



NEWCO FIGURE NUMBERS

Type	Pressure Class	End Connections	Trim Material
1 = Gate, OS&Y	1 = 150	F = Flanged	1 = CR13
2 = Globe, OS&Y	3 = 300	W = Butt Weld	2 = CR13/HF**
3 = Swing Check	6 = 600	S = Socket Weld	3 = HF/HF**
4 = Lift Check	8 = 800	T = Threaded	4 = 316
7 = Angle, OS&Y	15 = 1500	X = Special (Customer to specify)	4/2 = HF**/316
	25 = 2500		4/3 = 316/HF**
	45 = 4500		5 = NI CU (Monel***)
			5/2 = HF**/Monel***
			5/3 = Monel***/HF**
			9 = Special (Customer to specify)

FIG. 18T-FS2-*

BODY/BONNET MATERIAL

FS	= ASTM A105	= Forged Carbon Steel
F5	= ASTM A182, F5	= Forged Alloy Steel (5% Chrome, ½% Moly)
LF-2	= ASTM A350, LF2	= Forged Low Temperature Carbon Steel
F9	= ASTM A182, F9	= Forged Alloy Steel (9% Chrome, 1% Moly)
F11	= ASTM A182, F11	= Forged Alloy Steel (1¼% Chrome, ½% Moly) (Class 2)
F22	= ASTM A182, F22	= Forged Alloy Steel (2¼% Chrome, 1% Moly) (Class 3)
F91	= ASTM A182, F91	= Forged Alloy Steel (9% Chrome, 1 Moly, Vanadium)
SPL	= Special	= Special (Customer to Specify)

Note: Trim Materials Defined on Page 4.

* SUFFIX LETTERS

Y	= Y Pattern
INT	= Integral Flanged
WB	= Welded Bonnet
HP	= Horizontal Piston Check
HB	= Horizontal Ball Check
VB	= Vertical Ball Check
FP	= Full Port
RP	= Regular Port
TF	= Teflon* Insert
VT	= Viton* Insert
N1	= NACE Valve, Class I Bolting
N2	= NACE Valve, Class II Bolting
N3	= NACE Valve, Class III Bolting
MO	= Motor Operator
PO	= Pneumatic Operator
HO	= Hydraulic Operator
CR	= Cryogenic Service
OX	= Oxygen Service
CL	= Chlorine Service
GI	= Grease Injection
BS	= Bellows Seal
ST	= Socket Weld x Threaded
EB	= Extended Body

* = Viton and Teflon are registered trademarks of DuPont Company.

** HF = Hardfaced - AWS 5.13 Class C₀C_RA.

*** = Monel is a registered trademark of International Nickel Company.

Please order by size, figure number (which specifies type), pressure class, end connections, materials and special features, as shown above.

For End Connections, Body Materials and Trims not listed, please specify



MATERIALS SPECIFICATIONS

MATERIALS

Standard stocked material in A105 with NEWCO No. 2 Trim. (API Trim No. 8)
Bellow Seal and Extended Body Valves are available upon request.

The charts below list materials available.

F8C, F9, F347, & F347H are available upon request and factory ordered.

MATERIALS (BODY / BONNET)

NEWCO Material Designation	Common Designation	ASTM Specification	Standard NEWCO Trim	Optional Available Trim
FS	Carbon Steel	A105	2	3, 4, 4/3, 5
LF2	Low Temp Carbon Steel	A350 Grade LF-2	4/3	4
F11	1¼ Chrome ½ Moly	A182 Grade F-11	2	4, 5
F22	2¼ Chrome 1 Moly	A182 Grade F-22	3	4, 5
F5	5 Chrome ½ Moly	A182 Grade F-5	2	4, 5
F91	F91	A182 Grade F91	3	—

TRIM MATERIALS

NEWCO Trim No.	Seat Ring Facing	Wedge or Disc Facing	Stem	Other Trim Parts	API 602 Trim No.
1	CR13	CR13	F6a	F6a	1
2	Hardfaced	CR13	F6a	F6a	8
3	Hardfaced	Hardfaced	F6a	F6a	5
4	316	316	316	316	10
4/2	Hardfaced	316	316	316	12
4/3	Hardfaced	Hardfaced	316	316	16
5	NICU	NICU	NICU	NICU	9
5/2	Hardfaced	NICU	NICU	NICU	11
5/3	Hardfaced	Hardfaced	NICU	NICU	—
9	SPL	SPL	SPL	SPL	—

SPECIFICATIONS

NEWCO forged steel valves comply with the following applicable specifications:

ASME	API	MSS
B16.34	598	SP-84
B16.11	602	
B1.20.1		

Note: Bolted bonnet valves are also available in welded bonnet configuration.
Full Penetrant Welded Flanged Ends available in Class 600.

SOCKET WELD DIMENSIONS

Tolerances
Column A Dimensions + 010-000

Valve Size	Socket Dia. A	Min. ANSI B16.11 Socket Depth B
¼	.555	.38
⅜	.690	.38
½	.855	.38
¾	1.065	.50
1	1.330	.50
1¼	1.675	.50
1½	1.915	.50
2	2.406	.62

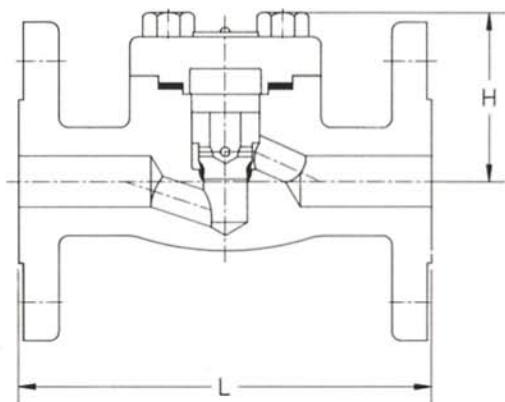


CHECK VALVES

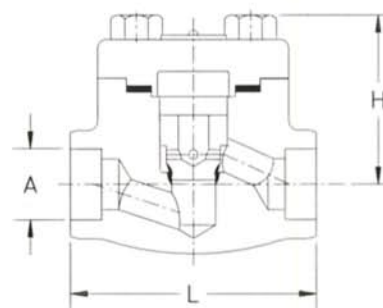
BOLTED CAP CLASS 150-300-600-800-1500

FEATURES

- Spiral wound gasket of stainless steel and flexible graphite with controlled compression.
- Fully guided disc in lift checks hardfaced seats
- No sidewall plug on swing checks.
- Lift checks with springs can be purchased upon special request.



Lift Check Fig. Numbers:
Fig. 41F-FS2-INT Class 150 (Flanged)
Fig. 43F-FS2-INT Class 300 (Flanged)
Fig. 46F-FS2 Class 600 (Flanged)



Lift Check Fig. Numbers:
Fig. 48S-FS2 Class 800 (Socket Weld)
Fig. 48T-FS2 Class 800 (Threaded)

Fig. 415S-FS2 Class 1500 (Socket Weld)
Fig. 415T-FS2 Class 1500 (Threaded)

CLASS 150-300-600 DIMENSIONS

NPS		1/2"	3/4"	1"	1 1/2"	2"
L-150 Face to Face	IN	6.00	7.00	8.00	9.00	10.50
	MM	152	178	203	229	267
L-300 Face to Face	IN	6.00	7.00	8.00	9.00	10.50
	MM	152	178	203	229	267
L-600 Face to Face	IN	6.50	7.50	8.50	9.50	11.50
	MM	165	190	216	241	292
H - Height	IN	1.73	2.05	2.60	3.23	3.82
	MM	44	52	66	82	92
WT - 150	LB	5.3	6.6	10.6	18.3	28.7
	KG	2.4	3.0	4.8	8.3	13.0
WT - 300	LB	6.0	8.8	12.3	22.7	31.5
	KG	2.7	4.0	5.6	10.3	14.3
WT - 600	LB	6.4	11.0	13.4	28.6	40.3
	KG	2.9	5.0	6.1	13.0	18.3

For materials and applicable specifications see page 4.

CLASS 800 DIMENSIONS

NPS		1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H - Height	IN	1.7	1.7	1.7	2.0	2.6	2.9	3.2	3.8
	MM	44	44	44	52	66	74	82	97
L - End to End	IN	2.91	2.91	2.91	3.38	4.17	5.12	5.98	6.77
	MM	74	74	74	86	106	130	152	172
WT	LB	2.9	2.9	2.9	2.9	5.1	8.2	10.4	16.3
	KG	1.3	1.3	1.3	1.3	2.3	3.7	4.7	7.4

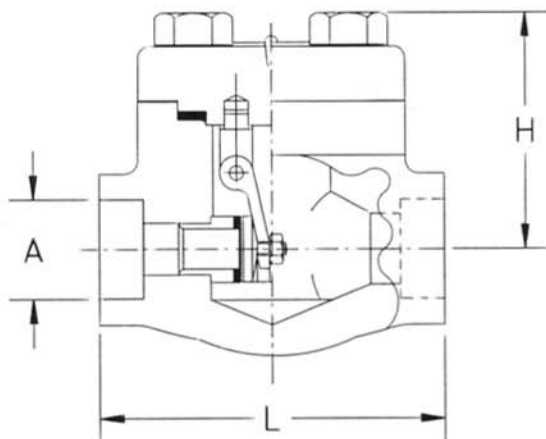
CLASS 1500 DIMENSIONS

NPS		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H - Height	IN	2.8	2.8	3.4	4.1	4.6	5.4
	MM	72	72	85	103	116	135
L - End to End	IN	4.37	4.37	5.12	5.98	6.77	8.66
	MM	111	111	130	152	172	220
WT	LB	6.2	6.2	9.0	12.8	20.1	28.7
	KG	2.8	2.8	4.1	5.8	9.1	13.0



CHECK VALVES

BOLTED CAP CLASS 800



Swing Check Fig. Numbers:

Fig. 38S-FS2 Class 800 (Socket Weld)

Fig. 38T-FS2 Class 800 (Threaded)

Y PATTERN — WELDED BONNET CLASS 1500-2500

FEATURES

- Seal welded cap eliminates potential leak path
- Integral hardfaced seats
- Spring loaded piston for positive shut-off
- In-line inlet port prevents fluid entrapment

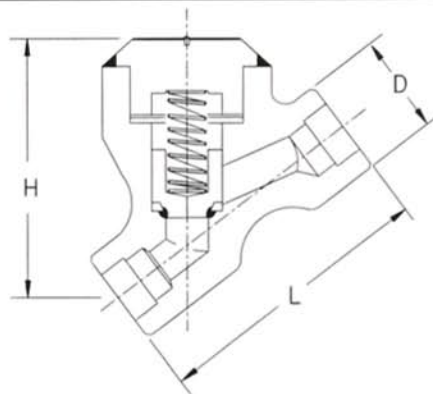


Fig. 415S-FS3 - WB - Y Class 1500 (Socket Weld)

Fig. 415T-FS3 - WB - Y Class 1500 (Threaded)

Fig. 415W-FS3 - WB - Y Class 1500 (Buttwelding)

Fig. 425S-FS3 - WB - Y Class 2500 (Socket Weld)

Fig. 425T-FS3 - WB - Y Class 2500 (Threaded)

Fig. 425W-FS3 - WB - Y Class 2500 (Buttwelding)

CLASS 800 DIMENSIONS

NPS		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H - Height	IN	1.9	2.2	2.7	2.9	3.9	4.1
	MM	49	56	67	73	95	105
L - End to End	IN	3.15	3.54	4.33	5.00	6.10	6.70
	MM	80	90	110	127	155	170
WT	LB	2.4	4.0	5.1	7.9	13.2	19.6
	KG	1.1	1.8	2.3	3.6	6.0	8.9

For materials and applicable specifications see page 4.

CLASS 1500 DIMENSIONS

NPS		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H - Height	IN	3.0	3.1	3.4	4.5	4.5	5.5
	MM	75	80	85	115	115	140
D	IN	1.6	1.9	2.2	2.7	2.7	3.3
	MM	40	49	56	69	69	85
L - End to End	IN	3.9	4.3	4.9	5.9	6.3	7.5
	MM	100	110	125	150	160	190
WT	LB	5.5	6.6	10.0	13.3	13.3	20.0
	KG	2.5	3.0	4.5	6.0	6.0	9.0

CLASS 2500 DIMENSIONS

NPS		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H - Height	IN	3.2	3.3	4.5	5.5	5.5	5.9
	MM	80	85	115	140	140	150
D	IN	1.9	2.2	2.7	2.8	3.3	3.9
	MM	49	56	69	72	83	99
L - End to End	IN	4.3	4.9	6.3	6.3	7.5	8.3
	MM	110	125	160	160	190	210
WT	LB	6.6	10.0	13.3	13.3	20.0	26.6
	KG	3.0	4.5	6.0	6.0	9.0	12.0