	0.08	0.73
64-704	3/4"	1.43	0.35	60/720	0.13	0.96
64-705	1"	1.75	0.39	40/480	0.19	1.35
64-706	1-1/4"	2.10	0.43	30/360	0.27	1.43
64-707	1-1/2"	2.35	0.48	45/270	0.47	2.01
64-708	2"	2.88	0.54	25/150	0.56	3.55

* Black locknuts available on special order basis.

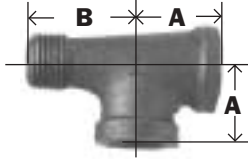


BLACK & GALVANIZED MALLEABLE IRON #150

MALLEABLE FITTINGS

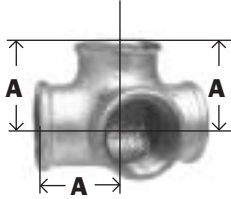
MALLEABLE SERVICE TEE

(STREET TEE)



Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-363	3.98	1/2"	1.12	1.62	40/240	0.31	65-363	2.59
64-364	4.37	3/4"	1.31	1.89	25/150	0.55	65-364	3.88

SIDE OUTLET TEES



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-383	6.21	1/2"	1.12	25/200	0.38	65-383	3.88
64-384	7.84	3/4"	1.31	15/120	0.58	65-384	5.17
64-385	12.70	1"	1.50	25/75	0.89	65-385	7.11
64-386	21.14	1-1/4"	1.75	12/36	1.39	65-386	10.05

REDUCING COUPLINGS



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-430	1.15	1/4" x 1/8"	1.00	50/600	0.08	65-430	0.94
64-431	1.15	3/8" x 1/8"	1.13	35/420	0.10	65-431	0.94
64-432	1.15	3/8" x 1/4"	1.13	30/360	0.12	65-432	0.94
64-433	1.15	1/2" x 1/8"	1.25	50/600	0.17	65-433	1.10
64-434	1.15	1/2" x 1/4"	1.25	50/600	0.15	65-434	0.94
64-435	1.15	1/2" x 3/8"	1.25	40/480	0.16	65-435	0.94
64-439	1.91	3/4" x 1/8"	1.44	35/420	0.20	65-439	1.58
64-436	1.63	3/4" x 1/4"	1.44	30/360	0.21	65-436	1.33
64-437	1.63	3/4" x 3/8"	1.44	30/360	0.22	65-437	1.33
64-438	1.36	3/4" x 1/2"	1.44	60/360	0.29	65-438	1.11
64-459	2.33	1" x 1/4"	1.69	45/135	0.00	65-459	1.78
64-440	2.55	1" x 3/8"	1.69	30/240	0.35	65-440	1.78
64-441	2.18	1" x 1/2"	1.69	30/240	0.37	65-441	1.78
64-442	1.82	1" x 3/4"	1.69	25/200	0.40	65-442	1.48
64-460	11.10	1-1/4" x 3/8"	2.06	25/75	0.00	65-460	9.98
64-444	3.73	1-1/4" x 1/2"	2.06	25/150	0.55	65-444	2.60
64-445	3.20	1-1/4" x 3/4"	2.06	25/150	0.60	65-445	2.60
64-446	3.20	1-1/4" x 1"	2.06	15/120	0.66	65-446	2.60
64-443	8.83	1-1/2" x 3/8"	2.31	15/120	0.00	65-443	6.01
64-447	4.45	1-1/2" x 1/2"	2.31	20/120	0.77	65-447	3.10
64-448	3.82	1-1/2" x 3/4"	2.31	15/120	0.77	65-448	3.10
64-449	3.82	1-1/2" x 1"	2.31	25/100	0.84	65-449	3.10
64-450	3.82	1-1/2" x 1-1/4"	2.31	12/96	0.86	65-450	3.10
64-458	5.79	2" x 1/2"	2.81	14/84	1.12	65-458	4.71
64-451	5.79	2" x 3/4"	2.81	14/84	1.11	65-451	4.71
64-452	5.79	2" x 1"	2.81	14/84	1.28	65-452	4.71
64-453	5.79	2" x 1-1/4"	2.81	12/72	1.30	65-453	4.71
64-454	4.82	2" x 1-1/2"	2.81	12/72	1.41	65-454	3.93
64-461	12.71	2-1/2" x 1-1/2"	3.25	15/30	1.74	65-461	8.86
64-462	10.89	2-1/2" x 2"	3.25	15/30	1.79	65-462	8.86
64-486	17.02	3" x 1-1/2"	3.69	16/32	2.18	65-486	16.49
64-456	14.19	3" x 2"	3.69	16/32	2.26	65-456	13.85
64-463	14.19	3" x 2-1/2"	3.69	12/24	3.52	65-463	13.85
64-464	31.31	4" x 2"	4.38	4/12	4.96	65-464	25.49
		4" x 2-1/2"	4.38	4/12	4.00	65-465	27.81
64-457	31.31	4" x 3"	4.38	4/12	4.07	65-457	25.49
		6" x 4"	4.24	1/8	9.84	65-491	136.31

MALLEABLE FITTINGS

BLACK & GALVANIZED MALLEABLE IRON 150#

HEX BUSHING



Part # Galvanized	List Price	Size M x F	A	Hex	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
		*1/4" x 1/8"	} Use steel fittings for smaller sizes - See page 208					
		*3/8" x 1/8"						
		*3/8" x 1/4"						
64-503	1.02	1/2" x 1/8"	0.84	1.03	100/120	0.10	65-503	0.83
		*1/2" x 1/4"						
64-505	0.85	1/2" x 3/8"	0.75	1.03	100/1200	0.07	65-505	0.83
64-506	1.15	3/4" x 1/8"	0.85	1.15	50/600	0.17	65-506	1.10
64-507	1.15	3/4" x 1/4"	0.85	1.15	50/600	0.16	65-507	0.94
64-508	1.15	3/4" x 3/8"	0.85	1.15	50/600	0.14	65-508	0.94
64-509	0.96	3/4" x 1/2"	0.93	1.15	50/600	0.10	65-509	0.78
64-510	1.70	1" x 1/4"	1.13	1.12	50/400	0.19	65-510	1.39
64-511	1.99	1" x 3/8"	1.13	1.12	50/400	0.24	65-511	1.39
64-512	1.70	1" x 1/2"	1.10	1.42	50/400	0.21	65-512	1.16
64-513	1.99	1" x 3/4"	1.10	1.42	50/400	0.17	65-513	1.39
64-514	3.18	1-1/4" x 1/4"	1.24	1.12	30/240	0.31	65-514	2.22
64-515	2.72	1-1/4" x 3/8"	1.24	1.12	30/240	0.43	65-515	2.22
64-516	2.72	1-1/4" x 1/2"	1.24	1.24	30/240	0.29	65-516	2.22
64-517	2.72	1-1/4" x 3/4"	1.08	1.76	30/240	0.35	65-517	2.22
64-518	2.27	1-1/4" x 1"	1.08	1.76	30/240	0.29	65-518	2.22
64-519	3.73	1-1/2" x 1/4"	1.30	1.12	25/150	0.64	65-519	2.60
64-520	3.20	1-1/2" x 3/8"	1.30	1.12	25/150	0.64	65-520	3.04
64-521	3.20	1-1/2" x 1/2"	1.30	1.34	25/150	0.40	65-521	2.60
64-522	3.20	1-1/2" x 3/4"	1.30	1.44	25/150	0.39	65-522	2.60
64-523	3.20	1-1/2" x 1"	1.23	2.00	25/150	0.46	65-523	2.60
64-524	2.67	1-1/2" x 1-1/4"	1.23	2.00	25/150	0.32	65-524	2.17
64-525	5.16	2" x 3/8"	1.28	1.12	20/120	0.95	65-525	4.20
64-527	4.43	2" x 1/2"	1.39	1.34	20/120	0.84	65-527	3.60
64-528	4.43	2" x 3/4"	1.39	1.63	20/120	0.63	65-528	3.60
64-529	4.43	2" x 1"	1.39	1.77	20/120	0.67	65-529	3.00
64-530	4.43	2" x 1-1/4"	1.50	2.48	20/120	0.73	65-530	3.60
64-531	3.69	2" x 1-1/2"	1.50	2.48	20/120	0.70	65-531	3.00
64-546	7.83	2-1/2" x 1/2"	1.51	1.34	15/60	1.57	65-546	6.65
64-547	8.54	2-1/2" x 3/4"	1.51	1.63	15/60	1.54	65-547	7.26
64-532	7.49	2-1/2" x 1"	1.51	1.95	15/60	1.51	65-532	7.11
64-533	8.74	2-1/2" x 1-1/4"	1.51	2.39	15/60	1.41	65-533	6.10
64-534	7.49	2-1/2" x 1-1/2"	1.51	2.98	15/60	1.37	65-534	7.11
64-535	7.49	2-1/2" x 2"	1.54	2.98	15/60	1.11	65-535	6.10
64-550	13.53	3" x 1"	1.61	1.95	12/48	1.46	65-550	10.34
64-549	12.96	3" x 1-1/4"	1.61	2.39	12/48	2.22	65-549	10.55
64-537	10.89	3" x 1-1/2"	1.61	2.68	12/48	1.96	65-537	8.86
64-538	9.08	3" x 2"	1.61	3.86	12/48	1.91	65-538	7.39
64-539	9.08	3" x 2-1/2"	1.61	3.86	12/48	1.50	65-539	8.86
64-551	44.47	4" x 3/4"	2.15	4.90	---	4.50	65-551	16.88
64-553	21.35	4" x 1"	2.00	4.75	5/20	4.00	65-553	20.74
64-540	23.83	4" x 1-1/2"	1.82	2.68	5/20	3.91	65-540	19.39
64-541	20.42	4" x 2"	1.82	3.31	5/20	2.89	65-541	13.85
64-542	20.42	4" x 2-1/2"	2.06	3.87	5/20	2.77	65-542	16.62
64-543	17.02	4" x 3"	2.17	4.96	5/20	3.03	65-543	13.85
64-545	66.71	6" x 4"	2.33	5.79	4/8	5.69	65-545	46.54

NIPPLES & FITTINGS



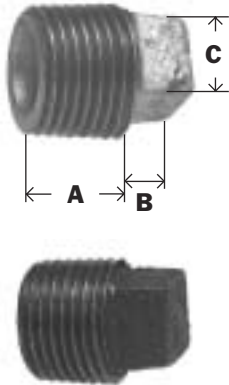
UNIONS



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-600	5.24	1/8"	1.26	30/360	0.19	65-600	4.26
64-601	5.24	1/4"	1.44	20/240	0.20	65-601	4.26
64-602	5.24	3/8"	1.61	20/240	0.35	65-602	4.26
64-603	4.37	1/2"	1.72	50/200	0.43	65-603	3.55
64-604	5.68	3/4"	1.94	35/140	0.63	65-604	4.62
64-605	6.81	1"	2.06	20/80	0.91	65-605	5.54
64-606	9.08	1-1/4"	2.26	15/60	1.35	65-606	7.39
64-607	11.92	1-1/2"	2.41	10/40	1.75	65-607	9.70
64-608	17.59	2"	2.75	6/24	2.62	65-608	14.32
64-609	28.93	2-1/2"	3.22	8/16	4.40	65-609	28.26
64-610	48.78	3"	3.50	7/14	5.63	65-610	39.71
64-611	96.44	4"	3.85	7	10.31	65-611	78.49

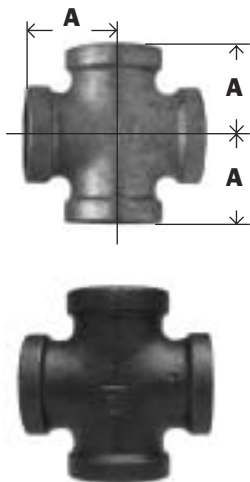
NIPPLES & FITTINGS

SQUARE HEAD PLUGS



Part # Galvanized	List Price	Size	A	B	C	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
		*1/8"	} Use steel fittings for smaller sizes - see p. ---						
		*1/4"							
		*3/8"							
64-653	0.69	1/2"	0.58	0.38	0.56	50/600	0.09	65-653	0.56
64-654	0.85	3/4"	0.65	0.44	0.63	30/360	0.13	65-654	0.83
64-655	1.13	1"	0.75	0.50	0.82	20/240	0.22	65-655	0.92
64-656	2.05	1-1/4"	0.82	0.56	0.94	40/240	0.40	65-656	1.67
64-657	2.38	1-1/2"	0.85	0.62	1.13	30/180	0.46	65-657	1.94
64-658	2.84	2"	0.91	0.68	1.31	20/120	0.74	65-658	2.31
64-659	6.81	2-1/2"	1.26	0.74	1.50	16/64	1.24	65-659	5.54
64-660	9.53	3"	1.16	0.80	1.69	16/48	1.69	65-660	6.46
64-661	17.02	4"	1.22	1.00	2.28	8/16	2.70	65-661	13.85

CROSSES



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-390	9.52	1/8"	0.65	---	0.12	65-390	8.95
64-391	3.40	1/4"	0.80	40/480	0.18	65-391	3.24
64-392	3.40	3/8"	0.95	25/300	0.27	65-392	2.77
64-393	3.40	1/2"	1.12	30/180	0.45	65-393	2.85
64-394	4.77	3/4"	1.31	20/120	0.69	65-394	3.88
64-395	6.47	1"	1.50	15/60	1.06	65-395	5.26
64-396	9.53	1-1/4"	1.75	20/40	1.56	65-396	9.05
64-397	12.94	1-1/2"	1.94	18/36	1.91	65-397	10.53
64-398	20.65	2"	2.25	10/20	3.24	65-398	14.41
64-399	5.16	2-1/2"	2.71	1/12	5.55	65-399	3.99
64-400	181.99	3"	3.06	1/8	8.00	65-400	112.37



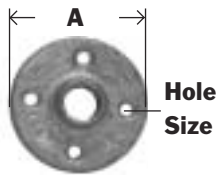
CAPS



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-472	0.95	3/8"	0.74	60/720	0.08	65-472	0.78
64-473	0.79	1/2"	0.87	50/600	0.13	65-473	0.65
64-474	0.96	3/4"	0.97	40/320	0.22	65-474	0.78
64-475	1.63	1"	1.16	25/200	0.37	65-475	1.11
64-476	2.38	1-1/4"	1.28	20/160	0.49	65-476	1.94
64-477	2.61	1-1/2"	1.33	18/108	0.64	65-477	2.12
64-478	3.36	2"	1.45	12/72	1.00	65-478	2.95
64-479	8.85	2-1/2"	1.70	28/56	1.45	65-479	7.21
64-480	12.25	3"	1.80	18/36	2.20	65-480	9.97
64-481	20.42	4"	2.08	7/21	3.75	65-481	16.62
64-482	79.42	6"	2.55	4/8	8.86	65-482	55.40

* Use steel fittings for smaller sizes. See page 208 for Galvanized and Black Steel Fitting.

FLOOR FLANGES



Part # Galvanized	List Price	Size	A	Thickness	Hole Size	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-692	3.54	1/2"	3.50	0.50	0.25	25/100	0.63	65-692	2.40
64-693	4.91	3/4"	3.50	0.63	0.25	15/90	0.75	65-693	3.99
64-694	4.76	1"	4.00	0.69	0.25	15/60	1.06	65-694	4.65
64-695	6.81	1-1/4"	4.00	0.75	0.25	10/60	1.08	65-695	5.54
64-696	7.94	1-1/2"	4.50	0.87	0.31	8/48	1.43	65-696	7.76
64-697	9.64	2"	5.50	1.00	0.31	8/32	2.23	65-697	9.42

STEEL MAGNETIC PLUGS

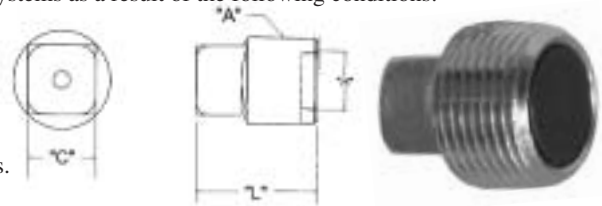
Magnetic Plugs

Steel Magnetic Drain Plugs - NPT Threaded

Magnetic Drain Plugs are similar to standard pipe or straight thread drain plugs with one important difference - a permanent magnet is fastened to the plug body. This magnet attracts and holds abrasive, ferrous metal particles preventing their circulation through the lubrication or hydraulic system.

These abrasive, ferrous metal particles appear in lubricating or hydraulic systems as a result of the following conditions:

- The constant flaking effect of normal wear of moving parts.
- Particles not removed by flushing operations after boring or machining.
- Chipping due to sub-surface casting flaws.
- Minute component breakdown caused by stress usage.



Magnetic Drain Plugs prevent excessive wear to the system's components.

Magnetic Plugs are used by numerous manufacturers of gear boxes, transmissions, engines, and hydraulic systems for the automotive, aircraft, agricultural and machinery industries. Typical applications include:

- Outbound Engines
- Earthmoving Equipment
- Combines
- Balers
- Crawler Tractors
- Lift Trucks
- Mining Equipment
- Military Vehicles
- Turbine Engines
- Truck Axles
- Heavy-Duty Transmissions

Part	Size "A"	Head Width "C"	Recess Dia. "H"	O/L Length "L"	List Price
28-996	3/8 - 18	.428 - .440	.435 - .445	.805 - .860	2.47
28-997	1/2 - 14	.553 - .565	.560 - .570	.970 - 1.04	2.97
28-998	3/4 - 14	.615 - .627	.725 - .735	1.120 - 1.170	3.75
28-999	1-11 1/2	.803 - 815	.895 - .905	1.25 - 1.33	5.66

More sizes and types available.



HEX BUSHINGS



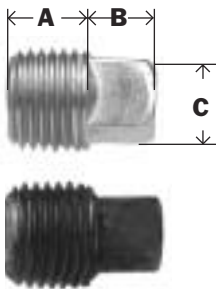
Part # Galvanized	List Price	Size M x F	A	Hex	Approx. Wt. Lbs.	Part # Black	List Price
66-500	0.98	1/4" x 1/8"	0.63	0.62	0.02	67-500	0.98
66-501	1.17	3/8" x 1/8"	0.66	0.68	0.04	67-501	0.92
66-502	1.17	3/8" x 1/4"	0.66	0.68	0.02	67-502	0.92
66-503	2.17	1/2" x 1/8"	0.80	0.87	0.10	67-503	1.70
66-504	1.57	1/2" x 1/4"	0.80	0.87	0.08	67-504	1.44
66-505	1.86	1/2" x 3/8"	0.80	0.87	0.06	67-505	1.66
66-506	3.13	3/4" x 1/8"	0.94	1.06	0.18	67-506	3.00
66-507	2.83	3/4" x 1/4"	0.94	1.06	0.14	67-507	2.57
66-508	3.00	3/4" x 3/8"	0.94	1.06	0.14	67-508	2.83
66-509	2.86	3/4" x 1/2"	0.94	1.06	0.10	67-509	2.14
66-510	5.76	1" x 1/4"	1.00	1.31	0.16	67-510	4.59
66-511	5.75	1" x 3/8"	1.00	1.31	0.26	67-511	5.32
66-512	5.10	1" x 1/2"	1.00	1.31	0.22	67-512	4.52
66-513	5.24	1" x 3/4"	1.00	1.31	0.14	67-513	4.59

CAPS



Part # Galvanized	List Price	Size	A	Hex	Approx. Wt. Lbs.	Part # Black	List Price
66-470	0.85	1/8"	0.53	0.56	0.02	67-470	0.73
66-471	0.88	1/4"	0.63	0.62	0.04	67-471	0.80
66-472	1.61	3/8"	0.69	0.81	0.06	67-472	1.52
66-473	2.50	1/2"	0.87	1.00	0.12	67-473	1.99
66-474	4.42	3/4"	0.97	1.18	0.16	67-474	3.34
66-475	6.53	1"	1.16	1.50	0.30	67-475	5.94

SQUARE HEAD PLUGS



Part # Galvanized	List Price	Size	A	B	C	Approx. Wt. Lbs.	Part # Black	List Price
		1/16"	0.33	0.18	0.22	0.01	67-669	0.32
66-670	0.32	1/8"	0.33	0.24	0.28	0.01	67-670	0.30
66-671	0.44	1/4"	0.45	0.28	0.37	0.02	67-671	0.38
66-672	0.67	3/8"	0.50	0.31	0.43	0.04	67-672	0.60
66-653	1.27	1/2"	0.59	0.38	0.55	0.12	67-653	1.08
66-654	1.80	3/4"	0.63	0.44	0.62	0.18	67-654	1.53

HEX HEAD PLUGS



Part # Galvanized	List Price	Size	A	Hex	Approx. Wt. Lbs.	Part # Black	List Price
66-770	0.40	1/8"	0.55	0.43	0.01	67-770	0.35
66-771	0.72	1/4"	0.74	0.56	0.04	67-771	0.53
66-772	1.28	3/8"	0.67	0.68	0.06	67-772	0.98
66-773	2.15	1/2"	0.80	0.70	0.12	67-773	1.66
66-774	3.07	3/4"	0.94	1.06	0.18	67-774	3.01
66-775	5.75	1"	1.00	1.31	0.22	67-775	4.06



COUNTERSUNK PLUG - Square Socket



Part # Galvanized	List Price	Size	A	Socket Size	Approx. Wt. Lbs.	Part # Black	List Price
66-630	0.34	1/8"	0.29	0.19	0.01	67-630	0.31
66-631	0.39	1/4"	0.45	0.25	0.02	67-631	0.31
66-632	0.55	3/8"	0.45	0.31	0.04	67-632	0.48
66-633	0.98	1/2"	0.59	0.38	0.08	67-633	0.75
66-634	1.57	3/4"	0.60	0.50	0.12	67-634	1.38
66-635	3.65	1"	0.75	0.50	0.16	67-635	2.85
		1-1/4"	0.80	0.75	0.32	67-636	4.90

HEX SOCKET PLUG



Part # Galvanized	List Price	Size	A	Socket Size	Approx. Wt. Lbs.	Part # Black	List Price
66-760	0.40	1/16"	0.29	0.15	0.01	67-760	0.38
66-761	0.29	1/8"	0.29	0.18	0.01	67-761	0.27
66-762	0.39	1/4"	0.44	0.25	0.02	67-762	0.36
66-763	0.55	3/8"	0.44	0.31	0.04	67-763	0.48
66-764	0.98	1/2"	0.59	0.37	0.08	67-764	0.74
66-765	1.48	3/4"	0.60	0.56	0.14	67-765	1.19
66-766	3.22	1"	0.75	0.62	0.22		

FACE BUSHING



Part # Galvanized	List Price	Size M x F	A	Approx. Wt. Lbs.	Part # Black	List Price
66-700	1.06	1/4" x 1/8"	0.44	0.01	67-700	0.96
66-701	1.24	3/8" x 1/8"	0.48	0.02	67-701	1.15
66-702	1.23	3/8" x 1/4"	0.48	0.02	67-702	1.15
		1/2" x 1/8"	0.56	0.04	67-703	1.42
66-704	1.84	1/2" x 1/4"	0.56	0.04	67-704	1.57
66-705	1.84	1/2" x 3/8"	0.56	0.04	67-705	1.80
		3/4" x 1/4"	0.62	0.12	67-707	2.53
66-708	2.71	3/4" x 3/8"	0.62	0.10	67-708	2.53
66-709	2.71	3/4" x 1/2"	0.62	0.10	67-709	2.65
		1" x 3/8"	0.75	0.18	67-711	4.37
66-712	4.83	1" x 1/2"	0.75	0.16	67-712	3.97
66-713	4.55	1" x 3/4"	0.75	0.16	67-713	3.99



BLACK & GALVANIZED SCHEDULE 80

EXTRA HEAVY WEIGHT NIPPLES 1/8" DIAMETER



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-001	4.56	Close (3/4")	59-001	2.87
58-002	5.44	1-1/2"	59-002	3.60
58-003	5.88	2"	59-003	3.60
58-004	7.06	2-1/2"	59-004	3.92
58-005	7.06	3"	59-005	4.41
58-006	7.06	3-1/2"	59-006	5.37
58-007	8.31	4"	59-007	5.37
58-008	11.32	4-1/2"	59-008	9.04
58-009	14.70	5"	59-009	9.78
58-010	15.44	5-1/2"	59-010	9.85
58-011	18.38	6"	59-011	10.44
58-012	20.21	7"	59-012	12.42
58-013	21.32	8"	59-013	14.11
58-014	23.15	9"	59-014	14.85
58-015	24.62	10"	59-015	15.80
58-016	26.46	11"	59-016	18.38
58-017	28.67	12"	59-017	20.95

EXTRA HEAVY WEIGHT NIPPLES 1/4" DIAMETER



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-020	5.29	Close (3/4")	59-020	3.38
58-021	6.10	1-1/2"	59-021	3.54
58-022	6.10	2"	59-022	4.03
58-023	7.42	2-1/2"	59-023	4.83
58-024	8.45	3"	59-024	5.07
58-025	9.19	3-1/2"	59-025	5.39
58-026	9.56	4"	59-026	5.64
58-027	10.66	4-1/2"	59-027	7.41
58-028	11.03	5"	59-028	7.81
58-029	13.52	5-1/2"	59-029	8.86
58-030	14.99	6"	59-030	11.59
58-031	20.80	7"	59-031	11.76
58-032	18.38	8"	59-032	13.45
58-033	18.38	9"	59-033	13.60
58-034	19.48	10"	59-034	14.26
58-035	20.95	11"	59-035	14.70
58-036	31.24	12"	59-036	15.44

STEEL FITTINGS

EXTRA HEAVY WEIGHT NIPPLES 3/8" DIAMETER



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-040	5.73	Close (1")	59-040	3.70
58-041	6.91	1-1/2"	59-041	4.43
58-042	6.91	2"	59-042	4.48
58-043	8.16	2-1/2"	59-043	5.15
58-044	11.27	3"	59-044	5.51
58-045	11.03	3-1/2"	59-045	6.60
58-046	11.39	4"	59-046	7.25
58-047	13.89	4-1/2"	59-047	10.47
58-048	13.97	5"	59-048	10.66
58-049	15.44	5-1/2"	59-049	10.95
58-050	16.02	6"	59-050	14.70
58-051	18.38	7"	59-051	18.38
58-052	24.92	8"	59-052	24.26
58-053	27.56	9"	59-053	4.55
58-054	29.40	10"	59-054	25.73
58-055	33.08	11"	59-055	29.40
58-056	34.91	12"	59-056	33.08

EXTRA HEAVY WEIGHT NIPPLES 1/2" DIAMETER



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-060	4.70	Close (1-1/8")	59-060	1.86
58-061	4.63	1-1/2"	59-061	2.17
58-062	5.31	2"	59-062	2.29
58-063	6.32	2-1/2"	59-063	2.58
58-064	7.25	3"	59-064	3.22
58-065	7.42	3-1/2"	59-065	3.62
58-066	8.39	4"	59-066	3.86
58-067	9.19	4-1/2"	59-067	4.19
58-068	12.08	5"	59-068	4.35
58-069	12.13	5-1/2"	59-069	4.83
58-070	13.23	6"	59-070	4.42
58-071	16.54	7"	59-071	7.08
58-072	18.38	8"	59-072	8.39
58-073	20.21	9"	59-073	8.45
58-074	22.05	10"	59-074	11.03
58-075	23.89	11"	59-075	14.70
58-076	27.56	12"	59-076	16.91

More sizes available...just ask!



STEEL FITTINGS

BLACK & GALVANIZED SCHEDULE 80

**EXTRA HEAVY WEIGHT NIPPLES
3/4" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-080	5.95	Close (1-3/8")	59-080	2.70
58-081	6.25	1-1/2"	59-081	2.67
58-082	6.62	2"	59-082	2.95
58-083	6.98	2-1/2"	59-083	3.70
58-084	7.72	3"	59-084	3.46
58-085	8.89	3-1/2"	59-085	4.44
58-086	9.19	4"	59-086	4.05
58-087	11.39	4-1/2"	59-087	5.64
58-088	12.86	5"	59-088	6.05
58-089	11.98	5-1/2"	59-089	6.60
58-090	13.60	6"	59-090	5.89
58-091	15.07	7"	59-091	8.60
58-092	18.83	8"	59-092	13.89
58-093	22.05	9"	59-093	16.54
58-094	25.73	10"	59-094	19.48
58-095	28.67	11"	59-095	20.95
58-096	31.75	12"	59-096	23.89

**EXTRA HEAVY WEIGHT NIPPLES
1-1/4" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-120	11.17	Close (1-5/8")	59-120	4.66
58-121	10.14	2"	59-121	5.49
58-122	11.61	2-1/2"	59-122	6.28
58-123	12.64	3"	59-123	6.92
58-124	13.82	3-1/2"	59-124	7.65
58-125	13.74	4"	59-125	8.29
58-126	14.70	4-1/2"	59-126	9.02
58-127	18.82	5"	59-127	9.66
58-128	20.21	5-1/2"	59-128	10.47
58-129	23.08	6"	59-129	11.11
58-130	24.99	7"	59-130	13.67
58-131	25.73	8"	59-131	18.45
58-132	28.81	9"	59-132	16.54
58-133	27.56	10"	59-133	17.71
58-134	29.40	11"	59-134	18.38
58-135	33.08	12"	59-135	20.21

NIPPLES & FITTINGS

**EXTRA HEAVY WEIGHT NIPPLES
1" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-100	9.74	Close (1-1/2")	59-100	3.11
58-101	10.06	2"	59-101	3.73
58-102	9.56	2-1/2"	59-102	4.59
58-103	9.56	3"	59-103	4.35
58-104	10.73	3-1/2"	59-104	5.64
58-105	12.50	4"	59-105	5.66
58-106	13.52	4-1/2"	59-106	7.08
58-107	14.26	5"	59-107	7.57
58-108	15.07	5-1/2"	59-108	8.29
58-109	17.71	6"	59-109	7.94
58-110	16.54	7"	59-110	11.76
58-111	27.20	8"	59-111	13.43
58-112	32.85	9"	59-112	13.82
58-113	40.43	10"	59-113	14.92
58-114	50.31	11"	59-114	16.46
58-115	55.13	12"	59-115	18.68

**EXTRA HEAVY WEIGHT NIPPLES
1-1/2" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-140	13.08	Close (1-3/4")	59-140	6.44
58-141	14.70	2"	59-141	6.84
58-142	15.44	2-1/2"	59-142	7.57
58-143	7.50	3"	59-143	6.14
58-144	16.91	3-1/2"	59-144	8.94
58-145	18.15	4"	59-145	10.06
58-146	20.21	4-1/2"	59-146	11.67
58-147	19.85	5"	59-147	12.48
58-148	22.05	5-1/2"	59-148	13.28
58-149	23.23	6"	59-149	14.17
58-150	23.52	7"	59-150	17.42
58-151	24.26	8"	59-151	21.24
58-152	29.33	9"	59-152	22.42
58-153	31.24	10"	59-153	23.15
58-154	33.08	11"	59-154	24.70
58-155	36.75	12"	59-155	25.95



BLACK & GALVANIZED SCHEDULE 80

STEEL FITTINGS

**EXTRA HEAVY WEIGHT NIPPLES
2" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-160	20.04	Close (2")	59-160	7.73
58-161	17.20	2-1/2"	59-161	10.22
58-162	19.77	3"	59-162	9.80
58-163	22.05	3-1/2"	59-163	12.06
58-164	23.74	4"	59-164	11.73
58-165	27.49	4-1/2"	59-165	14.34
58-166	29.03	5"	59-166	16.26
58-167	23.15	5-1/2"	59-167	18.11
58-168	30.94	6"	59-168	19.93
58-169	52.41	7"	59-169	21.61
58-170	60.64	8"	59-170	22.89
58-171	67.25	9"	59-171	28.67
58-172	73.13	10"	59-172	29.10
58-173	79.82	11"	59-173	38.59
58-174	79.01	12"	59-174	46.04

**EXTRA HEAVY WEIGHT NIPPLES
3" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-200	44.84	Close (2-5/8")	59-200	42.04
58-201	58.80	3"	59-201	46.89
58-202	66.15	3-1/2"	59-202	52.55
58-203	85.81	4"	59-203	60.38
58-204	81.22	4-1/2"	59-204	58.80
58-205	84.91	5"	59-205	60.64
58-206	87.39	5-1/2"	59-206	64.83
58-207	101.99	6"	59-207	77.92
58-208	104.37	7"	59-208	78.50
58-209	108.41	8"	59-209	81.07
58-210	115.10	9"	59-210	94.74
58-211	124.73	10"	59-211	105.40
58-212	129.07	11"	59-212	117.31
58-213	134.36	12"	59-213	108.12

**EXTRA HEAVY WEIGHT NIPPLES
2-1/2" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-180	49.54	Close (2-1/2")	59-180	34.47
58-181	51.45	3"	59-181	36.75
58-182	57.70	3-1/2"	59-182	45.50
58-183	60.64	4"	59-183	45.50
58-184	58.80	4-1/2"	59-184	52.85
58-185	60.64	5"	59-185	55.13
58-186	66.15	5-1/2"	59-186	57.70
58-187	73.13	6"	59-187	58.80
58-188	79.23	7"	59-188	62.77
58-189	81.95	8"	59-189	64.97
58-190	87.17	9"	59-190	72.40
58-191	88.64	10"	59-191	74.60
58-192	102.09	11"	59-192	80.12
58-193	111.18	12"	59-193	84.53

**EXTRA HEAVY WEIGHT NIPPLES
4" DIAMETER**



Galvanized			Black	
Part #	List Price	Length	Part #	List Price
58-220	98.49	Close (2-7/8")	59-220	68.97
58-221	108.78	4"	59-221	78.42
58-222	117.45	4-1/2"	59-222	86.73
58-223	122.01	5"	59-223	88.05
58-224	129.21	5-1/2"	59-224	94.82
58-225	137.67	6"	59-225	104.25
58-226	140.61	7"	59-226	102.90
58-227	151.31	8"	59-227	103.78
58-228	162.52	9"	59-228	113.93
58-229	204.33	10"	59-229	123.48
58-230	273.71	11"	59-230	200.21
58-231	332.96	12"	59-231	226.90

NIPPLES & FITTINGS



MALLEABLE FITTINGS

300 LB Fittings ASTM: A197 ANSI: B16.3, B16.4
90° ELBOWS

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-101	20.04	1/4"	69-101	12.88
68-102	19.32	3/8"	69-102	9.19
68-103	26.54	1/2"	69-103	11.64
68-104	30.99	3/4"	69-104	13.61
68-105	50.31	1"	69-105	17.21
68-106	54.74	1-1/4"	69-106	25.49
68-107	57.56	1-1/2"	69-107	27.67
68-108	94.99	2"	69-108	35.12

45° ELBOWS

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-181	26.75	1/4"	69-181	16.10
68-182	29.30	3/8"	69-182	16.24
68-183	32.20	1/2"	69-183	19.85
68-184	42.18	3/4"	69-184	21.32
68-185	43.15	1"	69-185	23.96
68-186	61.15	1-1/4"	69-186	33.08
68-187	73.06	1-1/2"	69-187	44.10
68-188	89.89	2"	69-188	65.72

90° STREET ELBOWS

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-161	24.12	1/4"	69-161	13.89
68-162	23.75	3/8"	69-162	14.63
68-163	25.73	1/2"	69-163	18.83
68-164	37.86	3/4"	69-164	26.73
68-165	57.96	1"	69-165	33.14
68-166	72.45	1-1/4"	69-166	39.63
68-167	97.24	1-1/2"	69-167	51.92
68-168	116.87	2"	69-168	69.65

TEES

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-252	25.06	3/8"	69-252	14.41
68-253	34.04	1/2"	69-253	16.07
68-254	37.85	3/4"	69-254	20.51
68-255	49.51	1"	69-255	18.51
68-256	66.60	1-1/4"	69-256	29.77
68-257	67.42	1-1/2"	69-257	43.71
68-258	110.72	2"	69-258	43.48

More sizes available...just ask!

EXTRA HEAVY 300# MALLEABLE IRON

300 LB Fittings ASTM: A197 ANSI: B16.3, B16.4
COUPLINGS

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-411	14.80	1/4"	69-411	11.61
68-412	17.89	3/8"	69-412	17.42
68-413	21.07	1/2"	69-413	12.96
68-414	25.86	3/4"	69-414	12.96
68-415	27.39	1"	69-415	13.52
68-416	32.92	1-1/4"	69-416	18.48
68-417	36.06	1-1/2"	69-417	24.08
68-418	59.54	2"	69-418	40.89

REDUCING COUPLING

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-432	21.39	3/8 x 1/4"	69-432	12.17
68-434	21.39	1/2 x 1/4"	69-434	11.54
68-435	25.92	1/2 x 3/8"	69-435	14.67
68-438	31.40	3/4 x 1/2"	69-438	22.34
68-441	29.14	1 x 1/2"	69-441	31.88
68-442	40.73	1 x 3/4"	69-442	31.88

CAPS

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-471	13.97	1/4"	69-471	9.56
68-472	21.32	3/8"	69-472	11.83
68-473	23.35	1/2"	69-473	10.80
68-474	20.36	3/4"	69-474	11.81
68-475	27.78	1"	69-475	16.99
68-476	27.69	1-1/4"	69-476	18.38
68-477	53.07	1-1/2"	69-477	28.89
68-478	64.17	2"	69-478	34.91

UNIONS

Galvanized			Black	
Part #	List Price	Size	Part #	List Price
68-600	36.53	1/8"	69-600	26.75
68-601	34.18	1/4"	69-601	26.61
68-602	38.24	3/8"	69-602	26.61
68-603	44.44	1/2"	69-603	19.11
68-604	54.94	3/4"	69-604	19.92
68-605	71.16	1"	69-605	26.48
68-606	73.74	1-1/4"	69-606	53.43
68-607	80.51	1-1/2"	69-607	55.93
68-608	96.36	2"	69-608	75.91

NIPPLES & FITTINGS



3000 LB FORGED STEEL THREADED FITTINGS

ASTM: A105 ANSI: B16.11

90° ELBOWS



Part #	Size	List Price
101-103	1/2"	14.33
101-104	3/4"	15.25
101-105	1"	20.76
101-106	1-1/4"	38.98
101-107	1-1/2"	54.10
101-108	2"	74.58

CROSS



Part #	Size	List Price
101-393	1/2"	43.44
101-394	3/4"	65.64
101-395	1"	92.66
101-396	1-1/4"	112.95
101-397	1-1/2"	156.51
101-398	2"	208.44

COUPLINGS



Part #	Size	List Price
101-413	1/2"	5.06
101-414	3/4"	7.41
101-415	1"	12.53
101-416	1-1/4"	19.07
101-417	1-1/2"	24.67
101-418	2"	29.50

STREET ELBOWS



Part #	Size	List Price
101-163	1/2"	22.41
101-164	3/4"	30.11
101-165	1"	35.65
101-166	1-1/4"	58.34
101-167	1-1/2"	73.74
101-168	2"	126.20

HALF COUPLINGS



Part #	Size	List Price
101-773	1/2"	3.09
101-774	3/4"	4.19
101-775	1"	5.81
101-776	1-1/4"	8.01
101-777	1-1/2"	11.91
101-778	2"	17.30

REDUCING COUPLINGS

Part #	Size	List Price
101-435	1/2 x 3/8	11.33
101-434	1/2 x 1/4	9.12
101-438	3/4 x 1/2	10.29
101-437	3/4 x 3/8	9.92
101-442	1 x 3/4	17.42
101-441	1 x 1/2	14.10
101-440	1 x 3/8	14.10
101-446	1-1/4 x 1	27.49
101-445	1-1/4 x 3/4	22.20
101-444	1-1/4 x 1/2"	22.16
101-443	1-1/4 x 3/8"	22.16
101-450	1-1/2 x 1-1/4"	31.48
101-449	1-1/2 x 1"	25.34
101-447	1-1/2 x 1/2"	25.34
101-454	2 x 1-1/2"	45.64
101-453	2 x 1-1/4"	45.64
101-452	2 x 1"	45.50
101-451	2 x 3/4"	36.75
101-458	2x 1/2"	36.75

45° ELBOWS



Part #	Size	List Price
101-183	1/2"	16.98
101-184	3/4"	22.33
101-185	1"	30.94
101-186	1-1/4"	36.90
101-187	1-1/2"	60.36
101-188	2"	76.44

CAPS



Part #	Size	List Price
101-473	1/2"	5.87
101-474	3/4"	7.79
101-475	1"	12.11
101-476	1-1/4"	19.85
101-477	1-1/2"	10.46
101-478	2"	34.15

TEES



Part #	Size	List Price
101-253	1/2"	17.65
101-254	3/4"	24.70
101-255	1"	29.53
101-256	1-1/4"	60.95
101-257	1-1/2"	71.10
101-258	2"	100.71

UNIONS



Part #	Size	List Price
101-603	1/2	21.60
101-604	3/4	25.50
101-605	1	28.66
101-606	1-1/4	56.89
101-607	1-1/2	64.90
101-608	2	79.16

2000 and 6000 lb threaded and socketweld fittings available on special order basis.

More sizes available...just ask!



1/2" BAND CLAMPS



Applications: A general purpose clamp for automobiles, plumbing, home and garden general clamping applications, with anti-corrosive properties varying with the number of components made from stainless steel.



600 Series

- 5/16" Hex Slotted Carbon Steel Screw
- 1/2" Wide 201 Stainless Steel Band
- Carbon Steel Housing

611 Series

- 5/16" Hex Slotted Carbon Steel Screw
- 1/2" Wide 201 Stainless Steel Band
- 301 Stainless Steel Housing

#	Dia. Range		Part #	List Price	Part #	List Price
	Min.	Max.				
6	3/8"	7/8"	600-006	1.44	611-006	1.37
8	7/16"	1"	600-008	1.23	611-008	1.53
10	9/16"	1-1/16"	600-010	1.45	611-010	1.37
12	9/16"	1-1/4"	600-012	1.24	611-012	1.38
16	11/16"	1-1/2"	600-016	1.24	611-016	1.20
20	3/4"	1-3/4"	600-020	1.46	611-020	1.63
24	1-1/16"	2"	600-024	1.31	611-024	1.63
28	1-5/16"	2-1/4"	600-028	1.47	611-028	1.68
32	1-9/16"	2-1/2"	600-032	1.47	611-032	1.68
36	1-13/16"	2-3/4"	600-036	1.54	611-036	1.70
40	2-1/16"	3"	600-040	1.73	611-040	1.73
44	2-5/16"	3-1/4"	600-044	1.92	611-044	2.18
48	2-9/16"	3-1/2"	600-048	1.92	611-048	2.18
52	2-13/16"	3-3/4"	600-052	2.11	611-052	2.40
56	3-1/16"	4"	600-056	2.11	611-056	2.40
60	3-5/16"	4-1/4"	600-060	2.18	611-060	2.48
64	2-1/2"	4-1/2"	600-064	1.87	611-064	2.12
72	3"	5"	600-072	1.99	611-072	2.63
80	3-1/2"	5-1/2"	600-080	2.31	611-080	2.77
88	4"	6"	600-088	2.63	611-088	2.99
96	4-1/2"	6-1/2"	600-096	2.86	611-096	3.24
104	5"	7"	600-104	2.88	611-104	3.26
116	5-3/4"	7-3/4"			611-116	3.70
128	6-1/2"	8-1/2"			611-128	5.11
152	2"	10"			611-152	4.21
164	1-3/4"	10-3/4"			611-164	4.42
176	9-1/4"	11-1/4"			611-176	4.42
188	2-1/16"	12-1/4"			611-188	4.82
200	11"	13"			611-200	5.04
212	11-3/4"	13-3/4"			611-212	5.19
224	12-1/2"	14-1/2"			611-224	5.39
248	1-3/4"	16"			611-248	5.42
270	15-3/8"	17-3/8"			611-270	5.78
312	18"	20"			611-312	5.90
332	19-1/8"	21-1/4"			611-332	6.23
390	22-7/8"	24-7/8"			611-390	6.50

CLAMPS

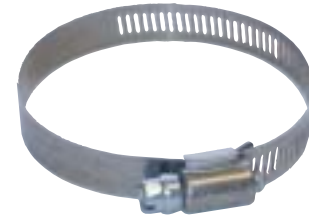


1/2" BAND CLAMPS

•Use for marine, underground and other high corrosive application

620 Series

- 5/16" Hex Slotted 305 Stainless Steel Screw
- 1/2" Wide 301 Stainless Steel Band
- 301 Stainless Steel Housing



#	Dia. Range		Part #	List Price
	Min.	Max.		
6	3/8"	7/8"	620-006	1.42
8	7/16"	1"	620-008	2.26
10	9/16"	1-1/16"	620-010	1.95
12	9/16"	1-1/4"	620-012	1.69
16	11/16"	1-1/2"	620-016	1.49
20	3/4"	1-3/4"	620-020	1.52
24	1-1/16"	2"	620-024	2.07
28	1-5/16"	2-1/4"	620-028	2.43
32	1-9/16"	2-1/2"	620-032	1.98
36	1-13/16"	2-3/4"	620-036	2.14
40	2-1/16"	3"	620-040	2.57
44	2-5/16"	3-1/4"	620-044	2.86
48	2-9/16"	3-1/2"	620-048	3.13
52	2-13/16"	3-3/4"	620-052	3.51
56	3-1/16"	4"	620-056	3.51
60	3-5/16"	4-1/4"	620-060	3.68
64	2-1/2"	4-1/2"	620-064	2.47
72	3"	5"	620-072	2.71
80	3-1/2"	5-1/2"	620-080	4.24
88	4"	6"	620-088	3.64
96	4-1/2"	6-1/2"	620-096	4.08
104	5"	7"	620-104	4.12
116	5-3/4"	7-3/4"	620-116	4.90
128	6-1/2"	8-1/2"	620-128	5.28
152	2"	10"	620-152	6.05
164	1-3/4"	10-3/4"	620-164	6.05
176	9-1/4"	11-1/4"	620-176	6.07
188	2-1/16"	12-1/4"	620-188	6.37
200	11"	13"	620-200	6.62
212	11-3/4"	13-3/4"	620-212	6.84
224	12-1/2"	14-1/2"	620-224	6.35
248	1-3/4"	16"	620-248	7.47
270	15-3/8"	17-3/8"	620-270	7.50
312	18"	20"	620-312	6.84
332	19-1/8"	21-1/4"	620-332	8.21
390	22-7/8"	24-7/8"	620-390	8.64

CLAMPS



MINIATURE CLAMPS - 5/16" BAND

Applications: For marine, agricultural, industrial and automotive uses.
Corrosion resistance varies with stainless components.

Mechanically interlocked, 3 piece construction for service sealing pressure without spot welding.

300 Series

- 1/4" Hex Slotted Carbon Steel Screw
- 5/16" Wide 301 Stainless Steel Band
- Carbon Steel Housing



Dia. Range		Part #	List Price
Min.	Max.		
7/32"	5/8"	300-004	1.06
7/16"	11/16"	300-005	1.24
5/16"	7/8"	300-006	1.06
7/16"	1"	300-008	1.29
1/2"	1-1/16"	300-010	1.29
9/16"	1-1/4"	300-012	1.16
11/16"	1-1/2"	300-016	1.38
7/8"	1-3/4"	300-020	1.37

325 Series

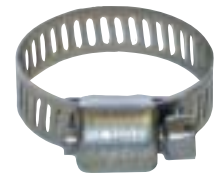
- 1/4" Hex Slotted Carbon Steel Screw
- 5/16" Wide 301 Stainless Steel Band
- 301 Stainless Steel Housing



Dia. Range		Part #	List Price
Min.	Max.		
7/32"	5/8"	325-004	0.69
7/16"	11/16"	325-005	1.42
5/16"	7/8"	325-006	0.77
7/16"	1"	325-008	1.48
1/2"	1-1/16"	325-010	1.48
9/16"	1-1/4"	325-012	1.51
11/16"	1-1/2"	325-016	1.51
7/8"	1-3/4"	325-020	1.54

350 Series

- 1/4" Hex Slotted 410 Stainless Steel Screw
- 5/16" Wide 301 Stainless Steel Band
- 301 stainless Steel Housing



Dia. Range		Part #	List Price
Min.	Max.		
7/32"	5/8"	350-004	0.79
7/16"	11/16"	350-005	1.65
5/16"	7/8"	350-006	0.80
7/16"	1"	350-008	1.50
1/2"	1-1/16"	350-010	1.50
9/16"	1-1/4"	350-012	1.54
11/16"	1-1/2"	350-016	1.54
7/8"	1-3/4"	350-020	1.56

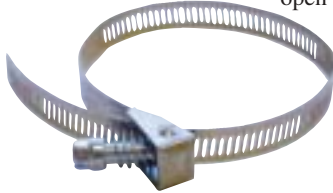
CLAMPS



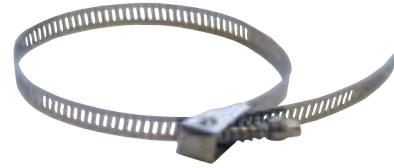
QUICK RELEASE 500/550 SERIES

These clamps feature a unique quick release design between the one piece housing and band allowing for quick and easy installation in restricted or difficult areas.

Applications: Quick release action permits easy installation in applications where clamp must be opened to be applied. Quick release clamps are used extensively in the telecommunications industry on cable enclosures where open air application demands durability.



Open/Close design allows easy installation.



500 Series

- 5/16" Hex Slotted Carbon Steel Screw
- 1/2" 301 Stainless Steel band
- 301 Stainless Steel Housing
- 410 Stainless Steel Bridge

550 Series

- 5/16" Hex Slotted 410 Stainless Steel Screw
- 1/2" 301 Stainless Steel band
- 301 Stainless Steel Housing
- 410 Stainless Steel Bridge

CLAMPS

#	Dia. Range		Part #	List Price	Part #	List Price
	Min.	Max.				
12	1/2"	1-1/4"	500-012	1.99	550-012	2.65
20	3/4"	1-3/4"	500-020	1.03	550-020	2.80
28	1"	2-1/4"	500-028	2.07	550-028	3.01
36	1"	2-3/4"	500-036	2.10	550-036	3.12
48	1-1/2"	3-1/2"	500-048	2.65	550-048	3.69
56	1"	4"	500-056	3.02	550-056	4.02
72	2"	5"	500-072	3.23	550-072	4.63
88	2-1/16"	6"	500-088	3.93	550-088	5.09
104	1-3/4"	7"	500-104	3.98	550-104	5.64
128	1-3/4"	8-9/16"	500-128	4.71	550-128	4.74
152	2"	10"	500-152	5.00	550-152	5.57
188	2-1/16"	12-5/16"	500-188	3.60	550-188	9.09
216	10-3/16"	14"	500-216	5.99	550-216	6.43
248	1-3/4"	16"	500-248	6.30	550-248	7.19
280	14-1/4"	18"	500-280	7.49	550-280	7.54
312	14"	20"			550-312	11.67

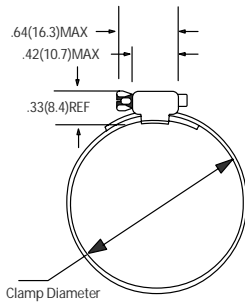
15 Things You Probably Never Knew or Thought About

1. At least 5 people in this world love you so much they would die for you.
2. At least 15 people in this world love you in some way.
3. The only reason anyone would ever hate you is because they want to be just like you.
4. A smile from you can bring happiness to anyone, even if they don't like you.
5. Every night, SOMEONE thinks about you before they go to sleep.
6. You mean the world to someone.
7. If not for you, someone may not be living.
8. You are special and unique.
9. Someone that you don't even know exists loves you.
10. When you make the biggest mistake ever, something good come from it.
11. When you think the world has turned its back on you, take a look: you most likely turned your back on the world.
12. When you think you have no chance of getting what you want, you probably won't get it, but if you believe in yourself, probably, sooner or later, you will get it.
13. Always remember the compliments you received. Forget about the rude remarks.
14. Always tell someone how you feel about them; you will feel much better when they know.
15. If you have a great friend, take the time to let them know that they are great.

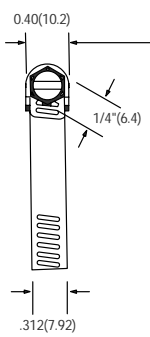
HOSE CLAMPS

ECONOMY WORM GEAR CLAMPS

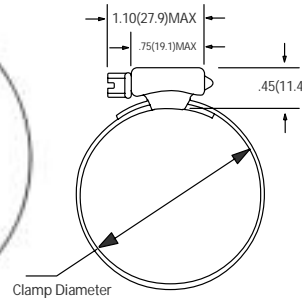
WORM GEAR HOSE CLAMPS 830 Series



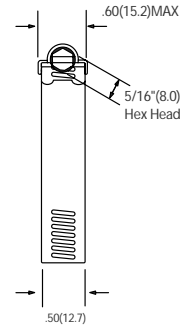
MINI CLAMP
Screw: 1/4" hex-head
Band: 5/16" wide



Interlock Construction
no welds, no bumps, which strengthens under tension to ensure maximum torque application



REGULAR CLAMP
Screw: 5/16" hex-head
Band: 1/2" wide



No.	Diameter Range		Min. Pcs.	Use for General Industrial Application			
	Inch	MM		All Galvanized Steel		400 Series Stainless Steel Band, Housing and Screw	
	Min-Max	Min-Max		Part #	List	Part #	List
Mini Clamp with 8 mm wide Band (5/16")							
4	7/32"-5/8"	6-16	100	830-185	0.40	830-185S	0.61
6	7/16"-3/4"	11-20	100	830-184	0.40	830-184S	0.62
8	1/2"-7/8"	13-23	100	830-183	0.40	830-183S	0.62
Regular Clamp with 12.7 mm (1/2") wide Band							
10	9/16"-1 1/16"	14-27	100	830-188	0.74	830-188S	0.82
12	11/16"-1 1/4"	18-32	100	830-189	0.57	830-189S	0.83
16	13/16"-1 1/2"	21-38	100	830-190	0.82	830-190S	0.88
20	13/16"-1 3/4"	21-44	100	830-192	0.59	830-192S	0.94
24	1 1/16"-2"	27-51	100	830-193	0.69	830-193S	1.07
28	15/16"-2 1/4"	33-57	100	830-194	0.71	830-194S	1.13
32	19/16"-2 1/2"	40-63	100	830-132	0.72	830-132S	1.17
36	1 13/16"-2 3/4"	46-70	100	830-195	1.00	830-195S	1.25
40	2 1/16"-3"	52-76	100	830-182	0.79	830-182S	1.25
44	2 5/16"-3 1/4"	59-82	100	830-196	0.81	830-196S	1.32
48	2 9/16"-3 3/4"	65-89	100	830-197	0.96	830-197S	1.45
52	2 13/16"-3 3/4"	72-95	100	830-152	1.12	830-152S	1.49
56	3 1/16"-4"	78-101	100	830-198	0.98	830-198S	1.53
60	3 5/16"-4 1/4"	84-108	100	830-060	1.21	830-060S	1.62
64	3 9/16"-4 1/2"	91-114	100	830-064	0.99	830-064S	1.84
72	4 1/8"-5"	105-127	100	830-072	1.07	830-072S	1.98
80	4 5/8"-5 1/2"	118-140	100	830-080	1.09	830-080S	2.13
88	5 1/8"-6"	130-152	100	830-288	1.11	830-288S	2.35
96	5 5/8"-6 1/2"	143-165	100	830-096	1.11	830-096S	2.50
104	6 1/8"-7"	155-178	100	830-009	1.11	830-009S	2.50



T-Bolt Clamps

- All designs meet SAE J1508 specifications.
- .025" Band Thickness
- 3/4" Wide Band
- Band Material: 300 Series Stainless Steel
- Bolt Material: 300 Series Stainless Steel
- Nut Material: 300 Series Stainless Steel
- Nuts are Self-locking
- Torque Rating 75 in/lb



Purpose: To provide a quick, yet effective means of clamping a variety of fittings to a wide range of hose. T-Bolts can be applied with a standard 7/16" socket wrench. They provide 360° sealing surface by using a shoe or formed bridge.

Services: The T-Bolt clamp is a high strength, reliable clamp with numerous applications in both the commercial and industrial markets including hose and ductwork connections for air, oil, water and other types of low pressure fluid lines.

Opens 1/16" above and tightens 1/8" smaller than nominal I.D. for a total of 3/16" range for clamps sizes 150 through 250. Opens 1/16" above and tightens 7/32" smaller than nominal I.D. for clamps sizes 256 through 750

Nominal Size	O.D. Range		Part#	List Price
	From:	To:		
1-1/4	1-5/32"	1-15/32"	840-131	3.31
1-1/2	1-3/8"	1-9/16"	840-150	2.90
1-3/4	1-5/8"	1-13/16"	840-175	3.53
1-7/8	1-3/4"	1-15/16"	840-188	3.53
2	1-7/8"	2-1/16"	840-200	3.06
2-1/4	2-1/8"	2-5/16"	840-225	3.60
2-3/8	2-1/4"	2-7/16"	840-238	3.12
2-1/2	2-3/8"	2-9/16"	840-250	3.87
2-9/16	2-11/32"	2-5/8"	840-256	3.79
2-5/8	2-13/32"	2-11/16"	840-263	3.82
2-3/4	2-17/32"	2-13/16"	840-275	3.86
2-7/8	2-21/32"	2-15/16"	840-288	3.90
3	2-25/32"	3-1/16"	840-300	3.40
3-1/8	2-29/32"	3-3/16"	840-312	4.04
3-1/4	3-1/32"	3-5/16"	840-325	4.12
3-1/2	3-9/32"	3-9/16"	840-350	3.77
3-3/4	3-17/32"	3-13/16"	840-375	4.26
3-53/64	3-19/32"	3-7/8"	840-382	4.30
4	3-25/32"	4-1/16"	840-400	4.29
4-1/4	4-1/32"	4-5/16"	840-425	4.41
4-1/2	4-9/32"	4-9/16"	840-450	4.48
4-3/4	4-17/32"	4-13/16"	840-475	4.63
5	4-25/32"	5-1/16"	840-500	4.70
5-1/4	5-1/32"	5-5/16"	840-525	4.78
5-1/2	5-9/32"	5-9/16"	840-550	5.00
5-3/4	5-17/32"	5-13/16"	840-575	4.92
6	5-25/32"	6-1/16"	840-600	5.00
6-1/4	6-1/32"	6-5/16"	840-625	5.15
6-1/2	6-9/32"	6-9/16"	840-650	5.22
6-3/4	6-17/32"	6-13/16"	840-675	5.29
7	6-25/32"	7-1/16"	840-700	5.37
7-1/2	7-9/32"	7-9/16"	840-750	5.44
8	7-25/32"	8-1/16"	840-800	5.66
8-1/4	8-9/32"	8-9/16"	840-850	6.62
8-7/8	8-21/32"	8-15/16"	840-888	6.17
10-7/8	10-21/32"	10-15/16"	840-1088	6.47
12-7/8	12-15/16"	12-15/16"	840-1288	7.06

CLAMPS



1 EAR CLAMPS

CARBON STEEL 1-EAR CLAMPS

1-Ear Clamps are intended for low pressures applications such as automotive (not fuel lines), appliances, industrial machinery, underground irrigation systems and beverage dispensing equipment. They are specifically designed for mass production applications where inexpensive clamps are needed.

Pressure:

As a guideline, 1-Ear Clamps have held 30 bar - 441 psi.
This was done using a static water pressure test.



100 pc. minimum per clamp

Material:

Hot dipped galvanized carbon steel band - G90

Part #	Ref#	Nominal Size	Inches		List Price
			Close	Open	
1050000	105	3/8"	0.350	0.414	0.46
1050001	113	7/16"	0.381	0.444	0.42
1050002	123	15/32"	0.394	0.486	0.42
1050003	133	1/2"	0.453	0.524	0.42
1050006	140	35/64"	0.472	0.551	0.49
1050007	145	9/16"	0.496	0.571	0.43
1050008	157	5/8"	0.543	0.618	0.43
1050009	170	11/16"	0.594	0.669	0.43
1050010	185	23/32"	0.618	0.728	0.43
1050011	198	3/4"	0.669	0.779	0.39
1050012	210	13/16"	0.716	0.827	0.44
1050013	226	7/8"	0.779	0.890	0.45
1050014	241	15/16"	0.839	0.949	0.45
1050015	256	1"	0.898	1.008	0.40
1050016	271	1-1/16"	0.945	1.067	0.41
1050017	286	1-1/8"	1.004	1.126	0.57
1050018	301	1-3/16"	1.063	1.185	0.57
1050020	331	1-5/16"	1.181	1.303	0.57
1050021	346	1-3/8"	1.240	1.362	0.54
1050023	376	1-15/32"	1.358	1.480	0.57
1050025	396	1-9/16"	1.437	1.559	0.68
1050026	410	1-5/8"	1.492	1.614	0.60
1050027	425	1-11/16"	1.551	1.673	0.62
1050028	440	1-23/32"	1.610	1.732	0.65
1050029	455	1-3/4"	1.669	1.791	0.65
1050030	470	1-16/16"	1.728	1.850	0.67
1050031	485	1-7/8"	1.787	1.909	0.68
1050032	500	1-15/16"	1.846	1.968	0.70
1050033	515	2"	1.905	2.028	0.72

ONE PIECE 1-EAR CLAMPS

- Smooth inner band surface protects hose other material when subjected to pulsation, expansion, or contraction
- One piece design offers quick and easy installation
- Used in places where clamping a second ear is impractical
- For air and fluid media lines

HOSE CLAMPS



100 pc. minimum per clamp

Material:

- Zinc plated-steel SAE 1008/1010 or DIN 1.0338
- Stainless steel UNS S30400 or DIN 1.4301

ZINC PLATED CARBON STEEL

Part #	Nominal Size	Inches		Band Width	List Price
		Close	Open		
10300052	1/8"	0.114	0.130	0.118	0.81
10300053	9/64"	0.118	0.138	0.118	0.81
10300054	5/32"	0.130	0.161	0.157	0.81
10300055	3/16"	0.161	0.201	0.157	0.81
10300056	15/64"	0.201	0.240	0.157	0.81
10300057	1/4"	0.220	0.260	0.157	0.72
10300008	9/32"	0.240	0.276	0.197	0.81
10300010	5/16"	0.268	0.315	0.197	0.81
10300012	11/32"	0.295	0.343	0.236	0.81
10300061	3/8"	0.311	0.374	0.276	0.81
10300016	25/64"	0.335	0.394	0.236	0.81
10300062	13/32"	0.351	0.413	0.256	0.76
10300063	27/64"	0.370	0.433	0.256	0.81
10300019	7/16"	0.376	0.445	0.236	0.81
10300064	29/64"	0.398	0.465	0.236	0.81
10300021	15/32"	0.398	0.472	0.276	0.81
10300022	31/64"	0.406	0.484	0.236	0.81
10300065	1/2"	0.425	0.504	0.236	0.81
10300066	33/64"	0.448	0.524	0.276	0.81
10300026	35/64"	0.476	0.551	0.276	0.81
10300068	9/16"	0.492	0.571	0.236	0.81
10300071	5/8"	0.555	0.630	0.295	0.81
10300073	11/16"	0.602	0.689	0.236	0.89

STAINLESS STEEL

Part #	Nominal Size	Inches		Band Width	List Price
		Close	Open		
15300000	1/8"	0.114	0.130	0.118	0.87
15300001	9/64"	0.118	0.138	0.118	0.92
15300002	5/32"	0.130	0.161	0.157	0.81
15300003	3/16"	0.161	0.201	0.157	0.92
15300004	15/64"	0.201	0.240	0.157	0.92
15300005	1/4"	0.221	0.260	0.157	0.92
15300006	9/32"	0.240	0.276	0.197	0.83
15300008	5/16"	0.268	0.315	0.197	0.92
15300010	11/32"	0.295	0.343	0.236	0.92
15300012	3/8"	0.319	0.374	0.276	0.88
15300013	25/64"	0.335	0.394	0.236	0.88
15300014	13/32"	0.369	0.413	0.256	0.31
15300015	27/64"	0.370	0.433	0.256	0.98
15300016	7/16"	0.376	0.445	0.236	0.88
15300017	29/64"	0.398	0.465	0.236	1.02
15300018	15/32"	0.398	0.472	0.276	1.07
15300019	31/64"	0.406	0.484	0.236	1.07
15300020	1/2"	0.425	0.504	0.236	1.07
15300021	33/64"	0.448	0.524	0.276	0.04
15300023	35/64"	0.476	0.551	0.276	0.98
15300024	9/16"	0.492	0.571	0.236	0.89
15300027	5/8"	0.543	0.630	0.295	0.94
15300030	11/16"	0.602	0.689	0.236	1.27

100 pc. minimum per clamp

CLAMPS



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EAR CLAMPS

2-EAR CLAMPS

2-Ear Clamps are especially suited for industrial use and with heavily vibrating equipment.

This is a medium pressure clamp and is widely used for maintenance and OEM applications. Rubber hose, plastic tubing, coaxial and electrical cable, rope, etc. are all easily clamped. These clamps are installed on air, fluid, gas and steam lines. The one piece design offers a positive, tamper-proof seal without damaging the hose.

PRESSURE:

As a guideline, 2-Ear Clamps successfully seal at 54 bar - 800 psi with 35 pulsating strokes a minute.

MATERIAL:

Zinc plated carbon steel

SAE 1008/1010 or DIN 1.0338

Stainless steel tubing

UNS S30400 or DIN 1.4301



100 pc. minimum per clamp

Note: When ordering your 2-Ear Clamps select nominal clamp size nearest to, but always larger than, O.D. of material to be clamped after insert has been fitted.

ZINC PLATED CARBON STEEL

Part #	Nominal Size	Inches		List Price ea.
		Close	Open	
1010002	3/16"	0.134	0.197	0.43
1010004	1/4"	0.197	0.276	0.88
1010008	5/16"	0.276	0.354	0.85
1010011	3/8"	0.319	0.433	0.98
1010016	1/2"	0.425	0.512	0.87
1010019	9/16"	0.492	0.591	0.93
1010022	19/32"	0.551	0.669	1.08
1010024	5/8"	0.591	0.709	0.81
1010027	3/4"	0.638	0.787	1.02

STAINLESS STEEL

Part #	Nominal Size	Inches		List Price ea.
		Close	Open	
1510003	1/4"	0.197	0.276	0.34
1510004	5/16"	0.276	0.354	1.14
1510023	3/8"	0.319	0.433	0.41
1510006	1/2"	0.425	0.512	0.41
1510007	9/16"	0.492	0.591	1.25
1510008	19/32"	0.551	0.669	1.63
1510009	5/8"	0.591	0.709	0.51
1510010	3/4"	0.638	0.787	0.59
1510011	13/16"	0.709	0.866	2.09
1510012	7/8"	0.748	0.906	0.66
1510013	15/16"	0.827	0.984	1.91
1510014	1"	0.886	1.063	2.07
1510016	1-1/8"	1.035	1.221	2.34
1510019	1-9/16"	1.260	1.457	2.73
1510020	1-1/2"	1.378	1.575	2.76

100 pc. minimum per clamp

HOSE CLAMPS

GAPLESS EAR CLAMPS

Features

- Assured clamping seal
- For low durometer and/ or thin-walled hose/ tubing
- Perfect for silicon, vinyl, polyurethane or other high tech materials used in all industries.
- Once installed, smooth inner ban circumference prevents damage to the hose while the unique tongue-in-groove design provides a 360° seal
- There are no steps or gaps inside clamp



Material

- Stainless steel tubing UNS S30400 or DIN 1.4301

Part #	Nominal Size	Band Width	Inches		List Price ea.
			Close	Open	
16700001	9/32"	5mm	0.228	0.276	0.96
16700004	3/8"	5mm	0.307	0.374	0.96
16700007	7/16"	5mm	0.378	0.445	0.96
16700010	1/2"	5mm	0.425	0.524	0.64
16700012	35/64"	7mm	0.453	0.551	0.66
16700013	9/16"	7mm	0.472	0.571	0.96
16700016	5/8"	7mm	0.520	0.618	1.15
16700017	11/16"	7mm	0.571	0.669	1.16
16700022	3/4"	7mm	0.654	0.780	0.72
16700024	13/16"	7mm	0.701	0.827	0.74

100 pc. minimum per clamp

PINCERS

Model 1098 I
Standard Jaw Pincers



Part #	List Price
1410118.....	84.66

SIDE JAW PINCERS

This dual purpose, side jaw design allows clamps to be applied or removed in confined areas with pincers held parallel to the hose. Also used like standard Pincers

Part #	List Price
1410083..... Model 1099 I.....	103.17

CLAMPS

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HOSE CLAMPS



Open End Clamps are of the same general construction as the preformed clamps with this exception, the double wrapping of the band around the hose or article is part of the application. The open end clamps are used when one end or both, of the article to be clamped is not free, or an obstruction prevents slipping a preformed clamp over the end.

OPEN END CLAMPS (3/8" AND 5/8" (NOMINAL) WIDTH)

Catalog Number	Band Width & Thickness	List Price	Clamp I.D. Inches	Clamps per Pkg.	Catalog Number	Band Width & Thickness	List Price
F0-3	3/8 x .022	3.10	13/16"	100	F0S-3	3/8 x .020	3.44
F0-311	3/8 x .022	3.24	1 3/8"	100	F0S-311	3/8 x .020	3.66
F0-316	3/8 x .022	3.31	2"	100	F0S-316	3/8 x .020	3.85
F0-325	3/8 x .022	3.48	3 1/8"	100	F0S-325	3/8 x .020	4.33
WITH STAINLESS STEEL LOK							
F0-8	5/8 x .025	2.68	2"	100	F0S-8	5/8 x .022	3.99
F0-10	5/8 x .025	2.82	2 1/2"	50	F0S-10	5/8 x .022	4.37
HEAVY DUTY BANDS							
F0-12	5/8 x .031	2.96	3"	50	F0S-12	5/8 x .022	6.20
F0-14	5/8 x .031	3.17	3 1/2"	50	F0S-14	5/8 x .022	5.13
F0-16	5/8 x .031	3.16	4"	50	F0S-16	5/8 x .022	5.44
F0-18	5/8 x .031	3.19	4 1/2"	50	F0S-18	5/8 x .022	5.77
F0-20	5/8 x .031	3.42	5"	25	F0S-20	5/8 x .022	6.20
F0-24	5/8 x .031	3.61	6"	25	F0S-24	5/8 x .022	6.91
F0-28	5/8 x .031	3.81	7"	25	F0S-28	5/8 x .022	8.10
F0-32	5/8 x .031	4.11	8"	25	F0S-32	5/8 x .022	9.04
F0-36	5/8 x .031	4.75	9"	25	F0S-36	5/8 x .022	9.72
F0-40	5/8 x .031	4.72	10"	25	F0S-40	5/8 x .022	10.41
F0-48	5/8 x .031	5.44	12"	25	F0S-48	5/8 x .022	12.03
F0-56	5/8 x .031	6.94	14"	10	F0S-56	5/8 x .022	14.08
F0-64	5/8 x .031	7.32	16"	10	F0S-64	5/8 x .022	15.49
F0-72	5/8 x .031	8.00	18"	10	F0S-72	5/8 x .022	POR
F0-80	5/8 x .031	8.41	20"	10	F0S-80	5/8 x .022	POR
F0-96	5/8 x .031	9.37	24"	10	F0S-96	5/8 x .022	POR
F0-120	5/8 x .031	10.55	30"	10	F0S-120	5/8 x .022	POR
F0-144	5/8 x .031	11.63	36"	10	F0S-144	5/8 x .022	POR
F0-168	5/8 x .031	15.02	42"	10	F0S-168	5/8 x .022	POR
F0-192	5/8 x .031	17.59	48"	10	F0S-192	5/8 x .022	POR

APPLICATION TOOLS

For 3/8", 5/8"F-38, F-40, F-100

F-CLAMPS



Preformed Clamps are double wrapped and formed to a given diameter. Used primarily where one end of the hose or article is free to allow the clamps to be slid over the hose end before the fitting is inserted. All clamps may be pulled down to a smaller diameter but cannot be adjusted to a larger diameter.

PREFORMED CLAMPS (3/8" AND 5/8" (NOMINAL) WIDTH)

Catalog Number	Band Width & Thickness	List Price	Clamp I.D. Inches	Clamps per Pkg.	Catalog Number	Band Width & Thickness	List Price
F-3	3/8 x .025	1.12	13/16"	100	FS-3	3/8 x .020	1.73
F-311	3/8 x .025	1.21	1 3/8"	100	FS-311	3/8 x .020	1.92
F-4	5/8 x .025	1.17	1"	100	FS-4	5/8 x .022	1.94
F-5	5/8 x .025	1.02	1 1/4"	100	FS-5	5/8 x .022	2.14
HEAVY DUTY BANDS							
F-6	5/8 x .031	1.28	1 1/2"	100	FS-6	5/8 x .022	2.38
F-7	5/8 x .031	1.33	1 3/4"	100	FS-7	5/8 x .022	2.42
F-8	5/8 x .031	1.37	2"	100	FS-8	5/8 x .022	2.73
F-9	5/8 x .031	1.22	2 1/4"	100	FS-9	5/8 x .022	2.71

CLAMPS

F-10	5/8 x .031	1.68	2 1/2"	50	FS-10	5/8 x .022	3.04
F-11	5/8 x .031	1.73	2 3/4"	50	FS-11	5/8 x .022	3.04
F-12	5/8 x .031	1.85	3"	50	FS-12	5/8 x .022	3.41
F-14	5/8 x .031	1.69	3 1/2"	50	FS-14	5/8 x .022	3.76
F-16	5/8 x .031	2.23	4"	25	FS-16	5/8 x .022	4.01
F-18	5/8 x .031	2.06	4 1/2"	25	FS-18	5/8 x .022	4.53
F-20	5/8 x .031	2.50	5"	25	FS-20	5/8 x .022	4.90
F-24	5/8 x .031	2.49	6"	25	FS-24	5/8 x .022	5.59
F-28	5/8 x .031	2.90	7"	25	FS-28	5/8 x .022	6.00
F-32	5/8 x .031	3.17	8"	25	FS-32	5/8 x .022	6.63

Double-wrapped, Triple Punched, Holds Permanently



Galvanized Preformed Clamps 2 1/2 inch I.D. and above, and 5/8" wide open end clamps have a stainless steel lok for greater strength and rigidity.



K-CLAMP PREFORMED HOSE CLAMPS

Each clamp is a double wrapped metal band formed to a given diameter. The clamp is designed to be slid over the hose end before the fitting is inserted. A punch-type or fold-up tool is then used to apply the clamp.

Punch Indentation for ease of center punching

Heavy Duty Lock for greater strength and rigidity

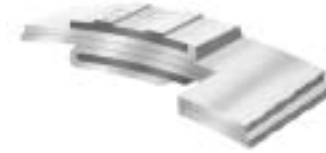


Center Punched



Less tension loss. Patented hole in inner band gives better internal mechanical locking after punching

Fold-up



K-Clamps may be secured by either a punch or fold-up method. (See cross sectioned views)

PREFORMED CLAMPS

(3/8" AND 5/8" (NOMINAL) WIDTH)

PREFORMED CLAMPS

(3/4" (NOMINAL) WIDTH)

CLAMPS

GALVANIZED STEEL

STAINLESS STEEL TYPE 301

Catalog Number	List Price	Clamp I.D. Inches	Band Width & Thickness	Clamps per Pkg.	Catalog Number	List Price
K-3	1.17	13/16"	3/8 x .025	100	KS-3	1.58
K-311	1.24	1 3/8"	3/8 x .025	100	KS-311	2.05
K-4	1.65	1"	5/8 x .030	100	KS-4	2.36
K-5	1.70	1 1/4"	5/8 x .030	100	KS-5	2.61
K-6	2.28	1 1/2"	5/8 x .030	100	KS-6	2.64
K-7	1.82	1 3/4"	5/8 x .030	100	KS-7	2.96
K-8	1.87	2"	5/8 x .030	100	KS-8	3.18
K-9	1.95	2 1/4"	5/8 x .030	100	KS-9	3.39
K-10	3.46	2 1/2"	5/8 x .030	50	KS-10	3.46
K-11	3.95	2 3/4"	5/8 x .030	50	KS-11	3.95
K-12	3.98	3"	5/8 x .030	50	KS-12	3.98
K-14	4.61	3 1/2"	5/8 x .030	50	KS-14	4.61
K-16	5.09	4"	5/8 x .030	25	KS-16	5.09
K-18	5.51	4 1/2"	5/8 x .030	25	KS-18	5.57
K-20	5.65	5"	5/8 x .030	25	KS-20	5.65
K-24	6.72	6"	5/8 x .030	25	KS-24	6.72
K-28	7.39	7"	5/8 x .030	25	KS-28	7.39
K-32	8.10	8"	5/8 x .030	25	KS-32	8.10

GALVANIZED STEEL

STAINLESS STEEL TYPE 301

Catalog Number	List Price	Clamp I.D. Inches	Band Width & Thickness	Clamps per Pkg.	Catalog Number	List Price
K-87500	2.30	2"	3/4" x .030	100	KS-87501	4.57
K-97500	2.35	2 1/4"	3/4" x .030	100	KS-97501	4.09
K-107500	2.45	2 1/2"	3/4" x .030	100	KS-107501	4.71
K-117500	2.50	2 3/4"	3/4" x .030	100	KS-117501	4.58
K-127500	2.56	3"	3/4" x .030	100	KS-127501	5.08
K-147500	5.51	3 1/2"	3/4" x .030	100	KS-147501	5.25
K-167500	2.96	4"	3/4" x .030	100	KS-167501	6.06
K-187500	3.20	4 1/2"	3/4" x .030	100	KS-187501	6.40
K-207500	4.93	5"	3/4" x .030	50	KS-207501	6.87
K-247500	3.92	6"	3/4" x .030	50	KS-247501	8.29
K-287500	4.52	7"	3/4" x .030	50	KS-287501	4.14
K-327500	4.80	8"	3/4" x .030	50	KS-327501	10.01

316 Stainless available upon request

For 3/8" and 5/8" widths F-40, F-100

For 3/4" width F-175

For all widths K5001 (with KA001 aapter)



**FLJ-Clamp
PREFORMED HOSE CLAMPS**

J-Clamps are available in 3/8", 5/8" and 3/4" widths, from 13/16" to 8" I.D. These non punch type clamps are to be secured by the foldup method, using the Wind-Up tool, our part no. KS001 and adapter KA001



**GALVANIZED
STEEL**

3/8" (NOMINAL WIDTH)

**STAINLESS STEEL
TYPE 301**

Catalog Number	List Price	Clamp I.D. Inches	Band Width & Thickness	Clamps per Pkg.	Catalog Number	List Price
FLJ-301	1.05	13/16"	3/8 x .025	100	FLJ-201	1.39
FLJ-343	1.07	1"	3/8 x .025	100	FLJ-243	1.90
FLJ-302	1.58	1 3/8"	3/8 x .025	100	FLJ-202	1.96
FLJ-345	1.65	2"	3/8 x .025	100	FLJ-245	2.28
FLJ-346	1.55	3"	3/8 x .025	100	FLJ-246	2.41
N/A		3 1/4"	3/8 x .025	100	FLJ-255	2.81
5/8" (NOMINAL WIDTH)						
FLJ-303	1.99	1"	5/8 x 0.30	100	FLJ-203	2.86
FLJ-304	2.04	1 1/4"	5/8 x 0.30	100	FLJ-204	3.52
FLJ-305	2.10	1 1/2"	5/8 x 0.30	100	FLJ-205	3.62
FLJ-306	2.18	1 3/4"	5/8 x 0.30	100	FLJ-206	3.21
FLJ-307	2.27	2"	5/8 x 0.30	100	FLJ-207	3.40
FLJ-308	2.19	2 1/4"	5/8 x 0.30	100	FLJ-208	3.48
FLJ-309	2.35	2 1/2"	5/8 x 0.30	100	FLJ-209	4.36
3/4" (NOMINAL WIDTH)						
FLJ-327	2.82	2"	3/4 x 0.30	100	FLJ-227	4.71
FLJ-310	3.12	2 3/4"	3/4 x 0.30	100	FLJ-210	5.16
FLJ-311	3.15	3"	3/4 x 0.30	50	FLJ-211	5.50
FLJ-312	3.26	3 1/2"	3/4 x 0.30	50	FLJ-212	6.22
FLJ-313	3.72	4"	3/4 x 0.30	50	FLJ-213	6.52
FLJ-314	3.87	4 1/2"	3/4 x 0.30	50	FLJ-214	7.19
FLJ-315	4.21	5"	3/4 x 0.30	25	FLJ-215	7.69
FLJ-316	4.80	6"	3/4 x 0.30	25	FLJ-216	8.74
FLJ-318	5.38	7"	3/4 x 0.30	25	FLJ-218	10.28
FLJ-319	5.76	8"	3/4 x 0.30	25	FLJ-219	11.11

CLAMPS



**FLJS-Clamp
SMOOTH I.D. CLAMPS**

FLJS - Clamps are double wrapped clamps with a more smooth inside diameter, intended for your thermo-plastic and other thinner wall hose clamping applications. The JS series clamps slide on the hose prior to inserting the fitting.

Preformed JS - Clamps are available in 5/8" and 3/4" widths, 1" I.D. to 8" I.D. in 1/4" increments.

The FLJS - Clamp is intended to be applied with a KS001 tool or other comparable fold-up locking tool.



**KA001
FOLD-UP ADAPTER**

**KS001
WIND-UP TOOL**

CLAMPS

**STAINLESS
STEEL**

5/8" (NOMINAL WIDTH)				
Catalog Number	Clamp I.D. Inches	Band Width & Thickness	Clamps per Pkg.	List Price
FLJS-203	1"	5/8" x .030	100	2.59
FLJS-204	1 1/4"	5/8" x .030	100	2.68
FLJS-205	1 1/2"	5/8" x .030	100	2.83
FLJS-206	1 3/4"	5/8" x .030	100	3.03
FLJS-207	2"	5/8" x .030	100	3.26
FLJS-208	2 1/4"	5/8" x .030	100	3.46
FLJS-209	2 1/2"	5/8" x .030	100	3.83
3/4" (NOMINAL WIDTH)				
FLJS-227	2"	3/4" x .030	100	4.14
FLJS-210	2 3/4"	3/4" x .030	100	4.76
FLJS-211	3"	3/4" x .030	50	5.08
FLJS-212	3 1/2"	3/4" x .030	50	5.49
FLJS-213	4"	3/4" x .030	50	6.07
FLJS-214	4 1/2"	3/4" x .030	50	6.65
FLJS-215	5"	3/4" x .030	50	7.48
FLJS-216	6"	3/4" x .030	50	8.15
FLJS-218	7"	3/4" x .030	50	9.54
FLJS-219	8"	3/4" x .030	50	10.42



HOSE CLAMPS



CLAMP-IT

The multi-sized clamps all rolled up in one..for your unknown requirements for 1 inch to 30 feet, be they round or otherwise. Clamp-It products will fill your needs. This Strapping in widths of 3/8", 1/2", 5/8", and 3/4" stainless or galvanized steel, as are the clamps (buckles).

100' CLAMP-IT STRAPPING

Catalog Number	Width	Thickness	Material 100'/CTN.	List Price/CNT
SS-3751	3/8"	.025	301 Stainless	101.28
SS-5001	1/2"	.030	301 Stainless	140.36
SS-6251	5/8"	.030	301 Stainless	168.14
SS-7501	3/4"	.030	301 Stainless	219.51
SG-3750	3/8"	.025	Galvanized	56.56
SG-5000	1/2"	.030	Galvanized	68.66
SG-6250	5/8"	.030	Galvanized	81.31
SG-7500	3/4"	.030	Galvanized	99.81

CLAMPS (BUCKLES)

Catalog Number	Width	Material 100'/CTN.	QTY /Box	List Price Each pc.
CS-3751	3/8"	301 Stainless	100	0.88
CS-5001	1/2"	301 Stainless	100	0.87
CS-6251	5/8"	301 Stainless	100	1.11
CS-7501	3/4"	301 Stainless	50	1.59
CG-3750	3/8"	Galvanized	100	0.35
CG-5000	1/2"	Galvanized	100	0.49
CG-6250	5/8"	Galvanized	100	0.59
CG-7500	3/4"	Galvanized	50	0.81

C-2 Orbitor (Loking Tool)

Used to apply Clamp-It continuous strapping up to 3/4" width



List Price
\$444.78

ORBITOR

A tool of endless travel... this lightweight, side entry, jack-type tool is the most rapid cinch-up application tool in its field. The **Orbitor C-2 Loking Tool** will handle Clamp-It strapping widths to 3/4" and always reached desired tension without fear of losing travel capacity of the tool. The **Clamp-It Strapping, Clamp-It Clamps**, and the unique **Clamp-It tool** add up to a superior system for you.

CLAMP-IT

F-38 Loking Tool



List Price:
\$83.33

Portable hand tool used to apply punch Type 3/8 & 5/8 Clamps

F-40 Loking Tool



List Price:
\$147.86

Used to apply Punch Type 3/8 & 5/8 clamps.
Order mallet separately

F-100 Loking Tool



List Price:
\$356.49

Used to apply Punch Type 3/8 & 5/8 clamps.
Order mallet separately

F-225 Mallet



List Price:
\$83.86

Used for punching of all punch type clamps.

F-550 Clamp Cutter



List Price:
\$163.99

Used to remove clamps with minimum effort

KS001 Wind-up Tool



List Price:
\$215.93

Used to apply fold-up clamps and continuous strapping up to 3/4" width

CLAMPS



NON PERFORATED (LINED) BAND

HOSE CLAMPS

HOSE CLAMPS

- All designs exceed SAE J1508 specifications
- Smooth inside surface
- Even tightening torque for 3600 seal
- Rolled-up band edge
- * Non-perforated band prevents hose damage *
- Precision thread pitch for high vibration applications
- Design allows reuse
- Provides a strong seal
- Tolerates corrosive environments

ALUZINC MINI-F



Band and Housing • Aluzinc/ Painted
Band Width • (9mm) 3/8" wide band
Screw • Zinc Plated / Chromed
Corrosion Factor • 100
Sure seal of small thin-walled hoses.

Part #	Size	List Price
92-008	15/64-21/64"	1.01
92-009	9/32-3/8"	1.01
92-010	5/16-13/32"	0.96
92-011	23/64-29/64"	1.02
92-012	25/64-31/64"	0.99
92-013	7/16-17/32"	1.10
92-014	15/32-9/16"	1.10
92-015	33/64-29/64"	1.03
92-016	35/64-41/64"	1.03
92-017	19/32-11/16"	1.11

304 S.S. MINI-F



Band and Housing • SS2333/ AISI 304
Band Width • (9mm) 3/8" wide band
Screw • Zinc Plated / Chromed
Corrosion Factor • 1000 Industrial

Part #	Size	List Price
93-008	15/64-21/64"	2.50
93-009	9/32-3/8"	2.51
93-010	5/16-13/32"	2.51
93-011	23/64-29/64"	2.66
93-012	25/64-31/64"	2.67
93-013	7/16-17/32"	2.68
93-014	15/32-9/16"	2.68
93-015	33/64-29/64"	2.69
93-016	35/64-41/64"	2.70
93-017	19/32-11/16"	2.57

Band and Housing • Aluzinc/ Painted
Band Width • (12.2mm) 3/8" wide band
Screw • Zinc Plated / Chromed
Corrosion Factor • 100

ALUZINC



Part #	SAE	Size	List Price
88-015	3	5/16-9/16"	1.66
88-017	4	7/16-11/16"	1.66
88-022	6	1/2-13/16"	1.52
88-024	8	5/8-15/16"	2.13
88-028	10	3/4-1-1/8"	2.23
88-032	12	7/8-1-1/4"	2.73
88-038	16	1-1/16-1-1/2"	2.73
88-044	20	1-1/4-1-3/4"	2.76
88-050	24	1-1/2-2"	2.83
88-056	28	1-3/4-2-1/4"	3.32
88-065	32	2-2-9/16"	3.53
88-075	40	2-5/16-3"	3.53
88-085	44	2-11/16-3-3/8"	3.60
88-095	52	3-3-3/4"	4.06
88-112	64	3-7/16-4-7/16"	4.41
88-138	80	4-1/8-5-7/16"	5.66
88-165	96	5-1/8-7-1/8"	6.10
88-180	104	5-7/8-7-1/8"	6.91
88-205	122	6-7/8-8-1/8"	8.13
88-231	138	7-7/8-9-1/8"	9.04
88-256	154	8-7/8-10-1/16"	9.48
88-282	170	9-7/8-11-1/8"	9.78
88-307	186	10-7/8-12-1/8"	9.54

Band and Housing • SS2333/ AISI 304
Band Width • (12.2mm) 1/2" wide band
Screw • SS2333/ AISI 304

Corrosion Factor • 1000 Industrial

All 304 S.S.



Part #	SAE	Size	List Price
89-014	3	5/16-9/16"	4.76
89-017	4	7/16-11/16"	4.78
89-020	6	1/2-13/16"	4.93
89-024	8	5/8-15/16"	4.51
89-028	10	3/4-1-1/8"	4.74
89-032	12	7/8-1-1/4"	5.04
89-038	16	1-1/16-1-1/2"	5.23
89-044	20	1-1/4-1-3/4"	5.37
89-050	24	1-1/2-2"	5.57
89-056	28	1-3/4-2-1/4"	5.85
89-065	32	2-2-9/16"	6.62
89-075	40	2-5/16-3"	6.97
89-085	44	2-11/16-3-3/8"	7.74
89-095	52	3-3-3/4"	8.17
89-112	64	3-7/16-4-7/16"	8.58
89-138	80	4-1/8-5-7/16"	10.22
89-165	96	5-1/8-7-1/8"	10.26
89-180	104	5-7/8-7-1/8"	11.29
89-205	122	6-7/8-8-1/8"	13.45
89-231	138	7-7/8-9-1/8"	13.89
89-256	154	8-7/8-10-1/16"	15.21
89-282	170	9-7/8-11-1/8"	15.73
89-307	186	10-7/8-12-1/8"	17.20

Band and Housing • Aluzinc/ Painted
Band Width • (9mm) 3/8" wide band
Screw • Zinc Plated / Chromed

Corrosion Factor • 100

ALUZINC NOVA



Part #	SAE	Size	List Price
91-015	3	5/16-9/16"	1.66
91-017	4	7/16-11/16"	1.66
91-022	6	1/2-13/16"	1.65
91-025	8	5/8-15/16"	2.16
91-028	10	3/4-1-1/8"	2.34
91-032	12	7/8-1-1/4"	2.21
91-040	16	1-1/16-1-1/2"	2.36
91-045	20	1-1/4-1-3/4"	2.35
91-051	24	1-1/2-2"	2.43
91-056	28	1-3/4-2-1/4"	2.46
91-065	32	2-2-9/16"	2.68
91-075	40	2-5/16-3"	3.01
91-085	44	2-11/16-3-3/8"	3.09

CLAMPS



Call Toll Free: **1-866-711-4673**

WebSales@GoodyearRubberProducts.com

**We Ship
World Wide**

HOSE CLAMPS

NON PERFORATED (LINED) BAND

HOSE CLAMPS

Band and Housing • SS2333/ AISI 316
 Band Width • (12.2mm) 1/2" wide band
 Screw • SS2333/ AISI 304
 Corrosion Factor • 1000 Industrial
ALL 316 ACID RESISTANT



304 S.S. RUBBER CLIP

Bolt hole dia. .33 for 1-3/4" - 3-5/16"
 Bolt hole dia. .25 for 1/8" - 1-1/2"



Eliminates hose and cable wear due to vibrations

Part #	SAE	Size	List
90-014	3	5/16-9/16"	4.76
90-017	4	7/16-11/16"	5.09
90-020	6	1/2-13/16"	5.18
90-024	8	5/8-15/16"	5.26
90-028	10	3/4-1-1/8"	5.31
90-032	12	7/8-1-1/4"	5.43
90-038	16	1-1/16-1-1/2"	5.54
90-044	20	1-1/4-1-3/4"	5.70
90-050	24	1-1/2-2"	5.95
90-056	28	1-3/4-2-1/4"	6.25
90-065	32	2-2-9/16"	6.89
90-075	40	2-5/16-3"	7.10
90-085	44	2-11/16-3-3/8"	6.84
90-095	52	3-3-3/4"	7.13
90-112	64	3-7/16-4-7/16"	7.42
90-138	80	4-1/8-5-7/16"	8.09
90-165	96	5-1/8-7-1/8"	9.36
90-180	104	5-7/8-7-1/8"	8.89
90-205	122	6-7/8-8-1/8"	9.59
90-231	138	7-7/8-9-1/8"	10.07
90-256	154	8-7/8-10-1/16"	10.88
90-282	170	9-7/8-11-1/8"	11.10
90-307	186	10-7/8-12-1/8"	11.69

ALUZINC EXHAUST CLAMP

Uniform tightening force around the exhaust tubes for a good



Part #	Size	List Price
94-030	1.06-1.18	4.71
94-033	1.18-1.30	4.92
94-036	1.30-1.42	5.51
94-038	1.38-1.50	5.51
94-039	1.44-1.56	5.51
94-042	1.54-1.65	5.81
94-043	1.59-1.71	6.17
94-045	1.65-1.77	6.17
94-046	1.69-1.81	5.57
94-047	1.73-1.85	5.88
94-048	1.77-1.89	6.84
94-051	1.89-2.01	6.39
94-052	1.93-2.05	6.94
94-054	2.00-2.13	7.20
94-055	2.05-2.17	7.28
94-056	2.09-2.20	7.28
94-058	2.17-2.28	8.53
94-061	2.28-2.40	8.67
94-064	2.40-2.52	8.72
94-071	2.68-2.80	23.66
94-074	2.80-2.91	16.91

Eliminates hose and cable wear due to vibrations

ALUZINC RUBBER CLIP

Part #	Size	List Price
95-300	1/8"	0.78
95-301	3/16"	0.80
95-302	1/4"	1.04
95-303	5/16"	1.06
95-304	3/8"	1.10
95-305	7/16"	0.93
95-306	1/2"	1.35
95-307	9/16"	1.13
95-308	5/8"	1.41
95-309	11/16"	1.31
95-310	3/4"	1.59
95-311	13/16"	1.37
95-312	7/8"	1.44
95-313	15/16"	1.56
95-314	1"	1.94
95-315	1-1/6"	1.78
95-316	1-1/8"	2.34
95-317	1-3/16"	2.59
95-318	1-1/4"	2.70
95-319	1-5/16"	2.65
95-320	1-3/8"	2.89
95-321	1-7/16"	2.79
95-322	1-1/2"	3.80
95-326	1-5/8"	3.37
95-323	1-3/4"	3.48
95-328	1-7/8"	3.78
95-324	2"	4.02
95-325	2-1/8"	4.15
95-329	2-3/8"	4.46
95-327	2-1/2"	4.59
95-330	2-15/16"	5.73
95-331	3-5/16"	7.59

ALUZINC ROBUST



Band and Housing • Aluzinc/ Painted
 Band Width • (9mm) 3/8" wide band
 Screw • Zinc Plated/ Chromed
 Corrosion Factor • 100

Part #	Size	List Price
97-031	(29-31mm)	5.63
97-035	(32-35 mm)	5.67
97-039	(36-39 mm)	5.91
97-043	(40-43 mm)	6.19
97-047	(44-47 mm)	6.80
97-051	(48-51mm)	8.00
97-055	(52-55 mm)	8.69
97-059	(56-59 mm)	8.83
97-063	(60-63 mm)	10.36
97-067	(64-67 mm)	8.42
97-073	(68-73 mm)	8.45
97-079	(74-79 mm)	8.67
97-085	(80-85 mm)	9.37
97-091	(86-91 mm)	11.99
97-097	(92-97 mm)	9.11
97-103	(98-103 mm)	9.11
97-112	(104-112 mm)	10.12
97-121	(113-121 mm)	9.78
97-130	(122-130 mm)	10.36
97-139	(131-139 mm)	10.58
97-148	(140-148 mm)	10.66
97-161	(149-161 mm)	10.80
97-174	(162-174 mm)	10.95
97-187	(175-187 mm)	17.27
97-200	(188-200 mm)	17.71
97-213	(201-213 mm)	17.79
97-226	(214-226 mm)	18.08
97-239	(227-239 mm)	18.38
97-252	(240-252 mm)	18.74

Norman Vincent Peale:

Believe that you are defeated, believe it long enough, and it is likely to become a fact.

CLAMPS

HOSE FERRULES

SMOOTH BRASS HOSE FERRULES



Part #	Ferrule #	I.D.	Length	Pierce	Gauge	List Price
32-500	6231	0.330	0.484	0.250	0.016	0.34
32-501	833	0.358	0.500	0.270	0.016	0.31
32-502	622	0.380	0.500	0.270	0.016	0.33
32-550	619	0.400	0.469	0.265	0.016	0.32
32-504	620	0.410	0.500	0.270	0.016	0.34
32-551	769R	0.450	0.563	0.343	0.016	0.35
32-552	4750	0.475	0.687	0.328	0.020	0.42
32-553	624R	0.500	0.500	0.343	0.016	0.37
32-554	7322	0.500	1.000	0.344	0.025	0.54
32-555	625	0.525	0.469	0.359	0.016	0.37
32-517	625A	0.525	0.525	0.360	0.016	0.39
32-556	7323	0.525	1.000	0.375	0.025	0.40
32-521	9974	0.529	1.000	0.437	0.025	0.56
32-557	7324	0.531	1.000	0.375	0.025	0.54
32-558	626	0.550	0.484	0.375	0.016	0.43
32-559	7325	0.562	1.000	0.437	0.025	0.60
32-561	7326	0.593	1.000	0.437	0.025	0.64
32-562	JJ	0.600	0.484	0.437	0.016	0.37
32-563	JJ	0.600	0.500	0.500	0.019	0.37
32-526	II	0.625	0.500	0.500	0.016	0.40
32-564	7327	0.625	1.000	0.437	0.025	0.67
32-565	HH	0.650	0.484	0.437	0.016	0.37
32-566	7328	0.656	1.000	0.437	0.025	0.64
32-567	GG	0.675	0.500	0.500	0.016	0.42
32-568	7329	0.687	1.000	0.500	0.025	0.42
32-570	7330	0.718	1.000	0.500	0.025	0.54
32-571	EE	0.725	0.530	0.500	0.016	0.46
32-572	DD	0.750	0.531	0.500	0.016	0.42
32-573	7331	0.750	1.000	0.625	0.025	0.69
32-574	CC	0.775	0.536	0.500	0.016	0.57
32-533	7332	0.781	1.000	0.500	0.025	0.79
32-575	7332	0.781	1.000	0.625	0.025	0.67
32-576	BB	0.800	0.546	0.562	0.016	0.43
32-577	7333	0.812	1.000	0.625	0.025	0.67
32-578	AA	0.830	0.550	0.562	0.016	0.49
32-579	7244	0.875	0.843	0.687	0.025	0.76
32-580	7113	0.925	0.975	0.750	0.023	0.94
32-545	5253	1.000	0.843	0.687	0.025	0.85
32-549	7145A	1.050	0.850	0.684	0.025	0.90
32-584	5027	1.100	0.843	0.812	0.025	1.01
32-588	7088	1.175	0.875	0.875	0.025	1.04
32-589	7088A	1.175	0.870	0.875	0.025	0.99
32-590	875L	1.200	0.843	0.875	0.025	1.11
32-591	7291	1.218	0.968	0.875	0.025	1.33

More sizes available

HOSE ACCESSORIES

HOSE CRIMPER

HOSE CRIMPERS

• Provides production capability and "big tool" crimping advantages at just a fraction of the cost of other tools offering comparable results.



HOSE CRIMPER COMES WITH 5 DIES

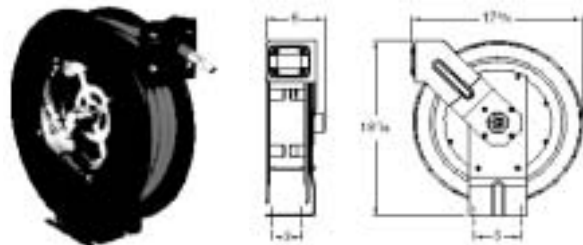
308-071 THRU # 308-075

Part #		List Price
308-070	Hose Crimper	348.20

REPLACEMENT DIES

Part #	Size	List Price
308-071	5/8"	48.58
308-072	37/64"	48.58
308-073	17/32"	48.57
308-074	31/64"	48.58
308-075	11/16"	48.58
308-076	7/16"	50.50
308-077	3/4"	48.58
308-078	13/16"	48.58
308-079	3/8"	48.58

HOSE REEL



LOW PRESSURE

Reels are ideally suited for plant maintenance or many other industrial functions where hose storage is a problem. Standard hose for air, water and oxygen/ acetylene application.

- Made in the USA
- All metal reel
- Unitized multi-functional hub arbor
- 8 Position guide arm
- Minimal size envelope permits installation where space is a factor
- Simple design incorporates fewer parts.
- Single set screw to access latch area and spring case.
- Heavy gauge base with no welds.

Part #	Operating Pressure	Capacity Hose ID		Shipping Weight	List Price
		I.D.	Length		
940-350	300	3/8	50	41	531.50
940-250	300	1/4	50	44	1042.45

940350 - Air/ Water

940250 - Oxygen/ Acetylene

CLAMPS

**MIDLAND
METAL**

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RUBBER PRODUCTS INC.

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**CORROSION RESISTANCE VALUES
for Plastic Tubing**

Ratings based on tests at 70°F and should not be exposed to higher temperature without testing

F-5000 Poly Vinyl Chloride

U-2000 Polyurethane

E-1000 Low Density Polyethylene

N-6000 Nylon

P-1100 Polypropylene

D-4000 EVA

T-7000 Teflon

U-8000 Special Plasticizers PVC

G-Good

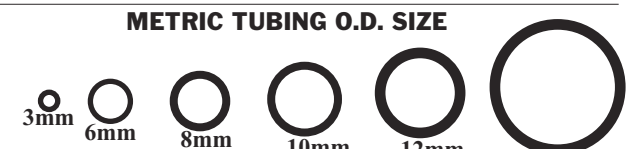
L-Limited

P-Poor

N-Not Tested

	F	U	E	N	P	D	T	U	ACIDS & BASES	F	U	E	N	P	D	T
FUELS:									Acetic, 50%	G	P	P	L	G	P	G
Butane (1)	G	G	L	G	L	G	G	N	Boric	G	G	G	G	G	G	G
Diesel Fuel	L	G	L	G	L	P	N	G	Carbolic (phenol)	P	P	G	P	G	P	N
Gasoline (regular)	L	G	P	G	L	N	G	G	Fatty	G	G	P	G	G	N	G
Kerosene	L	G	P	G	G	P	G	G	Formic, 90%	G	P	G	P	G	G	G
Methane (nat. gas)(1)	G	G	L	G	G	N	N	N	Hydrochloric, 10%	G	G	G	L	G	G	G
Propane (1)	G	G	L	G	L	N	N	N	Hydrochloric, 25%	G	L	G	P	G	L	G
OTHERS:									Hydrochloric, 50%	G	L	G	P	G	L	G
Acetylene	N	G	G	G	G	N	N	N	Hydrocyanic, 50%	L	P	G	P	G	G	G
Ammonia gas	P	G	G	G	G	N	N	N	Maleic	G	P	G	G	G	N	N
Ammonium salts	G	G	G	G	G	N	N	N	Nitric, 10%	G	P	G	L	G	L	G
Amyl acetate	P	P	L	G	P	P	G	N	Nitric, 30%	G	P	G	P	L	L	G
Aniline	P	P	L	L	G	P	G	N	Oleic	L	G	L	G	G	P	N
Animal oils	G	G	P	G	G	N	G	G	Phosphoric, 25%	G	L	G	G	G	G	N
Bleach, 7%	G	P	G	L	L	N	N	G	Sulfuric, 30%	G	L	G	L	G	L	G
Bromine	L	G	P	P	P	P	G	N	Sulfuric, 70%	L	P	P	P	G	P	G
Butandiol	G	G	G	G	G	N	N	N	Sulfuric, 98%	P	P	P	P	G	P	G
Calcium salts incl. Chloride	G	G	G	G	G	N	G	G	Sulfurous, 30%	G	P	G	L	G	N	G
Chlorine gas, dry	G	G	P	P	P	P	N	N	Tannic	G	P	G	G	G	N	G
Dibutyl phthalate	N	P	L	G	L	P	N	G	Ammonium hydroxide, 25%	P	G	L	G	G	G	N
Glucose	G	G	G	G	G	G	G	G	Potassium hydroxide, 25%	L	G	G	G	G	G	G
Glycerine	G	G	G	G	G	G	N	G	Sodium hydroxide, 50%	G	G	G	G	G	L	G
Hydrogen peroxide 10%	G	G	G	G	G	G	G	G	SOLVENTS:							
Hydrogen peroxide 25%	L	G	G	P	G	G	G	G	Acetone	P	P	G	G	L	P	G
Hydrogen sulfide	G	P	G	L	G	N	G	N	Benzene	P	L	P	G	P	P	G
Isocyanates	N	G	G	G	N	P	N	N	Carbon tetrachloride	P	L	L	L	P	P	G
Lead salts (3)	G	G	G	G	G	N	N	N	Chloroform	P	P	P	L	P	P	G
Magnesium salts	G	G	G	G	G	N	G	N	Cyclohexanone	P	P	P	G	L	P	G
Mercury	G	G	G	G	G	N	N	N	Dimethylformamide	P	P	L	N	G	N	N
Milk	G	G	G	G	G	N	G	G	Dioxane	N	N	P	G	L	N	N
Mineral Oil	G	G	L	G	L	P	G	G	Ethyl acetate	P	L	G	G	L	P	G
Nitrous Oxide (1)	G	G	L	G	G	N	N	N	Ethyl alcohol (1)	L	G	G	L	G	G	G
Oxygen (1)	G	G	G	G	G	G	G	G	Ethyl ether	L	L	G	G	L	P	N
Ozone, ambient	G	G	L	G	L	N	N	G	Ethylene glycol	G	G	G	G	G	G	N
Paint, oil base	L	G	L	G	G	N	N	G	Formaldehyde	G	G	G	G	G	L	N
Polyglycols	G	G	G	G	G	N	N	N	Freon - 12'	L	L	G	G	L	N	G
Potassium salts	G	G	G	G	G	N	G	N	Methyl alcohol	L	G	G	L	G	N	N
Pydraul	P	P	P	G	N	N	N	N	Methylene chloride	P	P	L	G	L	P	N
Pyridine	P	L	G	L	G	N	G	N	Methyl ethyl ketone	P	P	G	G	L	P	N
Salt Water	G	G	G	G	G	G	G	G	Naphthas (2)	P	G	P	G	L	P	G
Silver Nitrate	G	G	G	G	G	G	G	N	Toluene	P	G	P	G	L	P	N
Skydrol	P	P	P	G	N	N	N	N	Triclorethylene	P	P	P	L	P	P	G
Soap solution (conc.)	G	G	L	G	G	N	G	G	Turpentine	G	G	P	G	L	P	G
Sodium salts	G	G	G	G	G	N	G	G	Xylene	P	G	P	G	L	P	N
Sodium thiosulphate	G	G	G	G	G	N	G	G	HYDRAULIC FLUIDS:							
Styrene	P	G	P	G	N	N	N	G	Diester base grease	N	G	P	G	L	P	N
Trisodium phosphate	G	G	N	G	G	N	N	G	Petroleum base grease	G	G	L	G	L	P	N
Ucon oil	G	G	G	G	N	N	N	N	Phosphate ester	L	P	P	G	G	N	N
Urea	G	G	G	G	G	N	G	G	Polyol ester	P	N	P	G	G	N	N
Vegetable oils (1)	G	G	G	G	G	P	N	G	Water-glycol	G	G	G	G	G	N	N
Water at 730F	G	G	G	G	G	G	G	G	SAE motor oils	G	G	G	G	G	N	N
Water at 1400F	L	G	G	G	G	G	G	G	Machine oil	G	G	L	G	L	N	N
Water at 1700F	P	L	N	L	G	P	N	G	MIL-L-7808 H	G	G	L	G	G	N	N
Whiskey, wine (1)	N	G	G	G	G	N	G	G	Brake Fluid	N	N	N	N	N	N	N
Zinc Chloride	G	G	G	G	G	G	N	N								

TUBING



PLASTIC TUBING

TUBING

POLYETHYLENE TUBING

- Economic
- Flexible
- Low Pressure & Temperature



- Low density polyethylene tubing has a wide range of uses including water lines, beverage tubing, air lines, instrumentation, plus uses in industrial, agricultural, and chemical applications.
- Has good resistance to alkalis, dilute acid, ammonia gas, ammonium hydroxide, brine water, and most aqueous solutions of metallic salts.
- Food Grade
- temperature: -40F° to 135°F
- Natural - ASTM D-1248-8f - Type 1 - Class A - Category 4, Colors are class B.
- 100' coils in Boxes.

POLYETHYLENE TUBING

Part #	Tube O.D.	Tube Wall	Burst PSI	List Price
973-200	1/8	0.020	400	15.16
973-201	5/32	0.025	400	28.01
973-202	3/16	0.030	400	25.31
973-203	1/4	0.040	400	26.48
973-204	1/4	0.062	800	28.32
973-205	5/16	0.062	600	57.82
973-206	3/8	0.062	400	40.95
973-207	1/2	0.062	300	63.72
973-208	5/8	0.062	250	83.84
973-211	3/4	0.062	150	148.81
973-209	3/4	0.094	200	100.61
973-210	1	0.125	300	275.27

500' NATURAL POLYETHYLENE

Part #	O.D.	List Price
73-200N5	1/8	76.65
73-203N5	1/4	113.33
73-204N5	1/4	175.59
73-206N5	3/8	194.25
73-207N5	1/2	310.80

More colors and lengths available

1000' NATURAL POLYETHYLENE

Part #	O.D.	List Price
73-203N1	1/4	156.82
73-204N1	1/4	292.63
73-206N1	3/8	451.29
73-207N1	1/2	496.18

BLACK POLYETHYLENE TUBING

Part #	O.D.	List Price
73-200B	1/8	26.21
73-201B	5/32	28.01
73-202B	3/16	29.40
73-203B	1/4	19.58
73-204B	1/4	36.77
73-205B	5/16	48.16
73-206B	3/8	57.74
73-207B	1/2	76.90
73-208B	5/8	95.25

500' BLACK REEL

Part #	O.D.	List Price
73-203B5	1/4	146.49
73-205B5	5/16	226.70
73-206B5	3/8	223.16
73-207B5	1/2	321.36

1000' BLACK REEL

Part #	O.D.	List Price
73-206B1	3/8	482.96

BLUE

POLYETHYLENE TUBING

Part #	O.D.	List Price
73-200U	1/8	26.22
73-201U	5/32	28.01
73-202U	3/16	29.40
73-203U	1/4	30.63
73-204U	1/4	36.77
73-205U	5/16	45.02
73-206U	3/8	57.25
73-207U	1/2	71.10

500' BLUE REEL

Part #	O.D.	List Price
73-203U5	1/4	146.52
73-206U5	3/8	270.86

1000' BLUE REEL

Part #	O.D.	List Price
73-203U1	1/4	233.99

GREEN

POLYETHYLENE TUBING

Part #	O.D.	List Price
73-201G	5/32	28.01
73-203G	1/4	30.63
73-204G	1/4	36.77
73-205G	5/16	48.16
73-206G	3/8	57.25
73-207G	1/2	76.25

500' GREEN REEL

Part #	O.D.	List Price
73-203G5	1/4	146.52

1000' GREEN REEL

Part #	O.D.	List Price
73-203G1	1/4	233.99

RED

POLYETHYLENE TUBING

Part #	O.D.	List Price
73-203R	1/4	30.59
73-205R	5/16	48.16
73-206R	3/8	57.19

500' RED REEL

Part #	O.D.	List Price
73-203R5	1/4	146.52

1000' RED REEL

Part #	O.D.	List Price
73-203R1	1/4	233.99

WHITE

POLYETHYLENE TUBING

Part #	O.D.	List Price
73-203W	1/4	30.63
73-206W	3/8	57.25
73-207W	1/2	76.25

PLASTIC TUBE CUTTER

Range: 1/8" - 3/8" I.D. (3mm-10mm)



Part #	Description	List Price
91-707	Cutter w/Blade	7.06

TUBING



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TUBING

PLASTIC/ ALUMINUM/ COPPER TUBING

YELLOW POLYETHYLENE TUBING

Part #	O.D.	List Price
73-203Y	1/4	30.63
73-205Y	5/16	44.10
73-206Y	3/8	57.19

ORANGE POLYETHYLENE TUBING

Part #	O.D.	List Price
73-203O	1/4	30.59

GRAY POLYETHYLENE TUBING

Part #	O.D.	100' List
73-206A	3/8	51.45

POLYETHYLENE METRIC TUBING



Part #	MM O.D.	MM I.D.	Length	List Price
73-200M1	4	2.5	150	89.63
73-201M2	6	4	25	29.40
73-201M1	6	4	150	130.94
73-202M2	8	6	25	44.10
73-202M1	8	6	150	241.37
73-203M2	10	8	25	60.64
73-203M1	10	8	150	367.50

More sizes and colors available...just ask!

Age is an issue of mind over matter. If you don't mind, it doesn't matter.

- Mark Twain

FLEXIBLE NYLON 11 TUBING

- High Burst
- Resilient
- Corrosion Resistance



•Lubrication systems, instrumentation lines, fuel lines, refrigerant lines, Vacuum applications, food processing.

•Low moisture absorption, Good mechanical properties, and excellent electrical properties.

•Temperature range -10°F to 225 F°

•Has excellent resistance to a wide range of chemicals including oils, gasoline, hydraulic fluids, salt solutions, and bases.

•1000lb min. burst P.S.I.

•For DOT tubing see air brake section

Part #	Tube O.D.	Tube Wall	100' Boxed
973-230	1/8	.017	36.58
973-231	5/32	.025	43.59
973-229	3/16	.024	51.16
973-232	1/4	.035	101.94
973-238	1/4	.040	93.27
973-239	1/4	.062	121.72
973-226	5/16	.040	128.26
973-233	3/8	.050	167.65
973-234	1/2	.062	38.45
973-235	5/8	.062	423.56

500' NYLON TUBING NATURAL

Part #	Tube O.D.	List
73-232N5	1/4	441.00

100' BLACK NYLON TUBING

Part #	Tube O.D.	List Price
73-230B	1/8	31.83
73-231B	5/32	44.10
73-232B	1/4	88.57
73-238B	1/4	95.55
73-233B	3/8	187.13
73-234B	1/2	316.05

1000' BLACK NYLON

Part #	Tube O.D.	List Price
73-230B1	1/8	257.25

NYLON 12 METRIC TUBING

•Same properties as nylon tubing



100' LENGTHS

Part #	MM O.D.	MM I.D.	MM Wall	Min PSI	List Coil
973-323	4	2.3	0.85	1800	49.54
973-324	5	3	1	1600	70.34
973-325	6	4	1	1200	89.30
973-326	6	3.5	1.25	1700	105.18
973-327	8	6	1	800	128.26
973-328	8	5.5	1.25	1100	148.98
973-329	10	8	1	600	159.64
973-332	12	10	1	480	194.85
973-333	12	9	1.5	800	274.89
973-334	14	12	1	950	208.84

PLASTIC TUBE CUTTER

Range: 1/8" - 3/8" I.D. (3mm-10mm)



Part #	Description	List Price
91-707	Cutter w/Blade	7.06

MINI-TUBING CUTTER

•Great for tight places



Part #	Size	List Price
990-571	3mm-22mm (1/8"-7/8")	7.57

TUBING CUTTER



Part #	Size	List Price
990-570	1/8"-1-1/8"	11.39



PLASTIC TUBING

POLYVINYL CHLORIDE (PVC) TUBING

FDA recipe
NSF approved
Grade A



- Clear, flexible PVC tubing is suitable for use in low pressure applications including drain lines, laboratory tubing, industrial, chemical, agricultural, and food and beverage applications.
- Has good chemical resistance to alkalies, ammonium compounds, brine, and some acids and alcohols.
- Sanctioned by the FDA for food packaging applications.
- Temperature Range: -5°F to 125°F
- 100 Foot coils in Boxes.

Part #	Tube I.D.	Tube O.D.	Tube Wall	Min Burst	100' List Coils
973-222	1/8	3/16	1/32	200	26.04
973-224	1/8	1/4	1/16	400	39.65
973-223	3/16	5/16	1/16	250	41.71
973-215	1/4	3/8	1/16	200	41.96
973-252	5/16	7/16	1/16	150	64.35
973-253	5/16	1/2	3/32	250	113.24
973-216	3/8	1/2	1/16	125	69.96
973-255	3/8	5/8	1/8	250	140.09
973-262	3/8	9/16	3/32	200	117.20
973-217	1/2	5/8	1/16	100	64.26
973-219	3/4	1	1/8	120	244.25
973-221	1	1-1/4	1/8	100	310.25

POLYURETHANE TUBING

100' COILS



Part #	Tube O.D.	Tube I.D.	List Price
973-340	1/8	1/16	35.92
973-341	5/32	3/32	47.79
973-342	3/16	1/8	69.14
973-343	1/4	1/8	114.89
973-345	3/8	1/4	204.25
973-346	1/2	3/8	288.74

BLUE POLYURETHANE TUBING

Part #	Tube O.D.	List Price
73-343U	1/4	114.82

BLACK POLYURETHANE TUBING

Part #	Tube O.D.	List Price
73-343B	1/4	114.89

GREEN POLYURETHANE TUBING

Part #	Tube O.D.	List Price
73-343G	1/4	114.82

YELLOW POLYURETHANE TUBING

Part #	Tube O.D.	List Price
73-343Y	1/4	127.65

POLYURETHANE METRIC



Part #	Tube O.D.	Tube I.D.	25 Meters
973-350	4	2.5	39.87
973-352	6	4	76.58
973-353	8	6	121.60

More sizes and colors available

ALUMINUM TUBING

Alloy 3003-0
ASTM B-483

Material to ASTM B-483



ALUMINUM VERSATUBE 50' Coils

Part #	O.D.	Wall Thick	50' Coils
972-190	1/8	.025	41.53
972-191	3/16	.028	53.98
972-192	1/4	.032	57.83
972-193	5/16	.035	67.85
972-194	3/8	.035	69.47
972-195	1/2	.035	107.75

TUBING

COPPER TUBING

REFRIGERATION

COPPER TUBE (50' Coils)



Part #	O.D Actual	Wt. 50' Coil	Wall Thick.	List Price
972-180	1/8	1.74	.030	POD
972-181	3/16	2.88	.030	POD
972-182	1/4	4.02	.030	POD
972-183	5/16	5.45	.032	POD
972-184	3/8	6.7	.032	POD
972-185	1/2	9.1	.032	POD
972-186	5/8	12.55	.035	POD
972-187	3/4	15.25	.035	POD

TYPE L SOFT COPPER

TUBING (60' Coils)



For residential water lines

Part #	O.D Nom	Wt. 50' Coil	Wall Thick.	List Price
972-171	1/4	.126	.030	POD
972-172	3/8	.198	.035	POD
972-173	1/2	.285	.040	POD

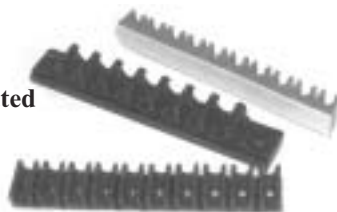
* Add 1/8" to Nom OD to get the Actual OD

*POD - Price On Demand due to copper market

TUBING ACCESSORIES

Features:

- Route and secure multiple tubing lines
- Mounting versatility
 - Racks can be easily hand separated down to single holders.
 - Thru holes provided (all sizes)
- Standard color is BLACK. Other colors available on special request.



Part #	Tubing OD	Description	Channels	List Price
28-988	1/4	non-adhesive	10	2.83
28-989	1/4	adhesive	10	3.32
28-990	3/8	non-adhesive	7	9.76
28-991	1/2	non-adhesive	5	10.25

Note: Mounting screws not provided



PNEUMATIC ACCESSORIES

QUICK DISCONNECTS

1/4" BASIC SIZE

UNIVERSAL SERIES COUPLERS

1/4" BASIC SIZE

For ARO, TRU-FLATE, INDUSTRIAL INTERCHANGE

1/4" BASIC SIZE

- Automatic Coupler
- Brass body, NBR Seal, Stainless Steel spring, Steel locking balls.
- Good for low pressure fluid lines.

Working range:

Maximum operating Pressure
To 220 psi

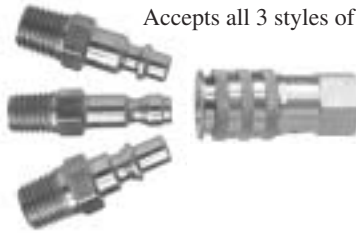
Temperature: -4° to +176°F

Industrial

Accepts all 3 styles of plugs!

Parker

ARO



MALE COUPLER

FEMALE COUPLER

HOSE BARB COUPLER



BRASS

BRASS

BRASS

Part #	Size	List Price
28-579	1/4 NPTF	9.56
28-589	3/8 NPTF	10.03

Part #	Size	List Price
28-560	1/4 NPSF	9.69

Part #	Hose I.D. Size	List Price
28-690	1/4"	8.63
28-691	3/8"	8.63

1/4" BASIC SIZE

INDUSTRIAL INTERCHANGE

1/4" BASIC SIZE

Specifications

Body Size (in.)	1/4
Rated Pressure (PSI)	250
Temperature Range	-4° to +176°

- Sleeve type couplings are widely used to connect compressed air and low pressure fluid lines.

Their compact and economical design uses a ball locking mechanism consisting of captive steel balls that engage the locking groove on the mating nipple. The sliding spring loaded sleeve on the coupler must be manually retracted in order to connect or disconnect the nipple. It is easy to do, but two hands are normally required.

Common applications include: compressed air, water, grease, paint, limited vacuum and limited gases.

MALE PIPE COUPLER



Part #	Size	List Price
28-552	1/4"	6.43
28-553	3/8"	7.64

FEMALE PIPE COUPLER



Part #	Size	List Price
28-540	1/4"	6.43
28-541	3/8"	7.68

HOSE ID COUPLER



Part #	Size	List Price
28-562	1/4"	7.21
28-564	3/8"	6.84
28-565	1/4(Push on)	20.21
28-566	3/8(Push on)	20.21

MALE PLUG

STEEL



Part #	Size	List Price
28-545	1/8	1.21
28-546	1/4	1.26
28-547	3/8	2.40

FEMALE PLUG

STEEL



Part #	Size	List Price
28-533	1/8"	1.09
28-534	1/4"	1.29
28-535	3/8"	2.40

HOSE ID PLUG

STEEL



Part #	Size	List Price
28-557	1/4"	1.47
28-559	3/8"	1.71
28-558	1/4(Push on)	6.25
28-561	3/8(Push on)	5.81

360° TURNING SWIVEL PLUG

1/4" Basic size

Industrial Interchange Plug

•360° Turning

•Swivels



Part #	Size	List Price
320-065	1/4"	23.19

Other sizes and materials available...just ask!

QUICK DISCONNECT

QUICK DISCONNECTS

PNEUMATIC ACCESSORIES

3/8" BASIC SIZE

INDUSTRIAL INTERCHANGE

3/8" BASIC SIZE

Specifications

Body Size (in.)	3/8
Rated Pressure (PSI)	250
Temperature Range	-4° to +176°

- Sleeve type couplings are widely used to connect compressed air and low pressure fluid lines.

Their compact and economical design uses a ball locking mechanism consisting of captive steel balls that engage the locking groove on the mating nipple. The sliding spring loaded sleeve on the coupler must be manually retracted in order to connect or disconnect the nipple. It is easy to do, but two hands are normally required.

Common applications include: compressed air, water, grease, paint, limited vacuum and limited gases.

- The standard is a Steel coupler with a Steel valve, NBR seat, and stainless steel springs. Brass coupler avail. on request.
- 3/8" Basic size.

MALE COUPLER

STEEL



Part #	NPT Size	List Price
98-823	1/4"	12.44
98-824	3/8"	14.14
98-825	1/2"	38.64

FEMALE COUPLER

STEEL



Part #	NPT Size	List Price
98-810	1/4"	12.44
98-811	3/8"	13.57
98-812	1/2"	40.03

HOSE ID COUPLER

STEEL



Part #	NPT Size	List Price
98-840	1/4"	37.57
98-841	3/8"	41.86
98-842	3/8"(Push on)	38.30

MALE PLUG

STEEL



Part #	NPT Size	List Price
98-814	1/4"	2.98
98-815	3/8"	2.52

FEMALE PLUG

STEEL



Part #	NPT Size	List Price
98-801	1/4"	2.33
98-802	3/8"	3.08

HOSE ID PLUG

STEEL



Part #	Hose I.D. Size	List Price
98-828	3/8"	9.27
98-830	3/8"(Push on)	10.09

1/4" BASIC SIZE

PARKER INTERCHANGE (TRU-FLATE)

1/4" BASIC SIZE

Specifications

Body Size (in.)	1/4
Rated Pressure (PSI)	250
Temperature Range	-4° to +176°

- The standard is a brass coupler and valve with steel locking balls, NBR seat, and stainless steel springs.
- Unique design has been field proven as a long lasting, high performance coupling especially when used with pneumatic tools.
- Marval connect and disconnect.

MALE PIPE COUPLER

BRASS



Part #	Size	List Price
28-515	1/8"	17.11
28-516	1/4"	9.11
28-517	3/8"	19.29

FEMALE PIPE COUPLER

BRASS



Part #	Size	List Price
28-506	1/8"	17.32
28-507	1/4"	8.23
28-508	3/8"	18.53

HOSE ID COUPLER

BRASS



Part #	Size	List Price
28-528	1/4"	19.51
28-530	3/8"	19.51
28-531	1/4"(Push on)	20.08
28-532	3/8"(Push on)	20.08

MALE PLUG

STEEL



Part #	Size	List Price
28-509	1/8"	1.24
28-510	1/4"	1.51
28-511	3/8"	1.94

FEMALE PLUG

STEEL



Part #	Size	List Price
28-500	1/8"	4.53
28-501	1/4"	1.83
28-502	3/8"	5.98

HOSE ID PLUG

STEEL



Part #	Size	List Price
28-518	1/4"	2.12
28-520	3/8"	6.84
28-521	1/4"(Push on)	7.61
28-522	3/8"(Push on)	8.23

QUICK DISCONNECT

PNEUMATIC ACCESSORIES

QUICK DISCONNECTS

1/4" BASIC SIZE

ARO 210 INTERCHANGE

UNION TEE

Specifications

Body Size (in.)	1/4
Rated Pressure (PSI)	250
Temperature Range	-4° to +176°

- Brass bodies and valves steel locking balls, NBR seat, and stainless steel springs.
- Couplings have a full opening tubular valve for maximum flow and a built-in sleeve guard to minimize accidental disconnect.
- Marval connect and disconnect.

MALE PIPE COUPLER

BRASS



Part #	Size	List Price
28-592	1/8	18.42
28-593	1/4	7.07
28-594	3/8	18.76

FEMALE PIPE COUPLER

BRASS



Part #	Size	List Price
28-583	1/8	18.42
28-584	1/4	7.64
28-585	3/8	18.76

HOSE ID COUPLER

BRASS



Part #	Size	List Price
28-601	1/4	20.21
28-603	3/8	20.21

MALE PLUG

STEEL



Part #	Size	List Price
28-586	1/8	4.22
28-587	1/4	1.40

FEMALE PLUG

STEEL



Part #	Size	List Price
28-577	1/8	5.46
28-578	1/4	1.47

HOSE ID PLUG

STEEL



Part #	Size	List Price
28-595	1/4	2.12
28-597	3/8	6.78

ST SERIES...HIGH FLOW

Specifications

Rated Pressure		
Brass - Coupler & Steel Plug	4650	2350
Temperature Range	-40° to 250°	

MALE PIPE COUPLER

BRASS



Part #	Body & Thread Size	List Price
28-667	1/8	12.72
28-665	1/4	15.41
28-666	3/8	7.25
28-668	1/2	13.29
28-669	3/4	41.62
28-670	1	72.02

FEMALE PIPE COUPLER

BRASS



Part #	Body & Thread Size	List Price
28-671	1/8	12.72
28-651	1/4	15.41
28-652	3/8	4.67
28-672	1/2	13.82
28-673	3/4	44.65
28-674	1	66.67

- Non-valved couplings for applications where maximum flow is required. Ideal for applications such as high pressure water and steam washers, carpet cleaners and mold coolant lines. They are often used in food processing, on fluid and dye transfer lines.

- Standard seals are Buna-N (Nitrile)
- Couplers and plugs available in additional sizes and materials.

MALE PLUG

STEEL



Part #	Size	List Price
28-675	1/8	6.75
28-639	1/4	5.49
28-640	3/8	6.14
28-676	1/2	8.09
28-677	3/4	15.78
28-678	1	35.57

FEMALE PLUG

STEEL



Part #	Size	List Price
28-688	1/8	5.39
28-619	1/4	6.23
28-620	3/8	2.55
28-679	1/2	4.45
28-680	3/4	21.02
28-681	1	37.82

QUICK DISCONNECT



QUICK COUPLERS

PNEUMATIC ACCESSORIES

BRASS

MINI TYPE QUICK DISCONNECTS

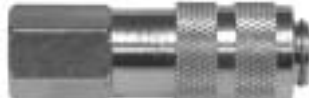
Working Range: 0-145 psi
Material: Chrome Plated Brass

MALE COUPLER



Part #	Size	List Price
28-605	1/8"	5.44

FEMALE COUPLER



Part #	Size	List Price
28-606	1/8"	5.44

MALE PLUG



Part #	Size	List Price
28-607	1/8"	1.40

FEMALE PLUG



Part #	Size	List Price
28-608	1/8"	1.40

LINCOLN INTERCHANGE

- 1/4" Basic Size

Specifications

Body Size (in.)	1/4
Rated Pressure (PSI)	250
Temperature Range	-40° to +250°

- Brass body with steel sleeve and backnut valve material is Acetal and seal is Nitrile

MALE PIPE COUPLER



Part #	Size	List Price
28-682	1/8"	19.30
28-683	1/4"	27.21

FEMALE PIPE COUPLER



Part #	Size	List Price
28-684	1/4"	26.17

MALE PLUG

Steel



Part #	Size	List Price
28-685	1/8"	7.23
28-686	1/4"	2.76

FEMALE PLUG

Steel



Part #	Size	List Price
28-687	1/4"	2.55

MOLD COOLANT-LINE QUICK COUPLERS

OPERATING PRESSURE:

200 PSIG (14.06 Kg/sq. cm)

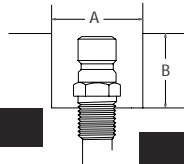
Standard Seal:

SILICONE: -90°F to 400°F (-68°C to +205°C)

- Coolant couplers are engineered for optimum speed and performance in connecting coolant lines to molds used for thermoplastic, thermosetting, blow molding, diecasting and on other types of tooling and equipment utilizing a constant fluid flow pumped through cooling channels.



BRASS



STEEL

MALE PLUG (BRASS)

1/4" BASIC SIZE

Part #	Size	A	B	List Price
29-900	1/8"	0.69	0.69	2.32
29-901	1/4"	0.84	0.94	2.88
29-902	3/8"	1.00	0.97	3.35

3/8" BASIC SIZE

Part #	Size	A	B	List Price
29-906	1/4"	1.00	0.94	3.15
29-907	3/8"	1.00	1.13	3.35
29-908	1/2"	1.81	1.25	5.84

1/2" BASIC SIZE

Part #	Size	A	B	List Price
29-911	1/2"	1.25	1.50	6.64
29-912	3/4"	1.50	1.56	11.27

FEMALE PLUG (STEEL)

1/4" BASIC SIZE

Part #	Size	List Price
29-903	1/8"	3.08
29-904	1/4"	3.21
29-905	3/8"	4.53

3/8" BASIC SIZE

Part #	Size	List Price
29-909	1/4"	4.02
29-910	3/8"	5.42

1/2" BASIC SIZE

Part #	Size	List Price
29-913	1/2"	12.98
29-914	3/4"	22.29

QUICK DISCONNECT

MOLD COOLANT-LINE QUICK COUPLERS
D-M-E, PARKER and FOSTER INTERCHANGE

Straight Stem



90° Stem



45° Stem



Body Only



1/4" BASIC SIZE, BRASS

STRAIGHT THROUGH (Non-Valved)

Hose ID Size	Straight Stem		90° Stem		45° Stem		Body Only	
	Part #	List Price	Part #	List Price	Part #	List Price	Part #	List Price
1/4"	98-915	14.41	98-920	17.05	98-925	21.05	98-930	12.72
1/4" (Push On)	98-916	16.02	98-921	22.09	98-926	22.09	(1/8" Female Pipe)	
5/16"	98-917	11.67	98-922	21.05	98-927	21.05		
3/8"	98-918	15.19	98-923	19.22	98-928	21.05		
3/8" (Push On)	98-919	21.05	98-924	22.33	98-929	22.33		

1/4" BASIC SIZE, BRASS

VALVED

Hose ID Size	Straight Stem		90° Stem		45° Stem		Body Only	
	Part #	List Price	Part #	List Price	Part #	List Price	Part #	List Price
1/4"	98-931	23.75	98-936	22.49	98-941	22.71	98-946	21.87
1/4" (Push On)	98-932	24.61	98-937	23.15	98-942	23.15	(1/8" Female Pipe)	
5/16"	98-933	23.78	98-938	22.49	98-943	22.71		
3/8"	98-934	19.26	98-939	23.52	98-944	22.71		
3/8" (Push On)	98-935	19.85	98-940	23.52	98-945	23.52		

3/8" BASIC SIZE, BRASS

STRAIGHT THROUGH (Non-Valved)

Hose ID Size	Straight Stem		90° Stem		45° Stem		Body Only	
	Part #	List Price	Part #	List Price	Part #	List Price	Part #	List Price
3/8"	98-947	27.45	98-952	22.34	98-957	22.34	98-962	16.84
3/8" (Push On)	98-948	18.91	98-953	26.77	98-958	24.55	(1/4" Female Pipe)	
1/2"	98-949	16.17	98-954	20.21	98-959	22.34	98-986	16.61
1/2"	98-950	17.27	98-955	22.34	98-960	22.34	(3/8" Female Pipe)	
1/2" (Push On)	98-951	19.26	98-956	22.34	98-961	25.21		

3/8" BASIC SIZE, BRASS

VALVED

Hose ID Size	Straight Stem		90° Stem		45° Stem		Body Only	
	Part #	List Price	Part #	List Price	Part #	List Price	Part #	List Price
3/8"	98-963	15.95	98-967	39.54	98-971	33.59	98-975	30.92
3/8" (Push On)	98-964	28.67	98-968	34.47	98-972	35.13	(1/4" Female Pipe)	
1/2"	98-965	23.37	98-969	33.22	98-973	33.59		
1/2"	98-966	28.81	98-970	34.77	98-974	34.91		

1/2" BASIC SIZE, BRASS

STRAIGHT THROUGH (Non-Valved)

Hose ID Size	Straight Stem		90° Stem		45° Stem		Body Only	
	Part #	List Price	Part #	List Price	Part #	List Price	Part #	List Price
1/2"	98-976	37.26	98-979	51.96	98-982	59.31	98-985	34.77
1/2" (Push On)	98-977	37.26	98-980	51.96	98-983	100.93	(1/2" Female Pipe)	
3/4"	98-978	40.84	98-981	53.73	98-984	61.30		

QUICK DISCONNECT

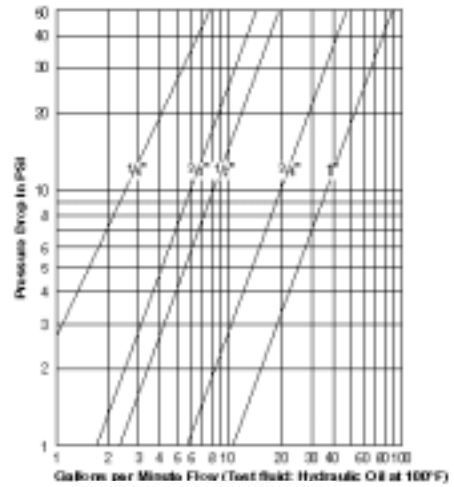


QUICK DISCONNECT

HYDRAULIC COUPLINGS

ISO-A Interchange

Nominal Size	Material	Rated Flow	Minimum Burst-Coupler	Minimum Burst-Plug	Minimum Burst Connected
1/4"	Steel	2.5 GPM	27,260 PSI	20,155 PSI	18,850 PSI
3/8"	Steel	6.6 GPM	22,185 PSI	18,125 PSI	17,400
1/2"	Steel	11.3 GPM	18,850 PSI	15,370 PSI	16,820
3/4"	Steel	24.5 GPM	18,705 PSI	17,400 PSI	15,080
1"	Steel	29.7 GPM	16,820 PSI	14,500 PSI	14,500



FEMALE PIPE COUPLER

Part #	Body Size	NPT	Working PSI	List Price
ANV-14-F	1/4	1/4	5075	22.56
ANV-38-F	3/8	3/8	4550	33.81
ANV-12-F	1/2	1/2	4500	48.99
ANV-34-F	3/4	3/4	3625	76.95
ANV-1-F	1	1	3335	103.49

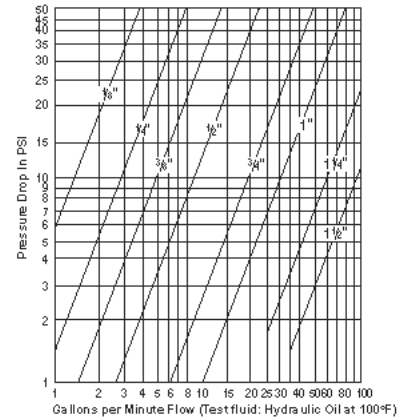


MALE PIPE PLUG

Part #	Body Size	NPT	Working PSI	List Price
ANV-14-M	1/4	1/4	5075	10.00
ANV-38-M	3/8	3/8	4550	16.17
ANV-12-M	1/2	1/2	4500	17.64
ANV-34-M	3/4	3/4	3625	32.34
ANV-1-M	1	1	3335	57.48

ISO-B Interchange

Nominal Size	Material	Rated Flow	Minimum Burst-Coupler	Minimum Burst-Plug	Minimum Burst Connected
1/8"	Steel	2.0 GPM	25,300 PSI	23,200 PSI	23,200 PSI
1/4"	Steel	4.2 GPM	27,260 PSI	21,460 PSI	20,880 PSI
3/8"	Steel	8.0 GPM	27,550 PSI	18,850 PSI	19,430 PSI
1/2"	Steel	11.0 GPM	23,780	15,370 PSI	15,370 PSI
3/4"	Steel	24.0 GPM	19,720	15,950 PSI	15,660 PSI
1"	Steel	25.0 GPM	19,720	15,950 PSI	15,660 PSI



FEMALE PIPE COUPLER

Part #	Body Size	NPT	Working PSI	List Price
HNV-14-F	1/4	1/4	5075	37.93
HNV-38-F	3/8	3/8	4350	41.78
HNV-12-F	1/2	1/2	4060	38.96
HNV-34-F	3/4	3/4	2610	70.63
HNV-1-F	1	1	2175	78.33



MALE PIPE PLUG

Part #	Body Size	NPT	Working PSI	List Price
HNV-14-M	1/4	1/4	5075	17.05
HNV-38-M	3/8	3/8	4350	18.10
HNV-12-M	1/2	1/2	4060	17.64
HNV-34-M	3/4	3/4	2610	32.34
HNV-1-M	1	1	2175	39.56



Call Toll Free: **1-866-711-4673**

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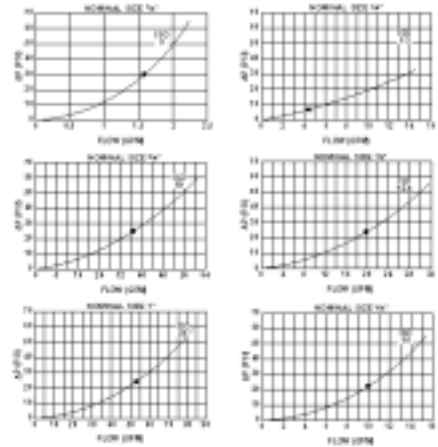
QUICK DISCONNECT

HYDRAULIC COUPLINGS

QUICK DISCONNECT

FLUSH FACE

Nominal Size	ISO Size	Maximum Working Pressure	Rated Flow	Minimum Burst-Plug	Minimum Burst-Coupler	Minimum Burst Connected
1/8"	5	7250 PSI	1.6 GPM	43,5000 PSI	29,000 PSI	43,500 PSI
1/4"	6.3	5000 PSI	4.8 GPM	28,275 PSI	23,925 PSI	33,350 PSI
3/8"	10	5000 PSI	10.0 GPM	29,200 PSI	21,025 PSI	20,590 PSI
1/2"	12.5	5000 PSI	19.8 GPM	25,375 PSI	21,750 PSI	23,925 PSI
5/8"	16	5000 PSI	26.4 GPM	24,255 PSI	21,750 PSI	23,200 PSI
3/4"	19	5000 PSI	37.0 GPM	20,580 PSI	20,580 PSI	20,300 PSI
1"	25	5000 PSI	52.8 GPM	20,580 PSI	20,580 PSI	21,750 PSI
1 1/2"	40	3625 PSI	89.5 GPM	14,500 PSI	14,500 PSI	14,500 PSI



FEMALE PIPE COUPLER

Part #	Body Size	NPT	Working PSI	List Price
FF-14-F	1/4	1/4	4400	117.38
FF-38-12-F	3/8	1/2	4350	105.19
FF-38-F	3/8	3/8	4350	102.02
FF-12-F	1/2	1/2	3650	143.99
FF-34-12-SAE-F	1/2	3/4	3675	180.37
FF-34-F	3/4	3/4	3650	240.12
FF-1-F	1	1	3675	339.86

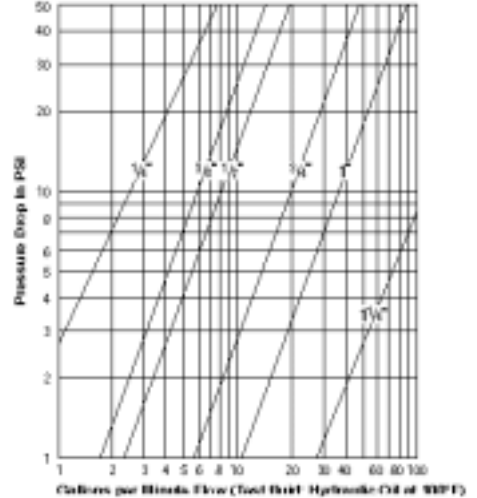


MALE PIPE PLUG

Part #	Body Size	NPT	Working PSI	List Price
FF-14-M	1/4	1/4	4400	47.04
FF-38-12-M	3/8	1/2	4350	55.13
FF-38-M	3/8	3/8	4350	49.17
FF-12-M	1/2	1/2	3650	96.29
FF-34-12-SAE-M	1/2	3/4	3675	94.45
FF-34-M	3/4	3/4	3650	151.70
FF-1-M	1	1	3675	232.04

AG INTERCHANGE

Nominal Size	Rated Flow	Minimum Burst-Coupler	Minimum Burst-Plug	Minimum Burst Connected
1/4"	6.08 GPM	27,550 PSI	21,170 PSI	22,040 PSI
3/8"	9.5 GPM	26,970 PSI	18,125 PSI	23,200 PSI
1/2"	11.3 GPM	18,850 PSI	15,370 PSI	16,820 PSI
3/4"	24.5 GPM	17,400 PSI	17,400 PSI	15,370 PSI
1"	27.5 GPM	16,820 PSI	14,500 PSI	14,790 PSI



FEMALE PIPE COUPLER

Part #	Body Size	NPT	Working PSI	List Price
NV-14-F	1/4	1/4	5075	28.30
NV-38-F	3/8	3/8	4550	87.24
NV-12-F	1/2	1/2	3625	45.35
NV-34-F	3/4	3/4	3625	87.24
NV-1-F	1	1	3335	124.44



MALE PIPE PLUG

Part #	Body Size	NPT	Working PSI	List Price
NV-14-M	1/4	1/4	5075	13.30
NV-38-M	3/8	3/8	4550	16.17
NV-12-M	1/2	1/2	3625	19.99
NV-34-M	3/4	3/4	3625	36.75
NV-1-M	1	1	3335	54.68

QUICK DISCONNECT



PNEUMATICS

PNEUMATIC ACCESSORIES

BRASS MUFFLERS



Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	List Price
300-020	10/32"	2.65
300-021	1/8"	2.83
300-022	1/4"	3.68
300-023	3/8"	5.00
300-024	1/2"	7.14
300-026	3/4"	15.03
300-028	1"	19.92
300-029	1-1/4"	33.58
300-030	1-1/2"	38.00

STAINLESS MUFFLERS



Materials:
Body: 303 Grade Stainless Steel
Element: 316 Grade Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 392°F

Part #	Size	List Price
300-031	10-32 NF	16.79
300-032	1/8"	16.79
300-033	1/4"	17.68
300-034	3/8"	20.67
300-035	1/2"	29.52
300-036	3/4"	84.84
300-037	1"	115.95

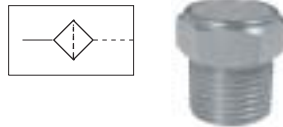
BRASS BREATHER VENT



Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 150PSI
Temperature: 35° to 300°F

Part #	Size	List Price
300-001	1/8"	2.02
300-002	1/4"	2.57
300-003	3/8"	3.68
300-004	1/2"	5.23
300-006	3/4"	12.48
300-008	1"	18.21
300-011	1-1/4"	20.29
300-013	1-1/2"	23.51

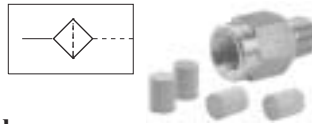
STAINLESS BREATHER VENT



Materials:
Body: 303 Grade Stainless Steel
Element: 316 Grade Stainless Steel
Max Operating Pressure: 150PSI
Temperature: 35° to 390°F

Part #	Size	List Price
300-014	1/8"	10.07
300-015	1/4"	15.73
300-017	3/8"	20.33
300-018	1/2"	28.46
300-019	3/4"	66.63
300-007	1"	85.72

PRESSURE SNUBBER



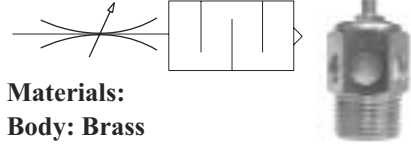
Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 9000PSI
Temperature: 35° to 300°F

Part #	Size	Porosity	List Price
28-354	1/4"	40 um	15.02
28-353	1/4"	30 um	15.02
28-352	1/4"	25 um	15.02
28-351	1/4"	20 um	15.02
28-350	1/4"	10 um	15.02

Part #	Size	Porosity	List Price
28-359	3/8"	40 um	15.02
28-358	3/8"	30 um	15.02
28-357	3/8"	25 um	15.02
28-356	3/8"	20 um	15.02
28-355	3/8"	10 um	15.02

Recommended Element Porosity Rating		
Porosity Rating	Color Code	Recommended Application
40 um	None	Viscous Fluids (over 500 ssu)
30 um	Black	Med. Type Oils (225 to 500 ssu)
25 um	Brown	Water & LT. Oils (30 to 25 ssu)
20 um	Green	Low Viscosity Fluids (under 30 ssu)
10 um	Red	
5 um	Purple	Air and Other Gases

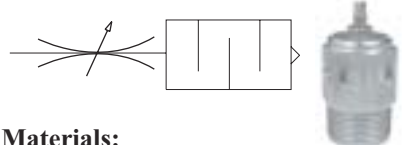
SPEED CONTROL VALVE



Materials:
Body: Brass
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	List Price
940-800	1/8"	11.03
940-801	1/4"	13.56
940-803	3/8"	18.82
940-804	1/2"	24.20
940-805	3/4"	25.88
940-806	1"	35.07

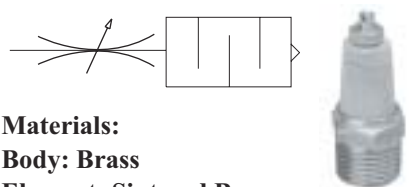
STAINLESS SPEED CONTROL VALVE



Materials:
Body: 303 Grade Stainless Steel
Element: 316 Grade Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 392°F

Part #	Size	List Price
940-810	1/8"	44.72
940-811	1/4"	47.37
940-812	3/8"	53.73
940-813	1/2"	70.35
940-814	3/4"	100.92
940-815	1"	137.33

MUFFLER W/ FLOW ADJUSTMENT



Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

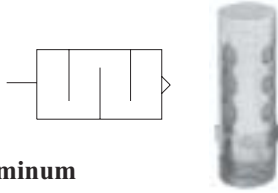
Part #	Size	List Price
28-379	1/8"	6.75
28-380	1/4"	8.84
28-381	3/8"	11.14
28-382	1/2"	16.26

ACCESSORIES



PNEUMATICS

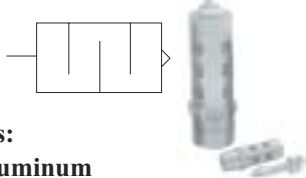
HIGH FLOW ALUMINUM MUFFLER



Materials:
Body: Aluminum
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	List Price
940-822	1/8"	18.38
940-823	1/4"	6.36
940-824	3/8"	8.66
940-825	1/2"	10.07
940-826	3/4"	16.79
940-827	1"	21.39

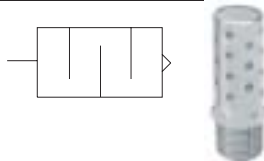
SPEED CONTROL ALUMINUM MUFFLER



Materials:
Body: Aluminum
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	List Price
940-816	1/8"	7.95
940-817	1/4"	10.07
940-818	3/8"	12.02
940-819	1/2"	19.44
940-820	3/4"	27.75
940-821	1"	31.11

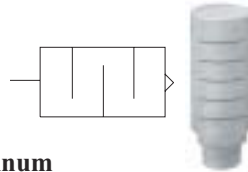
HIGH FLOW STEEL MUFFLER



Materials:
Body: Steel
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	List Price
28-373	1/8"	7.85
28-374	1/4"	8.24
28-375	3/8"	10.25
28-376	1/2"	11.31
28-377	3/4"	21.21
28-378	1"	23.86

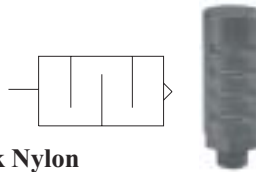
ALUMINUM HIGH FLOW MUFFLER



Materials:
Body: Aluminum
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	List Price
28-367	1/8"	17.50
28-368	1/4"	15.94
28-369	3/8"	25.63
28-370	1/2"	25.63
28-371	3/4"	52.14
28-372	1"	52.14

PLASTIC HIGH FLOW MUFFLER



Materials:
Body: Black Nylon
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 150PSI
Temperature: 35° to 120°F

Part #	Size	List Price
28-363	1/8"	7.25
28-364	1/4"	7.25
28-365	3/8"	11.31
28-366	1/2"	14.39

NIPPLE INLINE FILTER

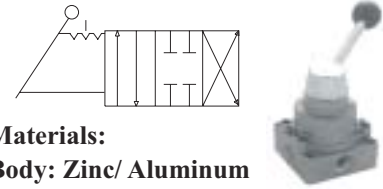


Materials:
Body: Brass
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	List Price
940-845	1/8"	7.28
940-846	1/4"	10.70
940-847	3/8"	11.68
940-848	1/2"	20.50

PNEUMATICS

SLIDING HAND VALVES



Materials:
Body: Zinc/ Aluminum
Cover: Zinc
Rotary Disk: Teflon
Pressure Range: 0 to 140PSI
Proof Pressure: 213 PSI
Temperature: 41°F to 140°F
Media: Air
Valve Function: 4-Way, 3 Position
Operation Method: Manually operated 90°, Rotary Disk, Direct-Acting type

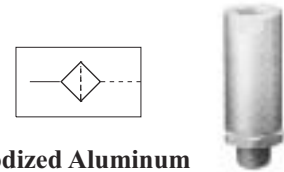
Body: Zinc

Part #	Size	List Price
28-360	1/4"	153.24

Body: Aluminum

28-361	3/8"	153.24
28-362	1/2"	153.24

REPAIRABLE AIR/ OIL INLINE FILTER



Materials:
Body: Anodized Aluminum
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 200°F

Part #	Size	List Price
940-840	1/8"	17.14
940-841	1/4"	17.14
940-842	3/8"	28.10
940-843	1/2"	63.45
940-844	3/4"	63.45

The only interesting answers are those which destroy the questions.

- Susan Sontag

ACCESSORIES



MANIFOLDS

PNEUMATIC ACCESSORIES

Materials:

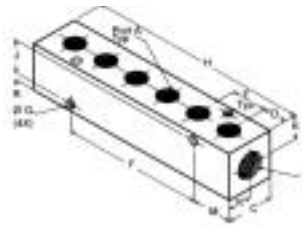
Aluminum with black anodizing for corrosion resistance.

Specifications:

Max Operating Pressure: 1000PSI

Temperature: -10° to 200°F

Media: Air and liquids compatible with materials of construction.



THREADED PORTS

Part #	Ports	List Price	A NPT	B NPT	C	D	E	F	G	H	J	K	M	R
28-448	2	37.19						N/A		1.75				
28-449	3	41.64						0.75		2.50				
28-450	4	55.78						1.50		3.25				
28-451	5	49.00						2.25		4.00				
28-452	6	51.96	1/8	1/4	1.00	0.50	0.75	3.00	0.17	4.75	0.70	0.50	0.88	0.15
28-453	7	54.72						3.75		5.50				
28-454	8	57.55						4.50		6.25				
28-455	9	59.67						5.25		7.00				
28-456	10	82.52						6.00		7.75				
28-457	2	42.14						N/A		2.13				
28-458	3	55.36						0.88		3.00				
28-459	4	59.35						1.75		3.88				
28-460	5	63.84						2.63		4.75				
28-461	6	67.94	1/4	3/8	1.25	0.63	0.88	3.50	0.20	5.63	0.89	0.63	1.06	0.18
28-462	7	59.32						4.38		6.50				
28-463	8	76.00						5.25		7.38				
28-464	9	65.04						6.13		8.25				
28-465	10	67.38						7.00		9.13				
28-466	2	64.97						N/A		3.13				
28-467	3	83.36						1.13		4.25				
28-468	4	87.80						2.25		5.38				
28-469	5	91.84						3.38		6.50				
28-470	6	96.93	3/8	3/8	1.25	1.00	1.13	4.50	0.20	7.63	0.89	0.63	1.56	0.18
28-471	7	113.90						5.63		8.75				
28-472	8	107.25						6.75		9.88				
28-473	9	109.66						7.88						
28-474	10	136.85						9.00						

RIGHT ANGLE MANIFOLD

Part #	List Price
28-448R	37.19
28-449R	42.14
28-450R	57.27
28-451R	41.64
28-452R	45.67
28-453R	68.86
28-454R	46.03
28-455R	49.21
28-456R	82.72
28-457R	49.00
28-458R	52.67
28-459R	61.61
28-460R	51.96
28-461R	56.07
28-462R	79.61
28-463R	54.72
28-464R	59.32
28-465R	89.44
28-466R	57.55
28-467R	62.64
28-468R	107.25
28-469R	59.67
28-470R	65.04
28-471R	109.66
28-472R	61.65
28-473R	67.38
28-474R	112.13

3 IN 1 ALUMINUM AIR MANIFOLD

No need to connect and disconnect every time you want to change tools. Supply 3 air tools from one outlet. These manifolds have one inlet with three outlets.



- S685-4 D3406
- S685-6 D3408
- S685-8 3104
- D3404 3106

Part #	Size	List Price
320-120	1/4" Inlet	14.28
three 1/4" Outlets		

SAFETY BLOW GUN

- N/P steel handle with plastic sleeve 20430AD
- Brass Valve S148
- Zinc body D204-30
- Aluminum nozzle 5114 6475



Part #	Size	List Price
320-050	1/4" Inlet	6.67
1/8" Outlet		

RUBBER TIPPED NOZZLE



- 51-521
- 2058
- D201RT
- 411R

Makes positive seal between gun and fuel line or other openings. Use only on air line regulated to 30 PSI or less

Part #	List Price
320-070	12.86

HIGH FLOW SAFETY NOZZLE



- 51-338
- SST10
- 411BT
- 2056

Meets OSHA regulations of 30 PSI maximum outlet pressure when line pressure is 150 PSI or less. Has an air pressure bypass which prevent build up of tip pressure even if nozzle is blocked. Adapts to any blow gun with a 1/8" NPT nozzle port

Part #	List Price
320-075	3.00

AIR ADJUSTING VALVE

(NOT A SHUT-OFF VALVE)

- Permits accurate flow control in either direction
- Set knob to desired flow rate
- Spring-loaded ratchet permits positive flow adjustment without drift



AIR ADJUSTING VALVE

Part #	Size	List Price
28-599	1/4"	11.64

MULTI-PURPOSE AIR VENT

705



Part #	Size	List Price
46-048	1/8	3.15

ACCESSORIES

PNEUMATIC ACCESSORIES

PNEUMATICS

BRASS BICYCLE PUMP FITTING

Screw on swivel chuck for most hand operated tire pumps.
Buna-N-Seal • Deflator



Part #	Size	List Price
32-782	3/16"	1.00

INFLATOR



Part #	Size	List Price
32-783	3/16"	1.00

360° Turning Swivel Fitting

1/4" Basic size Industrial Interchange Plug •360° Turning •Swivels



Part #	Size	List Price
320-065	1/4"	21.33

SWIVEL FITTING

1/4" Basic size Industrial Interchange Plug •360° Turning •Swivels

Male NPT x Female NPT



Part #	Size	List Price
320-061	1/4"	16.42

AIR CHUCKS

HEX BALL FOOT CHUCK



Part #		List Price
46-600	1/4 FPT Live Air	2.92

BALL FOOT CHUCK WITH 1/4 I.D. HOSE BARB



Part #		List Price
46-607	1/4 ID Live Air	2.76

DUAL FOOT CHUCKS

6999	99941
693	50-065
108	6569
DFG-1	



Part #	List Price
320-000	12.84

ANGLE CHUCK 690 6172



Part #	List Price
320-005	8.53

TANK & VENT VALVES

Three standard styles of valve bodies, complete with short core, for air lifts, water pumps, vacuum, pressurized containers, air jacks, and other pneumatic devices.

REGULAR: 300 PSI and cracking pressure 80 PSI

1/8" NPT, .9" LONG SPRING CORD

Thread - .302 x 32



7/16" Hex

Part #		List Price
46-620	REGULAR	3.59

1/8NPT 1.207"LONG SPRING CORD

7/16" Hex



Part #		List Price
46-621	REGULAR	4.67

1/4 NPT 1"LONG SPRING CORD

9/16" Hex



Part #		List Price
46-622	REGULAR	3.27
46-622L	LIGHT SPRING	5.17

TANK VALVE ACCESSORIES

BLACK PLASTIC CAP

No Gasket



Part #	List Price
46-630	0.14

SHORT NICKEL PLATED DOME CAP



Dome skirted type

Part #	List Price
46-631	0.99

ACCESSORIES



RELIEF VALVE

Application

These relief valves are ideal for air service. The valve will weep slightly at set pressure and achieve full lift and high flow by 110 percent of their rated set pressure.

Features

- Bubble tight at 95% of set pressure.
- Easy to read color coded psig / bar labels.
- Unique tamper resistant and staked adjusting screw.
- Repeatable performance.
- 100% factory tested.
- Temperatures Range -320 to +212 F
- Set pressures range from 25-600psi

Materials

BodyBrass
 Spring.....Stainless Steel
 Seat Retainer.....Brass
 Adjusting Screw.....Brass
 Seat Disc (Below 140psi).....Fluorosilicone
 (Above 140psi).....Teflon

* 6pc minimum order for each size relief valve



Flow Data for 1/4", 3/8" & 1/2" Relief Valves:

Set Pressure PSIG	Flow Pressure PSIG	Flow Rate SCFM Air
25	24	29
50	55	52
100	110	93
150	165	134
230	253	200
350	385	298
400	440	339
450	495	380
500	550	421

Also available with all stainless steel components.

Part # Specify Relief Setting "xxx"	Pull Ring	Body	A (NPT) Male	B Ht.	C (In.) Hex	Relief Setting	List Price	
28-390-xxx	Yes	Brass	1/4	3.0	7/8	Available in settings from 17-600 psi.	POR	
28-391-xxx	No			2.6			POR	
28-392-xxx	Yes			1/2			3.2	POR
28-393-xxx	No						2.8	POR
28-394-xxx	No	Stainless Steel	1/4	2.6			POR	
28-395-xxx	No			1/2			2.8	POR

28-390-230 indicates part # 28-390 with a pull ring set at 230.

CHECK VALVES

*Only come in 25psi setting

- A check valve specifically designed and manufactured for the car wash/pressure washing industry.
- Unique two piece construction allows the user to dis-assemble the valve, clean and replace seals as necessary.
- Both valves which are available in 1/4" and 3/8" NPTF contain O-rings of Viton7 and Buna-N for long-lasting durability.
- Maximum operating pressure on each valve is 200 psi.
- Cracking pressure is 5 psig.



Part #	Material	Thread (Both Ends)	A - Length (in)	B - Width (in)	List Price
28-396	ASTM B 16 Brass	1/4 NPTF	3.03	1.00	79.82
28-397	ASTM B 16 Brass	3/8 NPTF	3.03	1.00	96.14
28-398	303 Stainless Steel	1/4 NPTF	3.03	1.00	139.65
28-399	303 Stainless Steel	3/8 NPTF	3.03	1.00	154.13

See more check valves on page 151

ACCESSORIES



PNEUMATIC ACCESSORIES

DUAL ANGLE-FOOT TRUCK PENCIL GAUGE



High pressure 20-120 PSI, in 2lb unit

Part #	List Price
320-023	27.57

DUAL STRAIGHT-FOOT PENCIL GAUGE



Identical to above except has straight chuck with 30° reverse angle chuck

Part #	List Price
320-027	36.69

WATER NOZZLES

Lever controlled operating valve. Oil resistant, shockproof molded hard rubber nozzle. 1/4" female N.P.T.

RADIATOR WATER FAUCET



Part #	Size	List Price
320-100	1/4" FPT	24.96

PNEUMATIC SLIDE VALVES

- Max Operating Pressure: 200 psig
- Temperatures: -20°F to +200°F

Manually operated slide valves provide simple on/off airflow control. They can be mounted horizontally, vertically or at any angle.



Open Position

MALE X FEMALE

Part#	Size	L	Hex	List
20-780	1/8"	2.15	9/16"	5.50

Part #	Size	L	Hex	List Price
20-780	1/8"	2.15	9/16"	7.28

STANDARD DRY GAUGES

STEEL CASE



All the gauges supplied are designed for long, reliable service under rugged conditions. Typical applications include compressors, filter regulators, water pumps, beverage dispensing equipment, hydraulic and pneumatic systems, and other applications, where the media does not corrode brass

2" FACE 1/4" LOWER MOUNT

Part #	PSI	List Price
80-001	0-15	17.56
80-002	0-30	11.32
80-003	0-60	13.21
80-004	0-100	9.44
80-005	0-160	12.43
80-006	0-200	10.66
80-007	0-300	15.15
80-020	30-0 Vacuum	17.56



2-1/2" FACE 1/4" LOWER MOUNT

Part #	PSI	List Price
80-031	0-15	23.15
80-032	0-30	17.87
80-033	0-60	15.32
80-034	0-100	15.32
80-035	0-160	18.34
80-036	0-200	15.72

GAUGES

LIQUID FILLED GAUGES

STAINLESS CASE

Liquid filled gauges enhance the reliability and integrity of the measuring system for long periods. The glycerine filling helps dampen the effects of vibration and pulsation. It also lubricates the movement which extends the life of the gauge.



- Liquid Filled Gauges with a stainless case are used for protection in harsh environments.
- Stainless Steel Case
- Copper Alloy Wetted parts
- Polycarbonate window ± 1.5% of span accuracy

2-1/2" FACE 1/4" LOWER MOUNT

Part #	PSI	List Price
80-061	0-15	51.90
80-062	0-30	31.08
80-063	0-60	34.97
80-064	0-100	31.08
80-065	0-160	31.08
80-066	0-200	31.08
80-067	0-300	37.30
80-068	0-400	53.61
80-069	0-600	53.61
80-100	0-1000	53.61
80-101	0-1500	57.50
80-102	0-2000	53.61
80-103	0-3000	29.14
80-104	0-5000	53.61
80-080	30-0 Vacuum	46.22

2-1/2" FACE 1/4" CENTER BACK MOUNT

Part #	PSI	List Price
80-201	0-15	53.61
80-202	0-30	34.91

1-1/2" & 2" ABS also available

4" FACE 1/4" LOWER MOUNT

Part #	PSI	List Price
80-463	0-100	127.43

Other Gauges available upon request...Just Ask!

ACCESSORIES



GAUGES

Water Test Gauge

0-300 PSI DIAL
3/4" FEMALE HOSE
CONNECTION



Part #	Face Size	Box	Case	List Price
991-249	2"	1	5	18.45
991-250	2-1/2"	1	5	22.44

Water Test Gauge w/Lazy Hand (Maximum pointer)

2-1/2" GAUGE
0-300 PSI DIAL
3/4" FEMALE HOSE
CONNECTION



Regular pressure hand pushes LAZY hand to peak operating or surge pressure point where it remains until you manually reset it. Excellent to determine if P/T valve is leaking from failure or if leaking is caused by surge of excessive pressures. (Attach gauge to Boiler Drain Valve overnight.) LAZY hand operates over entire gauge range of 0-300psi

Part #	Box	Case	List Price
991-251	1	10	21.81

Air Valve Only



Part #	Box	Case	List Price
46-620	100	200	3.78

GAUGES

SIMPLE SIPHON W/ HOSE



Part #	NET Price
SS1000	24.99

FISH TANK CLEANER



Part #	NET Price
RC1010	34.10

SIMPLE SIPHON 3 PACK



Part #	NET Price
SS31015	26.09

10" EXTENSION



Part #	NET Price
10E1025	10.95

ACCESSORIES

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CAM & GROOVE

CAM & GROOVE



Aluminum

Type	A		B		C		D		E		F		DC		DP		Type
Size	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Size
3/4"	61-911	8.01	61-921	18.01	61-931	15.23	61-941	18.01	61-951	8.45	61-961	10.07	61-971	15.29	61-981	9.05	3/4"
1"	61-912	9.69	61-922	19.67	61-932	18.68	61-942	20.93	61-952	9.60	61-962	11.66	61-972	16.20	61-982	8.26	1"
1-1/4"	61-913	12.90	61-923	23.15	61-933	26.79	61-943	23.51	61-953	13.60	61-963	12.89	61-973	20.79	61-983	8.98	1-1/4"
1-1/2"	61-914	11.77	61-924	22.39	61-934	23.38	61-944	22.13	61-954	11.39	61-964	11.82	61-974	19.25	61-984	8.90	1-1/2"
2"	61-915	10.97	61-925	23.71	61-935	28.34	61-945	24.97	61-955	13.98	61-965	13.13	61-975	20.07	61-985	9.08	2"
2-1/2"	61-916	22.41	61-926	39.32	61-936	41.06	61-946	41.53	61-956	24.92	61-966	28.59	61-976	32.17	61-986	19.55	2-1/2"
3"	61-917	21.89	61-927	41.61	61-937	36.24	61-947	39.37	61-957	27.66	61-967	28.84	61-977	26.90	61-987	17.32	3"
4"	61-918	38.73	61-928	70.09	61-938	58.87	61-948	67.33	61-958	46.23	61-968	41.79	61-978	47.81	61-988	30.64	4"

316 Stainless Steel

Type	A		B		C		D		E		F		DC		DP		Type
Size	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Size
3/4"	63-911	26.03	63-921	41.16	63-931	37.49	63-941	43.02	63-951	20.29	63-961	22.42	63-971	34.18	63-981	12.35	3/4"
1"	63-912	24.67	63-922	41.91	63-932	36.31	63-942	52.57	63-952	23.45	63-962	37.71	63-972	42.26	63-982	28.15	1"
1-1/4"	63-913	31.17	63-923	64.61	63-933	66.89	63-943	67.25	63-953	43.88	63-963	53.73	63-973	44.85	63-983	31.05	1-1/4"
1-1/2"	63-914	36.72	63-924	93.71	63-934	64.28	63-944	79.19	63-954	49.76	63-964	50.91	63-974	57.70	63-984	32.49	1-1/2"
2"	63-915	44.56	63-925	123.85	63-935	85.00	63-945	86.88	63-955	53.29	63-965	59.01	63-975	67.40	63-985	44.54	2"
2-1/2"	63-916	80.83	63-926	113.93	63-936	113.19	63-946	102.33	63-956	80.85	63-966	109.37	63-976	90.92	63-986	61.89	2-1/2"
3"	63-917	85.63	63-927	155.45	63-937	141.86	63-947	174.82	63-957	155.67	63-967	135.09	63-977	121.42	63-987	70.49	3"
4"	63-918	157.29	63-928	227.48	63-938	227.04	63-948	233.36	63-958	178.16	63-968	205.07	63-978	173.46	63-988	102.02	4"

Brass

Type	A		B		C		D		E		F		DC		DP		Type
Size	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Size
3/4"	44-911	17.64	44-921	24.84	44-931	23.15	44-941	27.58	44-951	15.36	44-961	13.89	44-971	31.90	44-981	13.23	3/4"
1"	44-912	13.08	44-922	34.91	44-932	29.03	44-942	32.63	44-952	16.46	44-962	20.73	44-972	22.71	44-982	14.55	1"
1-1/4"	44-913	19.48	44-923	34.55	44-933	34.55	44-943	34.55	44-953	23.15	44-963	25.00	44-973	30.44	44-983	15.44	1-1/4"
1-1/2"	44-914	22.86	44-924	32.63	44-934	33.66	44-944	45.21	44-954	24.11	44-964	33.47	44-974	42.64	44-984	14.70	1-1/2"
2"	44-915	35.65	44-925	56.60	44-935	59.17	44-945	57.12	44-955	47.78	44-965	45.26	44-975	33.08	44-985	19.48	2"
2-1/2"	44-916	38.96	44-926	53.66	44-936	62.48	44-946	56.60	44-956	42.92	44-966	52.19	44-976	45.42	44-986	29.40	2-1/2"
3"	44-917	50.35	44-927	70.56	44-937	70.56	44-947	89.30	44-957	61.74	44-967	60.27	44-977	77.54	44-987	33.08	3"
4"	44-918	80.70	44-928	98.86	44-938	109.52	44-948	114.66	44-958	99.98	44-968	99.67	44-978	80.85	44-988	54.10	4"

Polypropylene

Type	A		B		C		D		E		F		DC		DP		Type
Size	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Part#	List Price	Size
1/2"	35-910	7.50	35-920	18.72	35-930	18.72	35-940	18.72	35-950	8.53	35-960	8.53	35-970	18.61	35-980	7.42	1/2"
3/4"	35-911	7.72	35-921	18.72	35-931	18.72	35-941	18.72	35-951	8.53	35-961	8.53	35-971	18.61	35-981	7.72	3/4"
1"	35-912	7.83	35-922	21.06	35-932	21.06	35-942	21.06	35-952	9.94	35-962	9.94	35-972	21.06	35-982	8.20	1"
1-1/4"	35-913	8.53	35-923	21.65	35-933	21.72	35-943	21.72	35-953	9.94	35-963	9.94	35-973	21.06	35-983	8.78	1-1/4"
1-1/2"	35-914	9.35	35-924	23.18	35-934	24.10	35-944	24.10	35-954	10.30	35-964	10.30	35-974	24.32	35-984	9.24	1-1/2"
2"	35-915	10.80	35-925	29.14	35-935	30.30	35-945	29.14	35-955	12.88	35-965	12.39	35-975	29.25	35-985	11.36	2"
3"	35-917	27.74	35-927	45.71	35-937	51.35	35-947	48.44	35-957	34.75	35-967	30.52	35-977	51.35	35-987	25.99	3"

ACCESSORIES



HOSE FITTINGS

BRONZE INSERT FITTINGS

150 PSI Genuine red brass
- for plastic pipe

HEX MALE ADAPTERS



Plastic x Male Pipe

Part #	Hose Size	List Price
973-927	1 x 1	12.13
973-930	1 x 1-1/4	17.20
973-928	1-1/4 x 1-1/4	18.30
973-929	1-1/4 x 1	18.52
973-948	1-1/2 x 1-1/2	21.32
973-949	2 x 2	28.85

BRONZE TEES ALL BARB



Part #	Size	List Price
973-965	3/4	17.64
973-966	1	24.70
973-967	1-1/4	39.69

ELBOWS



(BARB X MALE PIPE)

Part #	Size	List Price
973-980	3/4 x 3/4	12.13
973-981	1 x 3/4	17.42
973-982	1 x 1	19.85

STEEL INSERT FITTINGS FOR PLASTIC PIPE

MALE ADAPTER



BARB X MALE PIPE

Part #	Size	Box/Case	List Price
973-906	1/2	25/100	2.46
973-907	3/4	25/10	3.19
973-908	1	16/48	3.70
973-909	1-1/4	12/36	5.36
973-910	1-1/2	6/36	8.46
973-911	2	5/25	15.21
973-912	2-1/2	1/3	28.21
973-877	3	1/3	15.57
973-914	4	1/3	52.08

REDUCING ADAPTER



(INSERT X NPT)

Part #	Size	List Price
974-264	3/4 x 1/2	11.48
974-265	1 x 3/4	11.72
974-266	1-1/4 x 1	18.60
974-267	1-1/2 x 1-1/4	22.56

COUPLINGS



BARB X BARB

Part #	Size	Box/Case	List Price
973-900	1/2	30/120	3.28
973-901	3/4	20/100	4.69
973-902	1	20/100	6.04
973-903	1-1/4	16/64	9.36
973-904	1-1/2	12/48	9.00
973-905	2	5/25	11.67

HOSE NIPPLES

STEEL HOSE NIPPLES



Part #	Hose Size	List Price
973-850	1/2"	5.77
973-851	3/4"	6.03
973-852	1"	7.41
973-853	1-1/4"	7.59
973-854	1-1/2"	12.51
973-855	2"	16.29
973-856	2-1/2"	33.59
973-857	3"	33.19
973-858	4"	52.29

HOSE ACCESSORIES

STEEL HOSE NIPPLES

PLATED STEEL



Part #	Hose Size	List Price
973-870	1/2"	2.15
973-871	3/4"	2.39
973-872	1"	3.58
973-873	1-1/4"	4.51
973-874	1-1/2"	5.23
973-875	2"	6.56
973-876	2-1/2"	14.11
973-877	3"	15.57
973-878	4"	28.68

STEEL HOSE MENDER



Part #	Hose Size	List Price
973-890	1/2"	4.64
973-891	3/4"	5.49
973-892	1"	6.15
973-893	1-1/4"	11.31
973-894	1-1/2"	11.28
973-895	2"	15.00

More sizes available...just ask!

John F. Kennedy:

*The time to repair a roof is when
the sun is shining.*

*Forgive your enemies, but never
forget their names.*

*Mankind must put an end to
war, or war will put an end to
mankind.*

*Conformity is the jailer of free-
dom and the enemy of growth.*

Plbg Accessories

Tank Levers

- Chromed metal plated handle
 - Bulk
- T01-001



Part #	Size	Case	List Price
961-124	8"*	100	3.74

*round brass arm w/ metal spud. Import

- Bulk



Part #	Size	Case	List Price
961-126	8"*	100	5.04

*round brass arm w/ metal spud. USA

- Individually Boxed
- With Brass Locknut



Part #	Size	Case	List Price
961-141	8"*	100	6.28

*round brass arm w/ Brass locknut

The will to win is important, but the will to prepare is vital.

- Joe Paterno

Toilet Repair Parts

Float Ball



Part #	Size	Case	List Price
961-131	Black Poly	120	2.94

SEAT DISC FOR AMERICAN STANDARD



BLACK RUBBER

Part #	Size	Case	List Price
960-106	Screw on	200	2.44
960-107	Snap on	200	2.16

Flush Valves

PLASTIC FLUSH VALVE



Part #	Size	Case	List Price
961-119	With flapper chain, nut & washer	50	7.94

11-PIECE COMPLETE "TOUCH-FLUSH" ASSEMBLY FOR ELJER



NOT AVAILABLE FROM ELJER

Part #	Size	Case	List Price
960-125	Generic Boxed "Touch-Flush" Assy.	100	10.91

PLBG
ACCESSORIES

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Complete Cast Brass Spuds

CAST RED BRASS COMPLETE WITH BRASS LOCKNUT, SPUD GASKET AND FRICTION RING



SPUD
X
THREAD

FOR CLOSET

Part #	Size	Box	Case	List Price
961-160	1-1/4"	25	150	14.97
961-161	1-1/2"	6	60	18.84
961-162	2"	6	60	18.84
961-163	2"x1-1/2"	25	100	18.84



FOR URINAL

Part #	Size	Box	Case	List Price
961-173	1"x3/4"	25	200	6.31
961-172	1-1/4"x3/4"	25	125	7.03
961-174	1-1/2"x3/4"	25	125	14.14
961-171	1-1/2"x1-1/4"	25	125	15.91

Tank Bolt Set

14 PIECE TANK BOLT SET



7/8" OD
Head

- TWO DEEP SLOTTED 5/16" DIA X 2-3/4" LONG 7/8" OD DEEP BOLT HEAD
- FOUR LAYER CLOTH INSERTED GASKETS
- FOUR HEAVY PATTERN BRASS HEX NUTS
- TWO HEAVY PLATED BRASS WASHERS
- PACKAGED IN POLYBAG

Part #	Description	Box	List Price
961-215	Bolt Set	50 Sets	7.00

Plbg Accessories

Closet Bolt Sets

6 PIECE BRASS PLATED STEEL BOLT SETS



- TWO CLOSET BOLTS
- TWO PLATED ACORN NUTS
- TWO HEAVY PLATED BRASS WASHERS
- PACKAGED IN A POLYBAG

Part #	Size	Box	Case	List Price
961-212	1/4"x2-1/4"	50 Sets	250 Sets	1.00

8 Piece Solid Brass Bolt Set

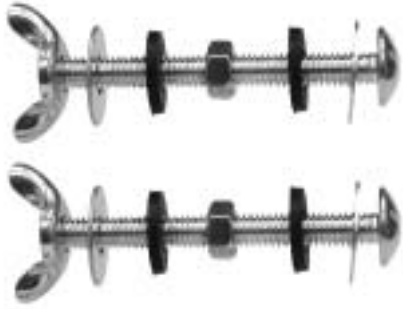


- TWO CLOSET BOLTS
- TWO HEAVY PLATED WASHERS
- TWO PLATED ACORN NUTS
- TWO STANDUP WASHERS
- PACKAGED IN A POLYBAG

Part #	Size	Box	List Price
961-203	1/4"x2-1/4"	125 Sets	6.06
961-204	5/16"x2-1/4"	125 Sets	6.90

Plbg Accessories

14 Piece Closet Bolt Set



- TWO CLOSET BOLTS
- TWO HEAVY PATTERN BRASS HEX NUTS
- 2-ZINC PLATED STEEL WING NUTS
- FOUR RUBBER WASHERS
- FOUR HEAVY PLATED BRASS WASHERS
- PACKAGED IN POLYBAG

Part #	Size	Box	List Price
961-515	5/16"x3	25 Sets	2.12

Smile at each other,
Smile at your wife,
Smile at your husband,
Smile at your children,
Smile at each other-
It doesn't matter who it is-
And that will help you to
grow up in greater love for
each other.

- Mother Teresa

Toilet Repair Parts

Solid Brass Closet Flanges



Part #	Description	Box	Case	List Price
961-320	9/16" Shallow 14oz	10	100	18.11



Part #	Description	Box	Case	List Price
961-321	1-1/8" Deep 20oz	10	50	23.02



Part #	Description	Box	Case	List Price
961-322	4" Offset	10	50	28.32

Closet Flanges

"COLLAR" SAVER SPANNER FLANGE



ALLEVIATES REPLACEMENT OF
BROKEN CLOSET RINGS

Part #	Box	Case	List Price
961-500	10	100	7.40

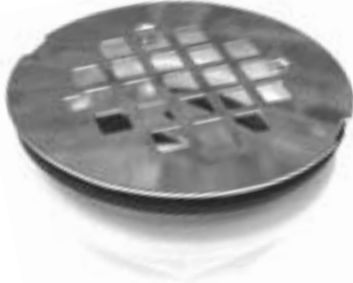
PLBG
ACCESSORIES



Floor Drains/ Shower Heads

PVC Stainless Steel Grid Shower Drain

- Stainless Steel Grid
- No Caulk



133-106
D41-001

Part #	Flange	Box	Case	List Price
952-204	4-1/2"	1	40	10.08

Quick Calulking Compression Shower Drain

- Neoprene Inlet Slip Connection
- All brass with Rubber Gripper
- Use on steel, fiberglass and plastic shower bases
- Internal compression sealing gasket
- Fits 2" steel or plastic pipe
- No solvent or lead required



D40-142
1268
133-301

Part #	Description	Box	Case	List Price
953-222	All Brass w/ Rubber Gripper	1	40	28.00

Plbg Accessories

BRASS BALL JOINT CHROMED ABS SHOWERHEAD

2" diameter face

2.5 GPM
waterflow



141-012

Part #	Description	Box	Case	List Price
913-116	Shower Head	10	50	7.58

CHROMED ZINC SHOWER HEAD

2" diameter face

141-009

2.5 GPM
waterflow



Part #	Description	Box	Case	List Price
913-118	CP Water-Miser	1	25	10.70

"LIFER ALL BRASS" SHOWER HEAD WITH CANOPY LEVER

- Chrome Plated Brass Ball Joints
- Heavy Duty
- 1/2" FIP Connection
- Chrome Plated

2.5 GPM
waterflow

122WS
141-301
501-008



Part #	Description	Box	Case	List Price
913-141	1-3/4 Dia Face	10	50	20.41

PLBG
ACCESSORIES

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Plbg Accessories

DROP EAR ELBOWS

- Sold in boxes of 100



SWT X FIP

Part #	Description	Box	List Price
44-117	1/2x1/2	100	4.52

SHOWER ARM



6" - 141-013
8" - 141-014
501-030

CHROME PLATED 1/2" IPS

Part #	Description	Box	List Price
913-109	6"	10	6.14
913-111	8"	12	11.39
913-115	10"	12	12.36

SHOWER ARM FLANGE

1/2" IPS



91

Part #	Description	Box	List Price
913-112	Set Screw Flange	25	4.14

SURFACE FLANGES



BC3000C
8.3

SHOWER ROD HOLDER

Part #	Description	Box	List Price
913-123	Plastic (Pair)	25	2.69

Shower Accessories

FOR FIBER GLASS SHOWER LOCKS SHOWER ARM TO WALL AND ELIMINATES VIBRATION

- Brass Body
- 2 metal locknuts
- 2 metal washers
- 2 rubber washers

1/2" FIP



outlet end

1/2" FIP

inlet end

1/2" IP or 1/2" FE.sweat

1/2" MIP (1/2"C)

Part #	Description	Box	List Price
912-185	1/2"MIP (1/2"SWT)x1/2"FIP	10	7.76

BATH COUPLING



CAST RED BRASS FURNISHED W/ COUPLING NUT GROUND JOINT NOSE 1/2" MIP

Part #	Description	Box	List Price
924-104	Complete Pair	6 Pair	20.13

CP BRASS DIVERTER

To allow connection of flexible hose without interrupting flow of fixed shower head or leg tub spout.

1/2"

1/2"



1/2"

Part #	Description	Box	List Price
913-205	Diverter for Fixed Shower	10	14.38

VOLUME CONTROL VALVE

141-401

Shut off water w/o changing shower setting

Install between shower arm & shower head

1/2"



1/2"

Part #	Description	Box	List Price
913-206	CP Brass	10	10.64



Tub Spouts

DIVERTER SPOUT

142-093



**DIE CAST CHROME PLATED ZINC BODY
SHIPPED WITH FACE BUSHING**

Part #	Description	Box	List Price
913-102	Fits 1/2IPS & 3/4IPS	10	18.69

DIVERTER SPOUT

359A
SHORT



Part #	Description	Box	List Price
913-104	CP Brass 3/4 FIP	10	60.55

BATHTUB SPOUT

142-092
360DB

- Threads at the nose



DIE CAST CHROME PLATED ZINC BODY

Part #	Description	Box	List Price
913-105	1/2" w/ 3/4"x1/2" plastic bushing	10	8.51

Do the things you are afraid to do
and the death of fear is certain.

- Ralph Waldo Emerson

Plbg Accessories

DIVERTER SPOUT

142-095
361



DIE CAST C/P ZINC BODY

Part #	Description	Box	List Price
913-132	1/2" FIP Nose	10	11.50

DIVERTER SPOUT

142-096
363



- Slides ove copper tube, seals with an O-ring and is held in place by a set screw

DIE CAST C/P ZINC BODY

Part #	Description	Box	List Price
913-108	1/2" Copper	10	14.38

Face Bushing

FOR DIVERTER SPOUT



Part #	Description	Box	List Price
28-117	1/2"MIP x 3/8"FIP	10	1.53
28-118	3/4"MIP x 1/2" FIP	10	2.55

Learn from yesterday, Live for
today, Hope for tomorrow.

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HOW TO CREATE A DEPRESSION

A man lived by the side of the road and sold hot dogs.
He was hard of hearing so he had no radio.
He had trouble with his eyes so he read no newspapers.
But he sold good hot dogs!
He put up signs on the highway telling how good they were.
He stood by the side of the road and cried: "Buy a hot dog mister!"
And people bought!
He increased his meat and bun orders.
He bought a bigger stove to take care of his business.
He brought his son home from college to help him.
But then something happened...
His son said, "Father, haven't you been listening to the radio?
There is a depression on.
The European situation is bad.
The Asian situation is terrible.
The domestic situation is worse.
Whereupon the father thought, "Well my son's been to college, He reads the papers
and listens to the radio, and he ought to know,"
So the father cut down on his meat and bun orders,
Took down his advertising signs,
And no longer bothered to stand out on the highway to sell hot dogs.
And his hot dog sales fell off almost overnight.
"You're right son," the father said to the boy.
"We certainly are in the middle of a terrible depression!"

Help Counteract Pessimism Terrorism



Face Plate/ Dishwasher Parts

Plbg Accessories

Face Plates



129-008

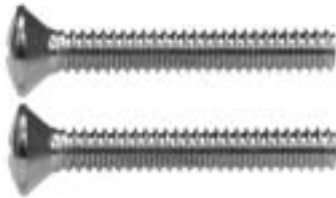
Part #	Description	Box	List Price
953-120	Chrome	25	7.36

PLAIN FACE PLATE & SCREWS



129-009

Part #	Description	Box	List Price
953-119	Chrome Plated Zinc	25	4.21



Part #	Description	Box	List Price
953-117	Screws Only	100	1.73

Contentment is not the fulfillment of what you want, it is the realization of how much you already have.

Automatic Trap Vent

- Protects traps of sinks, basins, tubs, showers, etc.



2430002
P21-050

ABS PLASTIC 1-1/2" MIP NSF 24 - APPROVED

Part #	Description	Box	Case	List Price
953-230	1-1/2" MIP	10	400	3.60

Dishwasher/Disposal Specialties

DISHWASHER DISPOSAL BOOT



FOR SEAL BETWEEN DRAIN AND
DISPOSAL WORM GEAR CLAMPS

Part #	Size	Box	Case	List Price
951-398	w/ 2 Clamps	50	100	3.28

DISHWASHER DISPOSAL BOOT



Part #	Size	Box	Case	List Price
951-399	w/ 4 Clamps	100	200	2.42

UPC
IAPMO

PLASTIC AIR GAP



PREVENTS BACKFLOW OF DISHWASHER
WATER INTO WATER SYSTEM

Part #	Size	Box	Case	List Price
951-401	UPC/ IAPMO	10	50	6.00
951-402	w/ White Top UPC	10	50	4.80

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Plbg Accessories

Replacement Pop-Up Assembly

- Chrome Brass Body w/Chromed Trim
- 1-1/4" Tailpiece
- Heavy Duty
- 2 Washers Provided For Each Side of Ball

127-006
P35-001



Part #	Size	Box	Case	List Price
911-152	C/P Cast Brass	1	50	20.13

Hole Covers

LARGE FAUCET HOLE COVER



WITH PUTTY CUP

Part #	Description	Box	Case	List Price
924-100	2" Diameter	25	100	1.61

FAUCET HOLE COVER



WITH POLISHED CHROME TOP

Part #	Description	Box	Case	List Price
924-107	1-3/4" Steel Body	25	100	1.43

Toilet Repair Parts

Plumbing Fittings

BASINCOCK COUPLING NUTS



Part #	Size	Box	Case	List Price
50-032	1/2"	50	100	1.27

BASIN ROSETTE



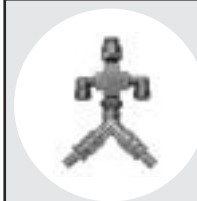
Part #	Description	Box	Case	List Price
910-400	Deep Pattern	50	250	0.73
910-401	Flat Pattern	100	500	0.30

100 in a Box

BRASS LOCKNUT



Part #	Size	Box	Case	List Price
24-103	1/2" IPS	25	500	1.50



Check out our new style of 1/4 turn supply stops on p.289 Can you believe those prices?

- Billy Brass

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ACCESSORIES**

Escutcheons & Flanges

Escutcheons & Flanges

SUREGRIP C/P STEEL

E01

SHALLOW ESCUTCHEONS

E02



Part #	Size	Box	Case	List Price
936-165	5/8" O.D.	50	2000	0.30
936-166	7/8" O.D.	50	2000	0.36
936-168	1/2" IPS	50	2000	0.42
936-169	3/4" IPS	50	2000	0.42
951-368	1/2" IPS 1-1/2" Skirt	50	1000	0.45

BOX ESCUTCHEONS

E04



CHROME PLATED

Part #	Size	Box	Case	List Price
951-374	1-1/4" O.D.	5	200	1.31
951-375	1-1/2" O.D.	5	200	1.73

A man can't be too careful in the choice of his enemies.

- Oscar Wilde

Plbg Accessories

ONE PIECE SPLIT RING FLOOR & CEILING PLATES

- CHROME PLATED PLASTIC
- UNBREAKABLE
- 100% RUSTPROOF



F06

For Iron Pipe

Part #	Size	Box	Case	List Price
970-650	1/2" IPS	12	144	1.42
970-651	3/4" IPS	12	144	1.42
970-652	1" IPS	12	144	1.48
970-653	1-1/4" IPS	12	144	2.16
970-654	1-1/2" IPS	12	144	2.22
970-655	2" IPS	12	144	2.35

For Copper

Part #	Size	Box	Case	List Price
970-670	5/8" O.D.	12	144	1.42
970-671	7/8" O.D.	12	144	1.42
970-672	1-1/8" O.D.	12	72	1.73

Keep away from people who try to belittle your ambitions. Small people always do that, but the really great make you feel that you too, can become great.

- Mark Twain

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Plbg Accessories

Copper Water Heater Connectors

3/4" FIP BRASS X 3/4" FIP BRASS

WB00



Part #	Size	Box	Case	List Price
935-210	12"	25	25	15.15
935-212	18"	25	25	15.15
935-213	24"	25	25	17.68

Cast Brass Connectors



Part #	Size	Box	Case	List Price
951-361	1-1/2" O.D. x 1-1/2" MIP x 1-1/2" SWT	20	200	16.91

LAVATORY DRAIN
C/P HEAVY CAST BRASS

760
134-301
D70-100



PERF. GRID DRAIN

Part #	Size	Box	Case	List Price
951-509	1-1/4" x 8"	10	50	23.00

Connectors/ Slip Nuts

Slip Nuts

CHROME PLATED
BRASS SLIP NUTS



OD X FIP

Part #	Size	Box	Case	List Price
951-320	1-1/4" x 1-1/4"	25	500	2.12
951-321	1-1/2" x 1-1/2"	25	500	2.42

EXTRA DEEP CAST BRASS SLIP NUT



HAS TWO EXTRA THREADS
IDEAL FOR HARD-TO-CATCH BASKET
STRAINERS OR SLIP CONNECTIONS

Part #	Size	Box	Case	List Price
951-322	1-1/2" x 1-1/2"	10	500	2.42

SLIP NUTS



HEAVY DIE CAST - CHROME PLATED

Part #	Size	Box	Case	List Price
951-335	1-1/4" x 1-1/4"	25	500	1.21
951-336	1-1/2" x 1-1/2"	25	500	1.52

SLIP JOINT WASHER SILICONE
COATED RUBBER



REGULAR WASHER

Part #	Size	Box	Case	List Price
951-383	1-1/4"	100	1000	0.24
951-384	1-1/2"	100	1000	0.28

PLBG
ACCESSORIES



Basket Strainers

Lucky 777 Basket Strainer

- Extra wide rubber washer
- C/P Brass Body



Part #	List Price
952-777	10.35

3-1/2" Stainless Steel Basket Strainer

2-9-3
2100-6
4200-1
131-201

- Fits 3-1/2" to 4" Sinks
- Rolled edge crumb cup

#11



- Solid Stick Post
- Steel Nut
- Neo seat
- 3-1/2" Locknut
- 1 Per Box

Part #	List Price
947-050	9.46

Imagination is more important than knowledge.

- Albert Einstein

Plbg Accessories

#430 Stainless Steel Basket w/ Clip

- Lock Shell
- #304 SS Body
- Polished Flange
- Deep Cup

644003



Part #	List Price
952-105	14.95

STAINLESS STEEL BASKET STRAINER



Easy thumb screw installation with three triangular slotted thumb screws

Part #	List Price
952-109	12.08

JR. BASKET STRAINER



131-202
3785A
640003

2-1/2" BODY - 3" FLANGE

Part #	List Price
952-102	6.04

Plbg Accessories

STICK POST REPLACEMENT BASKET

- Rolled Edge
- Positive acting stick post



4201-4
649003
139-202

Part #	List Price
952-107	3.04

INDUSTRIAL SINK PLUGS

- Cast Brass
- W/ Cast brass stopper



Part #	List Price
952-110	16.39

CHROME PLATED CAST BRASS

- Polished chrome
- Brass G.J. stopper
- Heavy cut threads
- 1-1/2" Brass coupling nut
- 1 Per Box

2-8-3
L7
131-302



Part #	List Price
952-118	30.82

BASKET STRAINERS/ TAILPIECE GASKETS

WASH TRAY PLUGS WITH RUBBER STOPPER

3" Flange

774A
132-201



Part #	List Price
952-119	6.90

Tailpiece Gaskets

TAILPIECE GASKET



RUBBER WITH TWO LAYERS OF FABRIC

Part #	Size	Case	List Price
952-150	1-5/16" x 1-3/4" x 1/8"	125	0.80

TAILPIECE GASKET "SLIP-NOT" NECK

Neck fits inside
wall of tailpiece



Part #	List Price
952-151	0.25

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Ice Maker Kits

Ice Maker Kits

ICE MAKER WATER SUPPLY KIT with Poly Tubing

592-025



- Bag with Header Card
- 25' 1/4" O.D. Polyethylene Tubing
- Self Piercing Saddle Valve
- 1/4" O.D. Compression x 1/8" MIP Elbow & Adapter
- 1/4" O.D. Compression Union
- 1/4" Inserts & Sleeves

Part #	Box	List Price
43-265	10	16.91
979-215	1/4" Tubing only	4.32

ICE-MAKER WATER SUPPLY KIT



- Economy
- 25' Polyethylene Tubing
- Self Piercing Saddle Valve
- 1/4" Compression Union
- 1/4" Inserts & Sleeves

Part #	Box	List Price
43-266	10	11.71

Plbg Accessories

Ice Maker Kits

with Copper Tubing



Above w/ Compression Fittings
Tubing not flared

Part #	Size	Box	List Price
43-269	25"	10	38.59
43-270	15"	10	34.91

SMALLER LENGTH 1/4 OD UTILITY GRADE FOR ICE MAKER KITS



Copper Tubing

Part #	Size	Box	List Price
979-216	25" Coil	10	POD
979-217	15" Coil	10	POD

If everyone is thinking alike, then
someone isn't thinking.

- George Patton

PLBG ACCESSORIES

Chrome Angle Supply Stops

- Brass cap nuts
- Brass compression nuts
- Chrome plated zinc handles
- Celcon stems

IPS X COMPRESSION



Part #	Size	Pkg	List Price
930-430	3/8 IPS x 3/8 O.D. Comp	10	8.69
930-431	1/2 IPS x 3/8 O.D. Comp	10	8.69

COMPRESSION X COMPRESSION



Part #	Size	Pkg	List Price
930-430	5/8 O.D. Comp x 3/8 O.D. Comp	10	8.69
930-431	1/2 O.D. Comp x 3/8 O.D. Comp	10	8.69

SWEAT X COMPRESSION



Part #	Size	Pkg	List Price
930-440	1/2 SWT x 3/8 O.D. Comp	10	8.69

PEX X COMPRESSION



Part #	Size	Pkg	List Price
930-441	1/2 PEX x 3/8 O.D. Comp	1	8.05

SUPPLY STOPS

Quarter Turn Ball Valve System Chrome Angle Supply Stops



- Forged Brass Construction
- Double O-ring Seal
- NSF 61 Compliant
- UPC/ IAPMO Approved



IPS X COMPRESSION



Part #	Size	Pkg	List Price
930-550	3/8 IPS x 3/8 O.D. Comp	1	9.69
930-551	1/2 IPS x 3/8 O.D. Comp	1	9.69

COMPRESSION X COMPRESSION



Part #	Size	Pkg	List Price
930-552	5/8 O.D. Comp x 3/8 O.D. Comp	1	9.69

SWEAT X COMPRESSION



Part #	Size	Pkg	List Price
930-541	1/2 SWT x 3/8 O.D. Comp	1	9.69

PEX X COMPRESSION



Part #	Size	Pkg	List Price
930-672	1/2 PEX x 3/8 O.D. Comp	1	10.06



Straight Supply Stops

Chrome Straight Supply Stops

- Brass cap nuts
- Brass compression nuts
- Chrome plated zinc handles
- Celcon stems

IPS X COMPRESSION



Part #	Size	Pkg	List Price
930-400	3/8 IPS x 3/8 O.D. Comp	10	8.69
930-401	1/2 IPS x 3/8 O.D. Comp	10	8.69

COMPRESSION X COMPRESSION



Part #	Size	Pkg	List Price
930-112	3/8 O.D. Comp x 3/8 O.D. Comp	10	8.69
930-405	5/8 O.D. Comp x 3/8 O.D. Comp	10	8.69

SWEAT X COMPRESSION



Part #	Size	Pkg	List Price
930-408	1/2 SWT x 3/8 O.D. Comp	10	8.69

PEX X COMPRESSION



Part #	Size	Pkg	List Price
930-442	1/2 PEX x 3/8 O.D. Comp	1	8.05

Plbg Accessories

Quarter Turn Ball Valve System Chrome Straight Supply Stops



- Forged Brass Construction
- Double O-ring Seal
- Certified to meet NSF 61
- UPC/ IAPMO Approved



IPS X COMPRESSION



Part #	Size	Pkg	List Price
930-500	3/8 IPS x 3/8 O.D. Comp	1	9.69
930-501	1/2 IPS x 3/8 O.D. Comp	1	9.69

COMPRESSION X COMPRESSION



Part #	Size	Pkg	List Price
930-505	5/8 O.D. Comp x 3/8 O.D. Comp	1	9.69

SWEAT X COMPRESSION



Part #	Size	Pkg	List Price
930-508	1/2 SWT x 3/8 O.D. Comp	1	9.69

PEX X COMPRESSION



Part #	Size	Pkg	List Price
930-671	1/2 PEX x 3/8 O.D. Comp	1	10.06

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Plbg Accessories



- Forged Brass Construction
- Double O-ring Seal
- Certified to meet NSF 61
- UPC/ IAPMO Approved
- Made in Spain



IPS X COMPRESSION



Part #	Size	Pkg	List Price
930-650	3/8 IPS x 3/8 O.D. Comp	1	12.00
930-651	1/2 IPS x 3/8 O.D. Comp	1	12.90

COMPRESSION X COMPRESSION



Part #	Size	Pkg	List Price
930-652	5/8 O.D. Comp x 3/8 O.D. Comp	1	12.00

IPS X COMPRESSION



Part #	Size	Pkg	List Price
930-600	3/8 IPS x 3/8 O.D. Comp	1	12.00
930-601	1/2 IPS x 3/8 O.D. Comp	1	12.90

COMPRESSION X COMPRESSION



Part #	Size	Pkg	List Price
930-605	5/8 O.D. Comp x 3/8 O.D. Comp	1	12.90

Quarter Turn Stop Valves/ PEX

BOILER DRAIN

- Quick 1/4 Turn Ball System
- Forged Brass Body, Chrome Finish
- Teflon Seats
- Leak Proof
- 125 PSI WOG



Part #	Size	Pkg	List Price
930-521	1/2 IPS x 3/4 H.T.	1	10.45

ICE MAKER VALVE



Part #	Size	Pkg	List Price
930-566	5/8 O.D. Comp x 1/4 O.D. Comp	1	9.69

Supply Stops

THREE-WAY SUPPLY STOPS ROUGH BRASS

CR1901LRC
R1701LRC



Part #	Description	Box	List Price
930-172	5/8 O.D. x 3/8 O.D. x 3/8 O.D.	10	12.37
930-174	1/2 FIP x 3/8 O.D. x 3/8 O.D.	10	14.09
930-170	5/8 O.D. x 3/8 O.D. x 1/4 O.D.	10	16.91
930-173	5/8 O.D. x 3/8 O.D. x 1/2 O.D.	10	16.91
930-171	1/2 FIP x 3/8 O.D. x 1/4 O.D.	10	20.70

DOUBLE HANDLE CHROME PLATED W/ BRASS STEM



Part #	Description	List Price
930-175	5/8 x 3/8 x 3/8	22.50

PLBG
ACCESSORIES



Supply Stops/ Tubes

Supply Tubes

PEX-C SUPPLY TUBES

Replaces
Polybutylene

CLOSET

LAVATORY



(PEX-C) has a cross-linked polyethylene electron beam technology. It features a one-piece construction and is flexible, easy to install water line connection, durable and attractive grey color. Approved under NSF Standard 14 & 6.

1/4" ID x 3/8" OD FOR LAVATORY / SINK / BASIN

Part #	Size	Box	List Price
932-250	12"	100	1.31
932-252	20"	100	1.49
932-253	30"	100	2.47
932-254	36"	100	3.14

FOR CLOSET/ TANK

932-135	12"	100	1.41
932-137	20"	100	1.49

CHROME SUPPLY TUBES

L6



FOR SINK AND LAVATORY

Part #	Description	Box	List Price
932-325	3/8 O.D. x 12"	20	6.44
932-326	3/8 O.D. x 20"	100	6.94
932-329	3/8 O.D. x 30"	20	13.80
932-233	3/8 O.D. x 36"	100	15.53

CLOSET SUPPLY TUBES

N6



SOLID FLANGE AND FLAT PLASTIC WASHER

Part #	Description	Box	List Price
936-316	3/8 O.D. x 12"	10	6.90

Plbg Accessories

CONE FOR LAVATORY SUPPLY

1A



Part #	Description	Box	Case	List Price
31-150	3/8 O.D. Brass Gr. Jt	25	100	0.54

Easy Connect Tee

3/8" COMPRESSION SWIVEL

- 1- 3/8" Female Compression
- 2- 3/8" Male Compression
- 3- 1/4" to 3/8" Male

3



FOR ICE MAKER INSTALLATION AND DISHWASHER HOSES

Part #	Description	Box	Case	List Price
935-045	1/4	5	500	7.76
935-044	3/8	5	500	7.76

Talk sense to a fool and he calls you foolish.

- Euripides

**MIDLAND
METAL**

GOODYEAR
RUBBER PRODUCTS INC.

Call Toll Free: **1-866-711-4673**

WebSales@GoodyearRubberProducts.com

**We Ship
World Wide**

Plbg Accessories

Cast Brass Square Head Cleanout Plugs

• Southern Code



Part #	Size	Box	Case	List Price
970-300	1-1/2 IPS (1-15/16 dia.)	100	300	5.22
970-301	2 IPS (2-3/8 dia.)	100	200	7.16
970-302	2-1/2 IPS (2-3/8 dia.)	50	200	8.79
970-303	3 IPS (3-7/16 dia.)	25	150	10.14
970-305	4 IPS (4-7/16 dia.)	10	80	20.04
970-330	5 IPS	1	40	56.00
970-331	6 IPS	1	25	60.00

Cast Brass Countersunk Head Cleanout Plugs

• Southern Code



Part #	Size	Box	Case	List Price
970-306	1-1/2" IPS	10	50	5.22
970-307	2" IPS	25	100	7.16
970-308	2-1/2" IPS	50	200	8.79
970-309	3" IPS	20	160	10.14
970-310	3-1/2" IPS	20	120	15.13
970-311	4" IPS	10	50	20.04
970-312	5" IPS	1	40	56.00
970-313	6" IPS	1	25	60.00

Cleanout Plugs/ Extension Covers

Stainless Steel Extension Covers

WALL COVERS



Part #	Size	Box	Case	List Price
970-320	3" 24 Ga.	50	1000	2.44
970-321	4" 24 Ga.	50	500	2.30
970-325	5" 24 Ga.	50	250	6.50
970-322	6" 24 Ga.	50	200	9.49
970-323	8" 24 Ga.	100	200	5.51

Stainless Steel Bolts Only



Part #	Size	Box	Case	List Price
970-347	1/4" x 2-1/4"	25	1000	1.13
970-348	1/4" x 4"	25	500	1.50

All you need in life is ignorance and confidence; then success is sure.

- Mark Twain



Hangers

TUBE STRAP



COPPER COATED STEEL
• TWO HOLE TUBE OD

Part #	Size	Box	Case	List Price
970-257	5/8" (1/2" norm.)	100	10000	0.21
970-259	7/8" (3/4" norm.)	100	1000	0.28
970-260	1-1/8" (1" norm.)	25	250	0.41

STEEL PIPE STRAPS



GALVANIZED • TWO HOLE

Part #	Size	Box	Case	List Price
972-215	1/2" IPS	100	500	0.20
972-216	3/4" IPS	100	500	0.30
972-222	1" IPS	100	500	0.39
972-223	1-1/4" IPS	50	250	0.47
972-224	1-1/2" IPS	50	250	0.82
972-225	2" IPS	25	50	0.95
972-226	2-1/2" IPS	25	125	1.20
972-227	3" IPS	25	125	1.70
972-228	4" IPS	25	125	2.11

SAFETY PLATES (STUD GUARDS)



- RECOMMENDED BY F.H.A.
- SELF-NAILING. PREVENTS DAMAGE TO PIPE AND WIRE FROM SHEETROCK NAILS.

Part #	Size	Box	Case	List Price
970-226	1-1/2" x 3"	18	100	0.28
970-225	1-1/2" x 5"	18	100	0.37
970-229	1-1/2" x 6"	18	100	0.51
970-228	1-1/2" x 3"	16	100	0.43
970-227	1-1/2" x 5"	16	100	0.54

Plbg Accessories

PERFORATED STEEL STRAP



GALVANIZED

Part #	Size	Box	Case	List Price
970-200	3/4" x 10" Roll -24ga.	25	100	2.61
970-201	3/4" x 100" Roll -24ga.	25	100	37.01
970-203	3/4" x 10" Roll -20ga.	25	100	2.93
970-204	3/4" x 10" Roll -28ga.	25	100	2.22

#350 MALLEABLE IRON BEAM CLAMP



PLAIN

Part #	Size	Box	Case	List Price
971-531	3/8" Short	10	200	2.78
971-532	3/8" Long	10	200	2.36
971-533	1/2"	10	150	3.31

ROD COUPLING



Part #	Size	Box	Case	List Price
970-456	3/8"	10	500	0.93

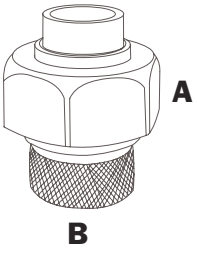
STEEL FLANGE



Part #	Size	Box	Case	List Price
970-465	3/8" B.T.	10	100	2.39

Plbg Accessories

Dielectric Unions

	DIMENSIONS IN INCHES T-571									
	F.I.P. x S.								M.I.P. x S.	
	Size	1/2"	3/4"	3/4 x 1/3"	1"	1-1/4"	1-1/2"	2"	3/4"	3/4" x 1/2"
	A	1.84	2.07	1.86	2.27	2.48	2.53	2.70	2.93	2.78
	B	1.44	1.63	1.63	1.88	2.26	2.62	3.51	1.63	1.63
	Size	2-1/2"	3"	4"						
	A	3.63	3.75	4.25						
B	6.33	6.75	10.13							

Material Specification	
Part	Materials
I.P.S. Connection	Forged Steel
Nut	Forged Steel
Sloder Connection	Brass
Gasket	EPDM
Insert	ABS

1. Body AISI 1008 A
2. Nut AISI 1008 A
3. Rubber Gasket NBR/EPDM
4. Insulator ABS
5. Ferrule Bronze

PURPOSE

The 110 series are used to protect against the accelerated galvanic and stray current corrosion of dissimilar metal pipes, connected together in a piping system. Dielectric fittings are a necessity to insure the long life of these systems.

APPLICATIONS

For residential, commercial and industrial use
 Hot water storage tanks Water and air conditioners Processing tanks

PROCESSING

Bodies and nuts are made of ANSI 1008A bar-carbon steel and are shaped by cold forging with spheroidizing to eliminate any flaws.

TECHNICAL DATA

All DF-100 series dielectric fittings are rated at 250 psi at 180°F and are designed to withstand a minimum of 600 volts on a dry line with no flashover.

Note: These ratings may vary according to other system variables.

DIELECTRIC UNIONS SWEAT TO STEEL IPS

- Forged steel with brass sweat connector and dielectric element.
- Designed to meet ANSI B16.39



Part #	Description	Box	Case	List Price
973-110	1/2 CC x 1/2 FIP	12	144	8.05
973-111	3/4 CC x 3/4 FIP	12	144	9.26
973-112	1/2 CC x 3/4 FIP	12	144	10.87
973-116	1 CC x 1 FIP	12	120	16.10
973-117	1-1/4 CC x 1-1/4 FIP	6	48	24.15
973-118	1-1/2 CC x 1-1/2 FIP	6	48	32.20



Part #	Description	Box	Case	List Price
973-113	1/2 CC x 1/2 Male IP	12	144	8.05
973-115	3/4 CC x 3/4 Male IP	12	14	9.26

WASHERS AVAILABLE UPON REQUEST

Dielectric Nipples

DIELECTRIC NIPPLE WITH THERMO PLASTIC WATERWAY

- IAPMO/UPC Listed
- Meets the requirements of ASTM Std. F-492



NSF/FDA
Listed Lining

Part #	Description	Box	Case	List Price
973-153	3/4" x 3"	25	100	3.85

We strongly recommend the use of steam rated gaskets on hydronic heating systems where temperature may exceed 180°.



Copper Tools

Copper Fitting Brushes

- Extra thick mass of steel wire insures perfect cleaning job with minimum effort. Twisted wire handle - for copper fittings. Carbon steel brush.
- Sold in boxes of 12 only



Part #	Size	Box	Case	List Price
990-541	1/2"	12	240	2.88
990-542	3/4"	12	240	3.73
990-543	1"	12	240	4.90
990-544	1-1/4"	12	240	5.60
990-545	1-1/2"	12	240	6.30

Tubing Cutters



Part #	Size	Box	Case	List Price
990-570	1/8" - 1-1/8"	10	100	11.39

TEFLON TAPE

Thread Sealant



Chemical Properties: Min. of 99% Polytrafluoroethylene

Thickness: .0035", +0.001 or -0.0005"

Elongation: Min. of 50% (most of times it far exceeds)

Width: Nominal width +0.02, -0.02

Length: Nominal length + 20", -0"

Density: -0.35 to 0.40

Incompatibility: Avoid using on Moten Alkali, certain Halo-gen products & Flourine at high temperatures and pressures
Temperature: When heated to over 260 degrees Centigrade, it will thermally degrade and decompose and produce toxic fumes.

Government standard: Meets military specification T-27730a

Usage: To be used on all types of threaded fittings for pas-sage of water; potable and non-potable, most chemicals, oxygen, gas, hydraulic and high pressure lines.

Part #	Size	Box	Case	List Price
982-107	1/2" x 260"	100	1000	0.69
982-108	1/2" x 520"	100	500	0.83
982-109	3/4" x 260"	100	500	0.76
982-110	3/4" x 520"	100	500	1.02

Plbg Accessories

Test Plug



- Large wing nuts

For Plastic, Iron & Copper Pipe Rubber Flange that grips the end of the pipe, prevents slippage while tightening

Part #	Size	Box	Case	List Price
990-566	1-1/2"	1	200	3.17
990-567	2"	1	100	4.07
990-568	3"	1	36	5.66
990-569	4"	1	40	6.97

Socket Wrench Set

TUB / SHOWER SOCKET WRENCH SETS

Each socket fits 2 sizes • 5 sockets

- For use on shower valves J40-002
- Faucets
- Bibbs
- Basin cocks



Part #	Box	Case	List Price
990-316	5	25	17.25

Inside Pipe Cutter

- Heat treated Steel Blade
- Zinc Plating Fast cutting for PVC & ABS, easy to use
- Many hard to reach applications
- Also cuts wood for sink rims



Part #	Box	List Price
990-910	1	21.00

Part#	Page	Part#	Page	Part#	Page	Part#	Page	Part#	Page
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10002	2	10085	4	101258	238	10171	6	10243	8
10003	2	10086	4	10131	5	10172	6	10244	8
10004	2	10087	4	10133	5	10173	6	10245	8
10005	2	10088	4	10135	14	10174	6	10246	8
10006	2	10089	4	10136	14	10175	6	10247	8
10007	2	10090	4	10137	14	10176	6	10248	8
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10013	2	10095	5	101394	238	101774	238	10254	9
10014	2	10097	5	101395	238	101775	238	10255	9
10015	2	10098	5	101396	238	101776	238	10256	9
10016	2	10099	5	101397	238	101777	238	10257	9
10017	2	10100	5	101398	238	101778	238	10258	9
10018	2	1010002	246	101413	238	10178	6	10259	9
10019	2	1010004	246	101414	238	10179	6	10260	9
10020	2	1010008	246	101415	238	10180	6	10261	9
10021	2	1010011	246	101416	238	10181	6	10262	9
10022	2	1010016	246	101417	238	10182	6	10263	9
10023	2	1010019	246	101418	238	10187	6	10264	9
10024	2	1010022	246	101434	238	10188	6	10265	9
10025	2	1010024	246	101435	238	10189	6	10266	9
10026	2	1010027	246	101437	238	10197	6	10267	9
10028	3	10104	5	101438	238	10203	7	10268	9
10030	3	10105	5	101440	238	10204	7	10269	9
10031	3	10106	5	101441	238	10204B	7	10270	9
10032	3	10107	5	101442	238	10205	7	10271	9
10033	3	10108	5	101443	238	10205B	7	10272	9
10038	3	10109	5	101444	238	10206	7	10273	9
10039	3	10110	5	101445	238	10207	7	10274	9
10040	3	101103	238	101446	238	10208	7	10275	9
10041	3	101104	238	101447	238	10209	7	10276	9
10042	3	101105	238	101449	238	10210	7	10277	9
10043	3	101106	238	101450	238	10211	7	10278	9
10044	3	101107	238	101451	238	10212	7	10279	9
10045	3	101108	238	101452	238	10213	7	10280	9
10046	3	10111	5	101453	238	10214	7	10283	10
10047	3	10112	5	101454	238	10215	7	10283B	10
10048	3	101163	238	101458	238	10216	7	10284	10
10049	3	101164	238	101473	238	10217	7	10284B	10
10051	3	101165	238	101474	238	10218	7	10285	10
10052	3	101166	238	101475	238	10219	7	10286	10
10053	3	101167	238	101476	238	10220	7	10286B	10
10054	3	101168	238	101477	238	10221	7	10287	10
10055	3	10117	6	101478	238	10224	8	10287B	10
10056	3	10118	6	10157	6	10226	8	10288	10
10058	3	101183	238	10158	6	10227	8	10289	10
10063	4	101184	238	10159	6	10228	8	10290	10
10064	4	101185	238	10159B	6	10229	8	10290B	10
10065	4	101186	238	10160	6	10230	8	10291	10
10066	4	101187	238	101603	238	10231	8	10291B	10
10067	4	101188	238	101604	238	10232	8	10292	10
10068	4	10119	6	101605	238	10233	8	10293	10
10074	4	10120	6	101606	238	10234	8	10293B	10
10075	4	10121	6	101607	238	10235	8	10294	10
10076	4	10122	6	101608	238	10236	8	10294B	10
10077	4	10123	6	10161	6	10237	8	10295	10
10078	4	101253	238	10162	6	10238	8	10295B	10
10079	4	101254	238	10163	6	10239	8	10296	10
10080	4	101255	238	10164	6	10240	8	10297	10
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10300008	245	10333	11	10458	13	12001	17	12074	19
10300010	245	10340	11	10459	13	12002	17	12075	19
10300012	245	10343	11	10460	13	12003	17	12076	19
10300016	245	10344	11	10461	14	12004	17	12077	19
10300019	245	10345	11	10462	14	12005	17	12079	19
10300021	245	10347	11	10463	14	12006	17	12080	19
10300022	245	10348	11	10464	14	12007	17	12081	19
10300026	245	10350	11	10467	14	12008	17	12085	19
10300052	245	10351	11	10468	14	12009	17	12086	19
10300053	245	10352	11	10469	14	12010	17	12087	19
10300054	245	10353	11	10470	14	12011	17	12088	19
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10300056	245	10355	11	10473	14	12013	17	12090	19
10300057	245	10357	11	10481	15	12014	17	12091	20
10300061	245	10359	11	10482	15	12015	17	12092	20
10300062	245	10360	11	10483	15	12016	17	12093	20
10300063	245	10361	11	10484	15	12017	17	12094	20
10300064	245	10373	12	10485	15	12022	18	12100	20
10300065	245	10374	12	10486	15	12023	18	12101	20
10300066	245	10375	12	10487	15	12024	18	12102	20
10300068	245	10376	12	10488	15	12025	18	12103	20
10300071	245	10382	12	10489	15	12026	18	12110	20
10300073	245	10383	12	10493	15	12027	18	12111	20
10300B	10	10404	12	10494	15	12032	18	12112	20
10301	10	10405	12	10495	15	12033	18	12118	20
10302	10	10406	12	10500	14	12034	18	12119	20
10302B	10	10407	12	1050000	245	12035	18	12120	20
10303	10	10408	12	1050001	245	12036	18	12121	20
10303B	10	10409	12	1050002	245	12038	18	12127	21
10304	10	10410	12	1050003	245	12040	18	12129	21
10305	10	10411	12	1050006	245	12041	18	12130	21
10306	10	10412	12	1050007	245	12042	18	12144	21
10306B	10	10416	12	1050008	245	12043	18	12145	21
10307	10	10417	12	1050009	245	12044	18	12146	21
10308	10	10419	12	1050010	245	12045	18	12147	21
10309	10	10421	12	1050011	245	12046	18	12149	21
10311	10	10429	13	1050012	245	12047	18	12150	21
10312	11	10430	13	1050013	245	12048	18	12151	21
10313	11	10431	13	1050014	245	12049	18	12200	21
10314	11	10432	13	1050015	245	12050	18	12202	21
10315	11	10434	13	1050016	245	12051	18	12210	22
10316	11	10435	13	1050017	245	12052	18	12212	22
10316B	11	10440	14	1050018	245	12054	19	12214	22
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10318	11	10442	14	1050021	245	12057	19	12218	22
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10320	11	10448	13	1050026	245	12060	19	12224	22
10321	11	10448B	13	1050027	245	12061	19	12230	22
10322	11	10449	13	1050028	245	12062	19	12250	22
10323	11	10450	13	1050029	245	12063	19	12252	22
10324	11	10451	13	1050030	245	12064	19	12254	22
10324B	11	10452	13	1050031	245	12065	19	12256	22
10325	11	10452B	13	1050032	245	12066	19	12257	22
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1510003	246	16700012	246	17188N	144	18020	28	18105B	32
1510004	246	16700013	246	17188P	144	18029	30	18106	32
1510006	246	16700016	246	17189N	144	18030	30	18106B	32
1510007	246	16700017	246	17189P	144	18033	29	18107	32
1510008	246	16700022	246	17190N	144	18034	29	18108	32
1510009	246	16700024	246	17190P	144	18035	29	18109	32
1510010	246	17064N	143	17193N	144	18036	29	18110	32
1510011	246	17064P	143	17193P	144	18037	29	18111	32
1510012	246	17065N	143	17194N	144	18038	29	18114	32
1510013	246	17065P	143	17194P	144	18039	29	18115	32
1510014	246	17066N	143	17195N	144	18040	29	18116	32
1510016	246	17066P	143	17195P	144	18041	29	18117	32
1510019	246	17068N	143	17224N	144	18042	29	18118	32
1510020	246	17068P	143	17224P	144	18047	30	18119	32
1510023	246	17078N	143	17225N	144	18048	30	18122B	33
15300000	245	17079N	143	17225P	144	18049	30	18123	33
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15300002	245	17081N	143	17229N	144	18054	29	18124	33
15300003	245	17081P	143	17229P	144	18055	29	18124B	33
15300004	245	17088N	143	17233N	144	18056	29	18125	33
15300005	245	17090N	143	17233P	144	18057	29	18125B	33
15300006	245	17091N	143	17234N	144	18062	31	18126	33
15300008	245	17101N	143	17234P	144	18063	31	18127	33
15300010	245	17103N	143	17237N	144	18064	31	18127B	33
15300012	245	17103P	143	17237P	144	18065	31	18128	33
15300013	245	17105N	143	17238N	144	18066	31	18129	33
15300014	245	17105P	143	17238P	144	18066D	31	18130	33
15300015	245	17106N	143	17254N	144	18067	31	18135	33
15300016	245	17106P	143	17254P	144	18068	31	18136	33
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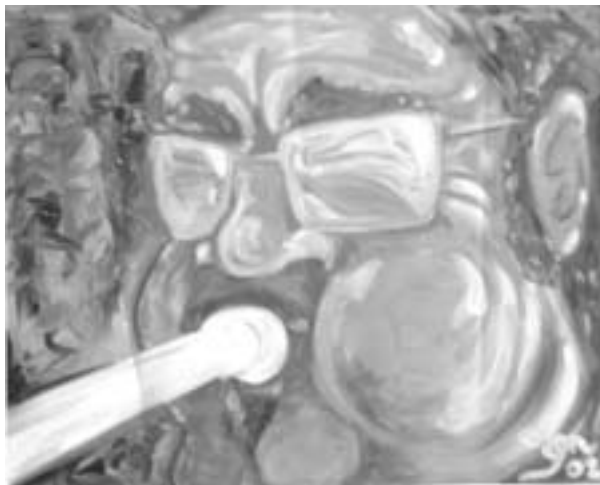
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John Patrick Bukaty is the chairman of how to live your life doing what you love. His unique concept of live art entertainment is quickly becoming popular throughout the country. The Painting featured on the back cover of this catalog features the original John Bukaty entitled "Up in Smoke". John was our featured artist at the 26th annual American Royal Barbeque in Kansas City, MO. More than 50,000 people attended as 474 BBQ teams, 81 Invitational teams, from 23 states and Great Britain competed for over \$81,000 in prize money. The American Royal Barbeque is the largest most prestigious BBQ culinary competition in the world. All of this hosted in the world capital of barbeque, Kansas City, Missouri. If you are interested in any of John's work please visit www.johnbukaty.com to view more of his original paintings, purchase a print of his work, or contact John about doing an original piece for you or a friend





“Upon the fields of strife, are sown the seeds that, upon other fields, on other days, will bear the fruits of victory.”

- General Douglas MacArthur

Dear Valued Customer,

Every good tree bears good fruit. My wife Mara, and I, strive to be good people (It comes a lot easier for her) and to bear good fruit. We embrace the responsibility to make a positive impact on our world by teaching our children about responsibility, hard work, respect, laughter, love, and faith in the graces of God. Our children are certainly our biggest challenge and, at the same time, our greatest source of joy and happiness.

I am committed to making the same positive impact on you and your business. Our team at Midland is dedicated to doing what is necessary to ensure you top-quality products with the most personalized, whatever it takes, customer care. We have traveled the world to bring you the greatest value the global market has to offer on fittings, nipples, valves & plumbing accessories.

For over 25 years, we have continually found smarter, more efficient ways to exceed our customer’s expectations. The more successful we are, the more value we deliver to you. My team is passionate about providing you with outstanding service. We are great people eager to serve you.

Thank you for your continued loyalty. I know that soon my kids will be working at Midland Metal to help continue our tradition of family values and hard work to serve you. Your business is important to us!

Again, thank you for the opportunity to serve you. I look forward to sharing another year of success with you.

Very Sincerely,

Billy



Billy(9), Maggie(8), Matthew(7), Lucy(5), Francie(2)
Billy, Mara, and #6 coming any day now!

ACCOUNT DETAILS

ACCOUNT DETAILS

Fax back to:

**ACCOUNT INFORMATION
REQUEST FORM**

Fax back to:

Your Account number is: _____ Your Multiplier is: _____

Your Outside Sales Representative: _____

Sales Representative Contact Information: _____

Account Manager

**Online Ordering • View / Modify Account Settings
Manage Part Number's • Download Pricing**

Your Customer ID: _____

Your Authorization Code is: _____

**SAVE
5%**

-----Fill out the following beforeing-----

Order Confirmations • Invoices • Statements

We are only sending Order Confirmations, Invoices and Statements by either or e-mail. Which would you prefer?

Fax e-mail None

Order Confirmation (Fax# or e-mail): _____

Invoices (Fax# or e-mail): _____

Statements (Fax# or e-mail): _____

Monthly E-Newsletter (New Products and Promotions at Midland)

Yes, Sign me up e-mail address: _____

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Please send me:

-Additional copies of the new Aug 2006 Catalog QTY_____

-Copies of the Generic "no name" catalog at \$3.00 each QTY_____(see generic catalog page)

-2006 Catalog on CD QTY_____

-A Midland Metal Binder to keep my current Midland Literature in.

Please send to :

Account # or

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Address: _____ # _____

City: _____ State: _____ Zip: _____

Special Notes: _____



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Personalize Midland's "Generic" catalog to help you sell more product!

Midland Metal is taking it's new Catalog and reprinting it without our name,numbers, or any reference to Midland on it. You can place your company sticker on the front and have an instant catalog of fittings and valves to sell to your customers.

Spine

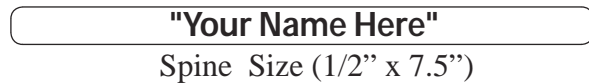
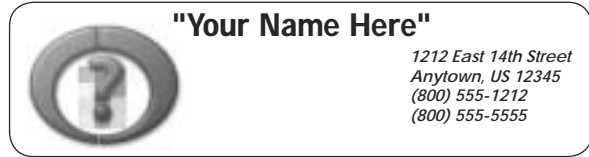
Cover



-Example-
Actual cover may vary

Personalized Labels

(Sample)



Midland's marketing department will help you create and design personalized labels (including the use of your artwork) to accompany your generic catalog order.

All labels are printed on high-quality optically clear polyester paper

\$3.00/each

- No Minimum order
- Free Labels with Your company info when you buy 50 catalogs or more

Midland Part#	Net Price Each
999.....	\$3.00

Free Labels

When you order 50 or more generic catalogs

"Generic" catalogs on CD

Midland can also personalize a catalog on CD to use as an additional marketing tool.



Midland Part#	Net Price Each
888.....	\$2.00



Drop Ship It!

Midland has made it even easier to have your orders Drop Shipped. Simply specify a ship to address not associated with your account and our system will automatically take care of the rest.

- Shipments look like they came from you.
- Get product to your customer faster.
- Save money on freight charges.
- Instant access to Midland's huge inventory of fittings, valves, clamps and accessories

Identification Tag



Identification tag for each product ordered is personalized. We can also reference your part number.

Packing Slip

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 212 East 14th Street
 Midland TX 79701
 (800) 855-1212
 (800) 855-0505
 www.brasscatalog.com

Packing Slip
 Date: 10-19-04

Ship To: YOUR CUSTOMER
 1234 CUSTOMER ROAD
 CITY, ST 12345

Bill To: YOUR CUSTOMER
 1234 CUSTOMER ROAD
 CITY, ST 12345

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Order No.	Date Shipped	Pick/Pack CP/CP	Shipment Method	PO Number	
11111	10-19-04	CP/CP	COLLECT	121212	
Cart Part#	Prod Code	Case	Ordered	Shipped	Description
	1234567	1	100	100	GARDEN HOSE GP BRAS PLUG

Additional Information:
 Thank you for your order!

Packing Slip is personalized with your name and company logo.

Box



No reference to Midland anywhere on the box

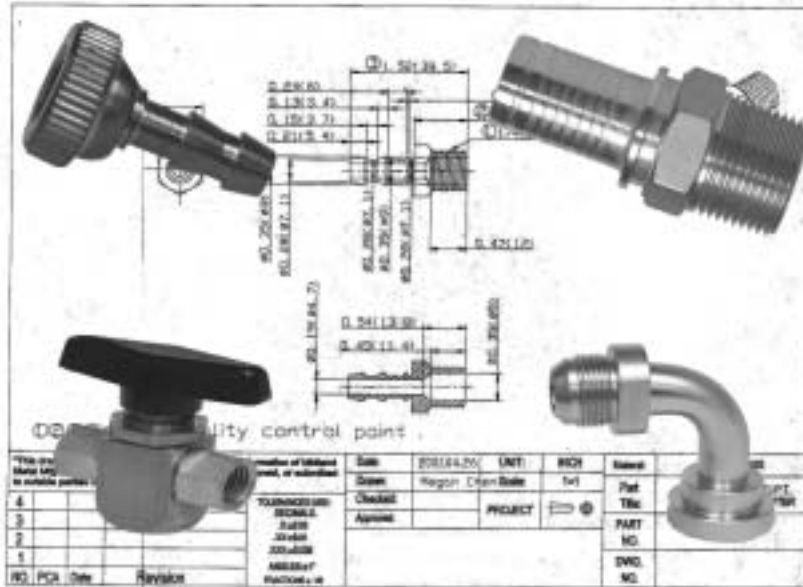
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 for FREE!**

For more information visit www.midlandmetal.com

Note: Your logo is not required to use Midland's Drop Ship program. If one is not provided we will print the name of your company and contact information in place of the logo.



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WE DO SPECIALS!

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OEM SPECIFIED FITTINGS & VALVES AT GENERIC PRICES

Midland can produce fittings & valves made to your specifications! Just send a print and/or sample with your delivery requirements, and we will quote a custom price from one of our domestic or overseas factories on your fitting(s) and/or valve(s).

Any Material, Any Size, Any Shape, Any Volume... Just Ask!

Once you approve our price, we will then require a blanket purchase order based on sample approval. We will then stock these items under a separate part# for your access only. We guarantee delivery on time, everytime!

Here's what you get:

- Consistent, top quality products!
- Dedicated Inventory for your access only!
- Guaranteed on-time delivery everytime!

"Allow Midland to surprise you!"



Payment Terms

Payment terms are 2% 10th net 30. Invoices dated the 1st through the 25th of the month are due by the 10th of the following month in order to take the 2% discount. Invoices dated the 26th through the end of the month are due by the 10th of the second following month in order to take the 2% discount. All invoices not paid by those terms will become due on a net 30 days basis following the shipment date. The fee for returned checks is \$30. A monthly service charge of 2% will be applied to overdue ac counts. Any account that regularly pays beyond our net terms will be denied open account status.

Minimum Order

There is no minimum order. However, all orders under \$50 are subject to a \$5 handling fee.

Full Freight Allowance

We will pay the freight on orders totaling \$1000 net or more to one destination within the 48 contiguous states. All Alaska, Hawaii, Puerto Rico, and Canada shipments will be responsible for full freight costs. Please note that on our invoices prepaid freight is shown with a "PP" beside it. As the invoiced amount indicates, the freight is not being charged, it is there only to show our customers their savings on freight costs. No discount is allowed off the cost of freight. The discount must be figured by the net amount, and is shown on each invoice.

Additions to orders

Once an order is entered and printed for fulfillment, additions to that order are not allowed. We will make every effort to ship a new purchase order out with the order already in the fulfillment process. However, we cannot guarantee that the two orders will be shipped together if the original order is already packed for shipping. Additions to backorders are not allowed.

Pick up Orders

Midland requires only one hour from time of order placement to fulfill pick-up orders. Orders are picked and invoiced the same day the order is placed even if it is not picked up that day. Discounts on pick-up orders are given from the invoice date, not the date of pick-up.



Uh...Oh Catalog Errors

We strive to provide a completely error free catalog, but if errors are discovered, they are corrected in our computer immediately. **Please note that current computer pricing supercedes printed catalog errors.**

Damage/ Shortage Claims

Please be sure to count the cartons you sign for and note any damage on the bill of Lading. Open your order immediately to check for any concealed damage. If damaged, the original carton should be kept for possible carrier inspection. Shortage or damage claims need to be reported within 14 days of delivery. To process a claim, we need your invoice number or customer number. Once we ship an order it's consigned to the carrier. Please note: THEY are responsible for any shortage or damage incurred - until you sign a clear bill of receipt. Usually, carriers will not honor a claim if they have a signed receipt from you. Please do not deduct from an invoice without first contacting our customer service department to obtain authorization, regardless of the reason. Any payment sent with deductions must have the authorization paperwork attached.

Backorders

Most orders are shipped complete because we stock all items in this catalog. However, if we do not ship your order complete, we will notify you of this and ship your backorder within 60 days or let you know of cancellation. All backorders under \$10 will be automatically cancelled.

Special Order Items

Orders for special products or blanket purchase orders cannot be cancelled without our authorization, and only upon terms that will indemnify us against loss.

Be Smart

These products are intended for use by qualified, experienced professionals, and the selection of appropriate products for the intended use must be made by persons knowledgeable in this field.



Limited Warranty:

All of our goods are guaranteed only to extent of replacing, requiring or repairing any part that proves defective in workmanship or material, provided it is reported to us no later than 30 days after receipt of the part. No responsibility will be assumed for deterioration, wear or injury of parts which results from age, accident or abuse.

Except as expressly provided herein, Midland Metal Mfg. does not make any warranty or representation, express or implied, with respect to its products, including without limitation any implied or expressed warranty of merchantability or fitness for a particular purpose. In addition, under no circumstances shall Midland Metal Mfg. be liable for lost profits, lost savings or other consequential, incidental, special or indirect damages, or for acts of negligence that are not intentional or reckless in nature regardless of whether it has been advised of the possibility of such damages.

California Customers:

Midland Metal does not guarantee that all products meet California environmental laws or Proposition 65. It is the sole responsibility and liability of the Midland distributor to order products for use in California that complies with California laws.

Return Policy

Unused NON-DEFECTIVE items in Midland packages with part numbers clearly identified and in resalable condition are subject to a 25% restocking charge and must be returned within one year from invoice date. Customer made or blanket ordered, special items are not returnable.

DEFECTIVE items, may be returned at Midland's discretion for credit or replacement. No cash refunds will be given. For a Return Goods Authorization (RGA) number before shipping product, please call Customer Service at 1-800-821-5725. NO returns of any type will be accepted without lot traceability and an RGA number. Returns must be received within 30 days of the issuance of the RGA number. Please have the following information on hand when calling for an RGA number:

- Customer Name
- Original purchase order number
- Nature of problem
- Account number
- Invoice number

Credit will be issued within 30 days after returned product is received and if inspection and traceability requirements are met. Credit will be null and void after one year from date of issue and are good towards future purchases only. No cash refunds.

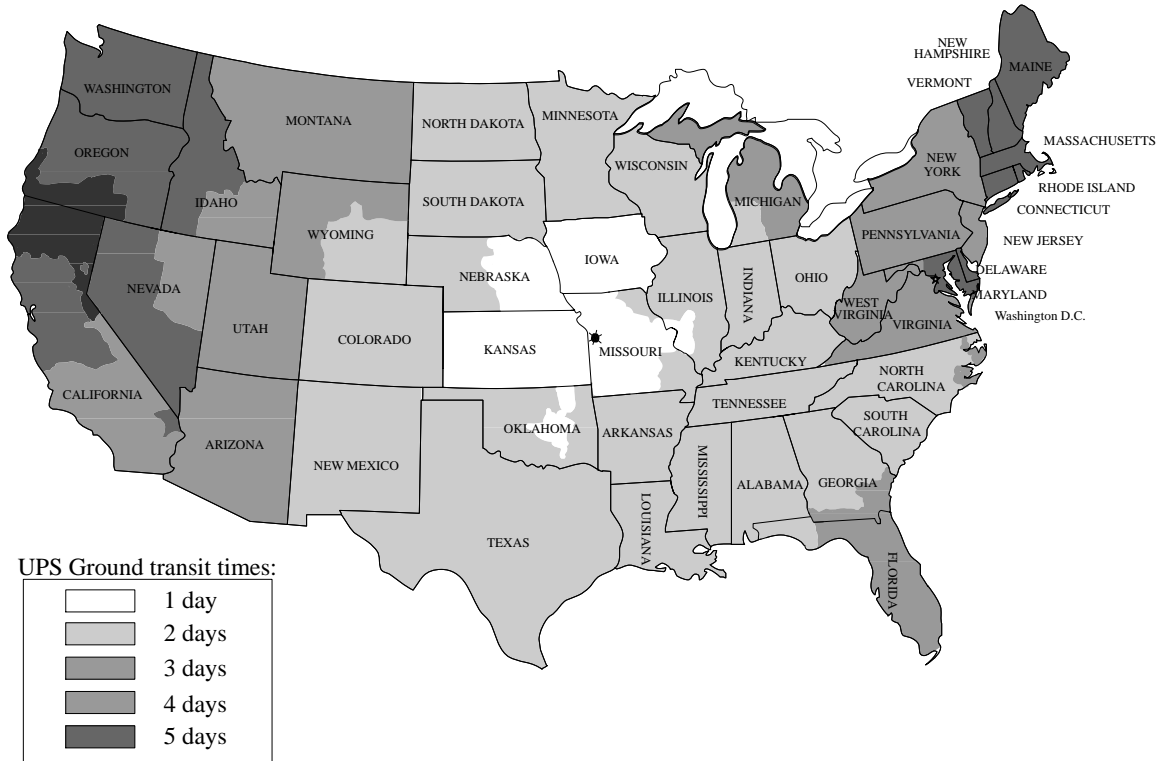
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Kansas City, Missouri (64106)



Track your shipments



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NEW PRODUCTS



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Pipe

Pages 62-73

90° Elbow	45° Elbow	Union Tee	Cross	Coupling
Union	Cap	St. Elbow	Hex Bushing	Square Plug
Countersunk	Slotted-head	Hex Plug	Locknut	Close Nipple
Long Nipple	Hex Nipple	45° Elbow	Street Tee	Extender
Male Elbow	Branch Tee	Male Tee	Bulkhead	

Hose Barb

Pages 74-85

Male Adapter	Swivel	Mender	Female Adapter	Swivel
90° Elbow	Tees	HB Elbow	Female HB	Swivel Male
45° Elbow	Ball End	Ballseat Adapt.	45° Flare	Flare Swivel
SS Nipple	Single Barb Adapter	Single Barb Elbow	Double Barb Adapter	Double Barb Elbow

Push-on Hose Barb

Pages 86-90

Male Adapter	Male Swivel	F Swivel	Splicer	Female Adapter
Male Elbow	Rigid Tube	SAE Flare	JIC Flare	Duel Swivel
45° SAE	37° JIC	Inverted Male	Inverted F	Ballseat

PICTORAL INDEX

Parden lose

Pages 91-101

Swivel	FGHxFemale	Rigid	Swivel	FGH x Male
Rigid FGHxM	Rigid FGHxF	MGHxM	MGHxMGH	"Y"
Quick Dis.	Coupling	Ball Valve	Shut-Off	Nozzle
Spray	Cap	Plug	Coupling	

45° Flare

Pages 1-15

Short Rod Nut	Extra Heavy	Flared Plug	Flared Cap	Copper Gasket
Union	Union Tee	F Adapter	M Adapter	90° Elbow
90° Elbow	Forged Cross	90° Flare	Flare x M Pipe	Swivel
Union	Union	Male Branch	Flare Reducer	

Inverted Flare

Pages 16-23

Steel Nut	F Adapter	M Adapter	St. Elbow	45° Elbow
Union Tee	Steel Plug	Branch Tee	F Elbow	M Run Tee
Stand/Metric	Brake Tee	Dual Adapter	SAE x Invert	Metric Tee
Pipe Adapter	Metric Union			



PICTORAL INDEX

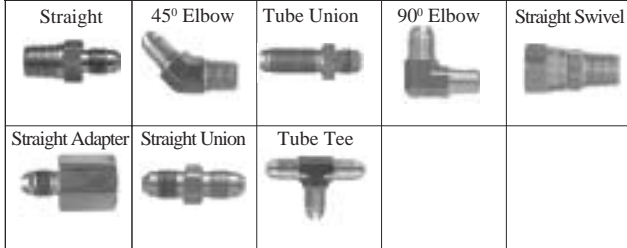
Space Heater Range

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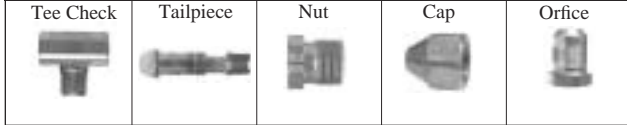
JIC 37° Brass Adapters

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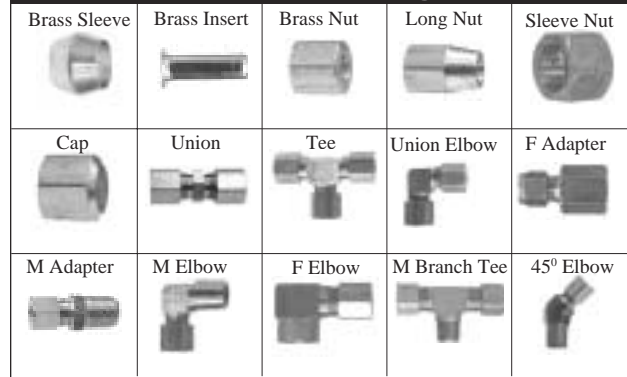
POL (Bottled Gas)

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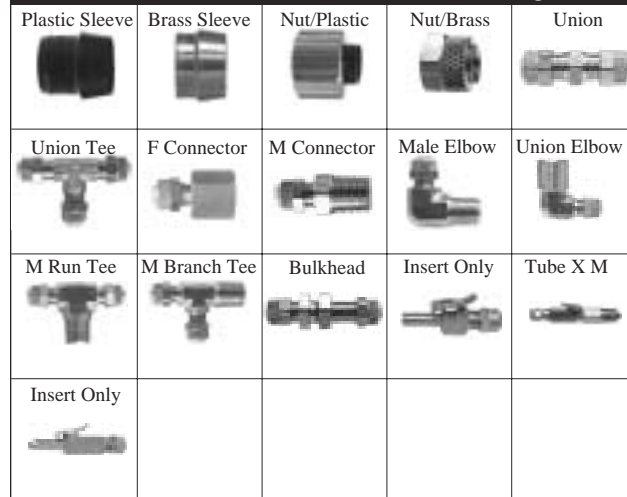
Compression Fittings

Pages 27-40



Flareless

Pages 41-48



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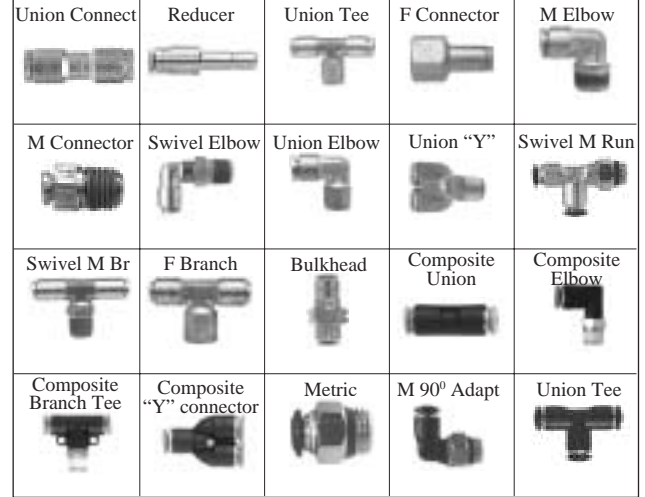
Pex Fittings

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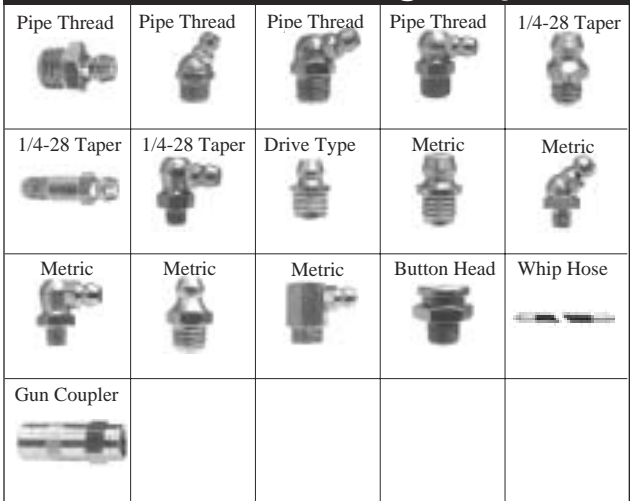
Push-In Fittings

Pages 49-55



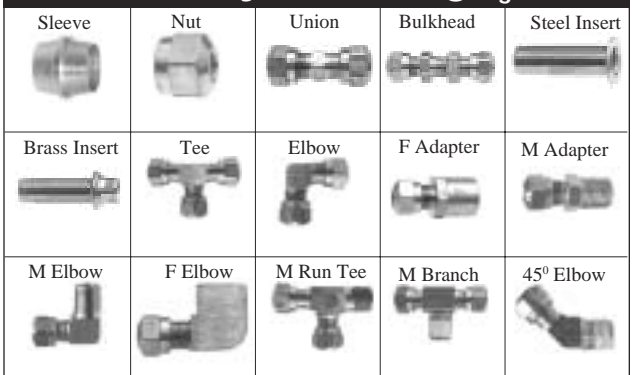
Steel Grease Fittings

Pages 102-105



Air Brake-Nylon Tubing













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








Air Brake - Copper

Pages 111-115

Sleeve 	Nut 	Union 	Tee 	Elbow 
F Adapter 	M Adapter 	90° M Elbow 	90° F Elbow 	Run Tee 
Branch Tee 	45° M Elbow 			
















Air Brake - Hoses/Ends

Pages 116-118

Sleeve 	Nut 	Nut 	Nut / Spring 	Adapter Body 
M Adapter 	M Adapter 	Spring 	Union 	F Connector 
M Connector 	Adapter 			

D.O.T. Push-In

















Pages 119 -125

Male 45° 	Male Swivel 	Plug 	Union 	Union Tee 
Union Elbow 	F Connector 	M Connector 	Male Elbow 	M Swivel 
M Run Tee 	M Swivel Run 	Male Branch 	Bulk/Union 	F Bulk/Union 

PICTORAL INDEX













Air Brake - Accessories

Pages 126-129

Collet 	Tubing 	No Hub 	Seal 	Hex Foot Chuck 
1/4 I.D. Barb 	Dual Foot 	Angle Chuck 	Steel Brake 	Hose 
Fuel Line 	Airbrake Tube 	M Connector 	90° M Elbow 	Long Ells 
Ext. Adapters 				








Drain Cocks

Pages 150-151

Shut Off 	Drain Valve 	Drain Cock 	Truck Drain 	Shut Off 
Lever Handle 	Internal Seat 	Internal Seat 	Long Seat 	Bibb Needle 
Needle Valve 	Radiator Type 			









Shut-Off Cocks

Pages 152-153

Flare X Male 	Flare X Flare 	Flare X F 	Comp X M 	F X F 
M X F 	M X M 			

Brass Air Cocks

Pages 154-157

MIP X BIBB 	MIP X BIBB 	MIP X MIP 	MIP X MIP 	MIP X BIBB 
MIP X BIBB 	FIP X FIP 	MIP X FIP 		

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PICTORAL INDEX

Needle Valves

Pages 158-162

Comp X Male 	Comp X Male 	Comp X Comp 	Flare X M 	Flare X Flare
Air Vent 	M X M Pipe 	F to FE PIPE 	M X F Pipe 	Check Valve
Flow Control 	Needle Valve 	Needle 	Needle 	Metering

Toggle / Instrumentation

Page 163-164

Toggle 	Toggle 	F X F 	F X F Angle 	3 Way Vaves
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Mini / Check Valves

Page 168-169

M X F 	Check 	Check 		
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Valves

Pages 171-195

Full Port 	NSF 61 	MIP x FIP 	SWT x SWT 	Std Port
Gas Ball 	Appliance 	Flare x Flare 	Mini FxF 	Mini MxF
Mini FxF 	Mini MxF 	Mini MxM 	Mini MxHB 	Mini HBxHB
Mini FxHB 	3-Way 	Hose Bibb 	Gate 	Y-Strainer
Check 	In-Line Check 	Carbon 	Stainless 	Stainless
SS In-Line 	PVC Thread 	PVC SLIP 	Plastic 	

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Ball Valve Handles

Page 173

Private Label 	Tee 	Locking 		
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Brass & Bronze

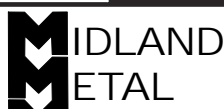
Pages 196-208

Nipple 	90° Elbow 	90° Street 	45° Elbow 	45° Street
Tee 	Reducing 	Cross 	Coupling 	Cap
Union 	Hex Bushing 	Countersunk 	Square Head 	Locknut
Hex Nipple 				

Stainless Steel

Pages 209-215

Nipple 	90° Elbow 	90° Street 	45° Elbow 	Tee
Cross 	Machined 	Coupling 	Cap 	Hex Bushing
Union 	Hex Head 	Hex Nipple 	Square Plug 	1/2 Coupling
Hose Nipple 				



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Black & Galvanized

Pages 216-237

Nipples	Merchant	1/2 Merchant	90° Elbow	90° Street
45° Elbow	45° Street	Tee	Coupling	Reducing
Service	Side Outlet	Hex Bushing	Union	Cored Plug
Cross	Cap	Flange	Hex Bushing	Cap
Solid Plug	Hex Plug	Countersunk	Hex Socket	Extra Heavy
90° Elbow	45° Elbow	90° Street	Tee	Coupling
Cap	Union			

3000# Forged Steel

Page 238

90° Elbow	Cross	Coupling	45° Elbow	Street Elbows
Half Coupling	Tees	Union		

Copper Fittings

Pages 130-136

90° Ell	90° Street Ell	90° Long Turn	90° Long Turn	45° Ell
Street 45°	Coupling	Coupling	Coupling	Reducer
Reducer	Flush Bushing	Male Adapter	M. Fitting	F. Adapter
Fitting Adapter	Cap	Unions	U-Type Strap	Tee

Plastic Pipe

Pages 137-141

PVC Nipple	Hex Plug	Pipe Cap	Hex Nipples	Hex Bushing
Elbow	Tee	Coupling		

Plastic Hose

Pages 141-142

Female	Male	Elbows	Hose x Fe	Union Elbow
Connector	Barbed Tee	Tees		

Plastic Garden Hose

Page 143

Cap	Nut	Adapter	Thread Adap.	MGH
FGH	FGHxF Pipe	Adapter		

Plastic Compression

Pages 143-144

Union	Bulkhead	Union Tees	Union Elbow	Connectors
Run Tees				

Plastic Push-In

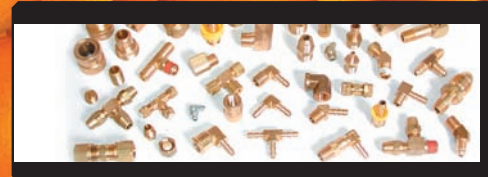
Pages 145-147

Connector	Union	Cross	Reducing	Union Elbow
Fixed Elbow	Plug-In	Stem Adapter	Union Tee	Reducing Tee
Bulkhead	Female	2-Way	PL x PL	PL x NPTF
Check Valve				

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BRASS



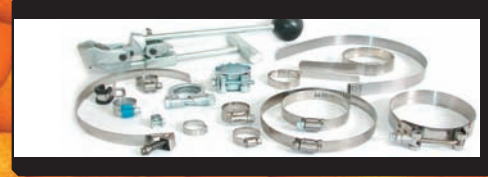
PLASTIC
FITTINGS



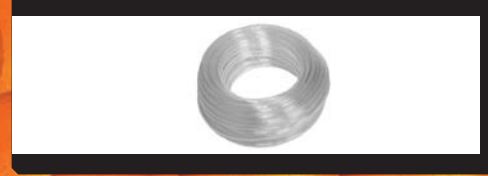
VALVES



NIPPLES &
FITTINGS



CLAMPS



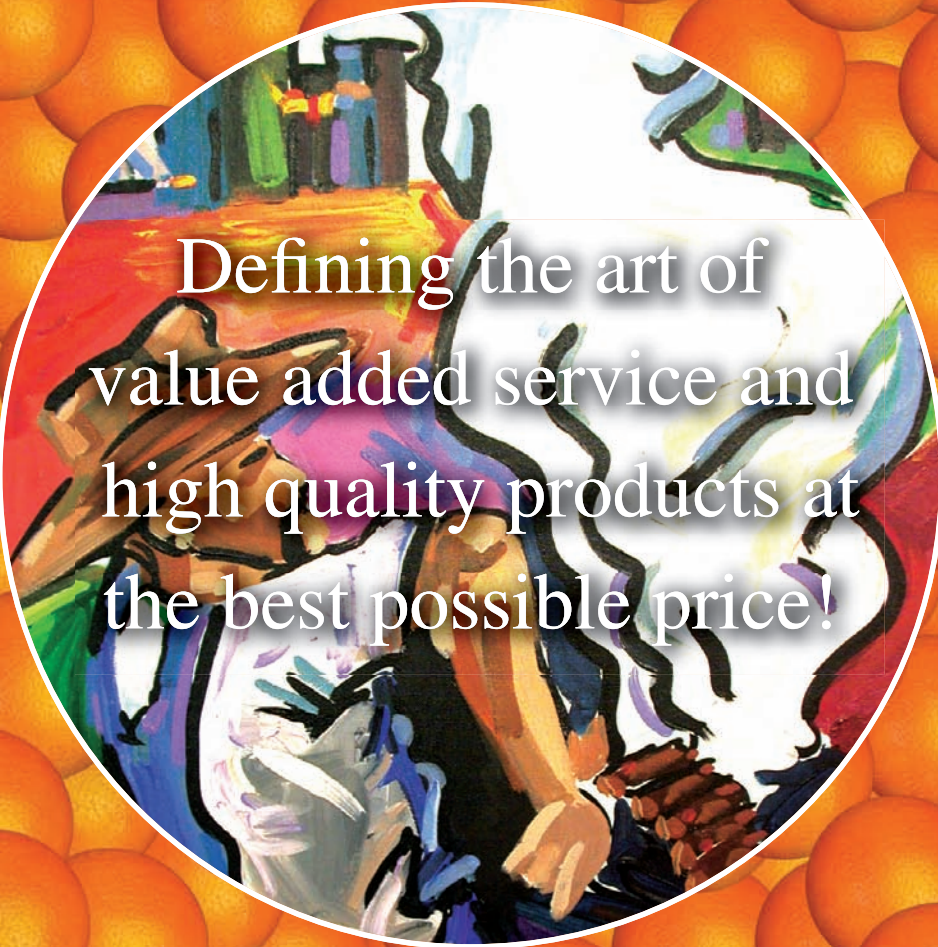
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