



THREE-PIECE FORGED TRUNNION BALL VALVES

Warren Valve offers a 2”–48” forged steel three-piece trunnion ball valves to meet the industry’s strictest specifications. Our products include ANSI Classes 150–2500 in carbon steel bodies with electroless nickel plating, stainless steel trim, or full stainless steel body and trim. Double block and bleed and emergency sealant injection fittings are standard, along with NACE and fire-safe.

Our comprehensive evaluation includes on-site audits, inspection at the source, receiving inspections, and destructive material testing. Mill test reports are always available.

A105N

CLASS	FIGURE NUMBER
150#	6155- T3
300#	6305- T3
600#	6605- T3
900#	6905- T3
1500#	6505- T3
2500#	6255- T3

A182-F316

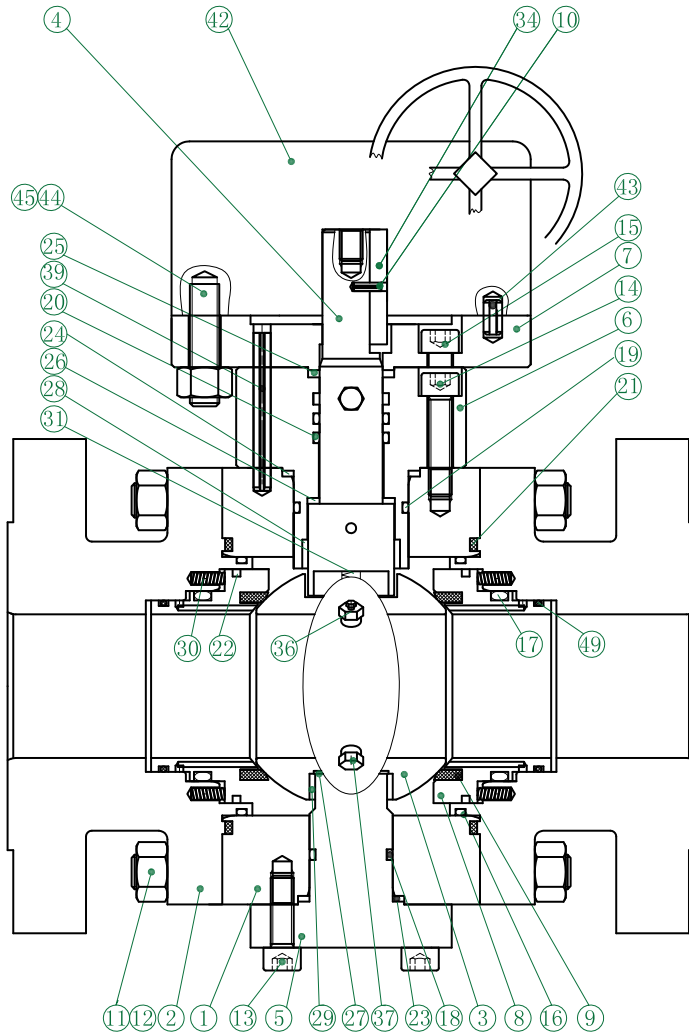
CLASS	FIGURE NUMBER
150#	6156- T3
300#	6306- T3
600#	6606- T3
900#	6906- T3
1500#	6506- T3
2500#	6256- T3

PRODUCT OVERVIEW

SIZE RANGE	2” –48”
PRESSURE RANGE	ANSI 150# through ANSI 2500# pressure class
MATERIAL GRADES	A105N, A182-F316 SS, A350-LF2, A350-LF6, and F51 Duplex
PORT SIZES	Full Bore, and Reduced Bore
TRIM MATERIALS	3MIL ENP, 316SS, and F51 Duplex
SEAT INSERT MATERIAL	Devlon (PEEK and others available upon request)
SEAT MATERIALS	HNBR 90 DURO, James Walker 101/985, Viton GLT, and AFLAS
END CONFIGURATIONS	Raised Face (RF), Ring Type Joint (RTJ), Butt Weld (BW), and Flanged X Butt Weld

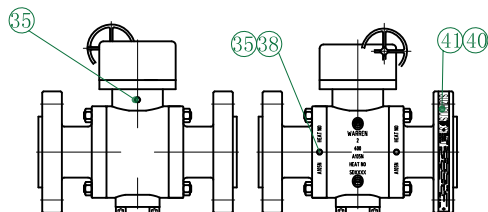
FULL PORT DESIGN

ANSI CLASS 150 - 300 - 600 - 900 - 1500 - 2500



A105N MATERIAL LIST

NO.	PART NAME	MATERIAL
1	BODY	ASTM A105N
2	ADAPTER	ASTM A105N
3	BALL	ASTM A105N+0.075ENP
4	STEM	AISI 4140+0.075ENP
5	TRUNNION	ASTM A105N+0.075ENP
6	BONNET	ASTM A105N
7	TOP FLANGE	ASTM A105N
8	SEAT	ASTM A105N+0.075ENP
9	SEAT INSERT	DEVLON
10	PIN	ASTM A29 1566
11	BOLT	ASTM A193 B7M
12	NUT	ASTM A194 2HM
13	SCREW	ASTM A193 B7M
14	SCREW	ASTM A193 B7M
15	SCREW	ASTM A193 B7M
16	O-RING	90-DR HNBR
17	O-RING	90-DR HNBR
18	O-RING	90-DR HNBR
19	O-RING	90-DR HNBR
20	O-RING	90-DR HNBR
21	GASKET	GRAPHITE
22	PACKING	BRAIDED GRAPHITE
23	GASKET	GRAPHITE
24	GASKET	GRAPHITE
25	GASKET	GRAPHITE
26	THRUST WASHER	PEEK
27	WASHER	PTFE
28	BEARING	CS+PTFE
29	BEARING	CS+PTFE
30	SEAT SPRING	INCONEL X-750
31	ANTISTATIC SPRING	ASTM A313 316
32	ANTISTATIC SPRING	ASTM A313 316
33	ANTISTATIC BALL	ASTM A182 F316
34	SQUARE KEY	ASTM A29 1045
35	INJECTION VALVE	ASTM A182 F304+SS316
36	VENT VALVE	ASTM A182 F304
37	DRAIN PLUG	ASTM A182 F304
38	CHECK VALVE	ASTM A182 F304
39	PIN	ASTM A29 1566
40	NAMEPLATE	ASTM A240 316
41	RIVET	ASTM A276 304
42	GEARBOX	ASTM A48 No. 35A
43	PIN	ASTM A29 1566
44	BOLT	ASTM A193 B7M
45	NUT	ASTM A194 2HM
46	O-RING	90-DR HNBR



A182-F316 MATERIAL LIST

NO.	PART NAME	MATERIAL
1	BODY	ASTM A182 F316
2	ADAPTER	ASTM A182 F316
3	BALL	ASTM A182 F316
4	STEM	ASTM A182 F51
5	TRUNNION	ASTM A182 F316
6	BONNET	ASTM A182 F316
7	MOUNTING PLATE	ASTM A182 F316
8	SEAT RETAINER	ASTM A182 F316
9	SEAT INSERT	DEVLON

OTHER BODY AND TRIM MATERIALS AVAILABLE.

Please contact Warren Valve or your Warren Valve representative for more details.

FULL PORT DESIGN

ANSI CLASS 150 - 300 - 600 - 900 - 1500 - 2500

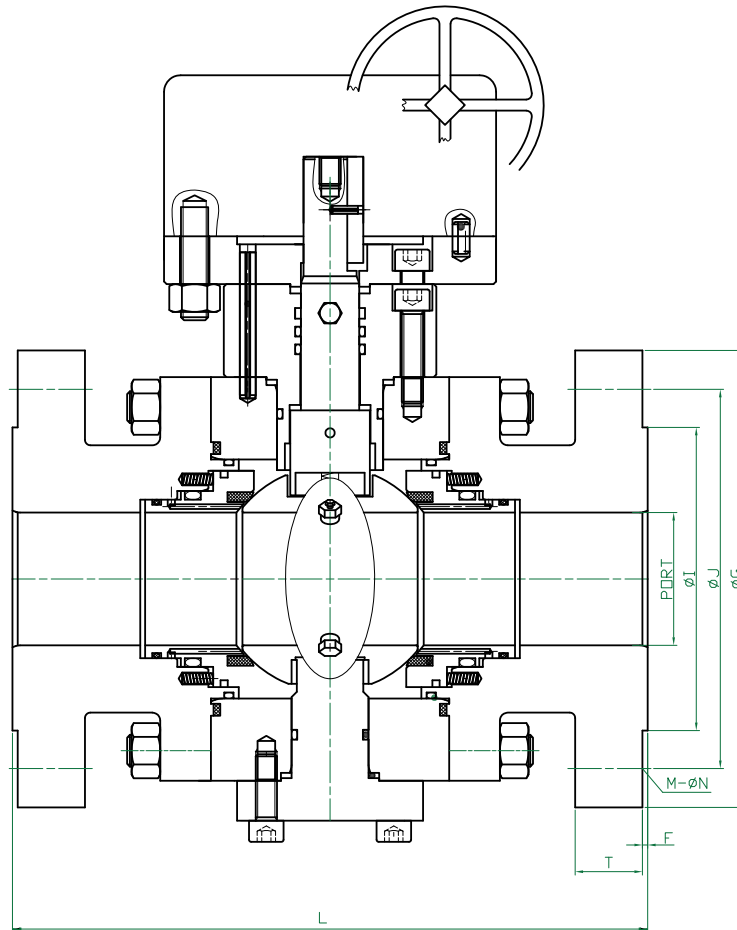


FIGURE NUMBER 6155-6156

SIZE	PORT	L	ØG	ØJ	ØI	T	F	M	ØN
2"	2.00	7.00	6.00	4.75	3.62	0.69	0.06	4	0.75
3"	3.00	8.00	7.50	6.00	5.00	0.88	0.06	4	0.75
4"	4.00	9.00	9.00	7.50	6.19	0.88	0.06	8	0.75
6"	6.00	15.50	11.00	9.50	8.50	0.94	0.06	8	0.875
8"	8.00	18.00	13.50	11.75	10.62	1.06	0.06	8	0.875
10"	10.00	21.00	16.00	14.25	12.75	1.12	0.06	12	1.00
12"	12.00	24.00	19.00	17.00	15.00	1.19	0.06	12	1.00
14"	13.25	27.00	21.00	18.75	16.25	1.31	0.06	12	1.125
16"	15.25	30.00	23.50	21.25	18.50	1.38	0.06	16	1.125
18"	17.25	34.00	25.00	22.75	21.00	1.50	0.06	16	1.25
20"	19.25	36.00	27.50	25.00	23.00	1.62	0.06	20	1.25
24"	23.25	42.00	32.00	29.50	27.25	1.81	0.06	20	1.375
30"	29.00	51.00	38.75	36.00	33.75	2.88	0.06	28	1.375
36"	34.50	60.00	46.00	42.75	40.25	3.50	0.06	32	1.625

FIGURE NUMBER 6305-6306

SIZE	PORT	L	φG	φJ	φI	T	F	M	φN
2"	2.00	8.50	6.50	5.00	3.62	0.81	0.06	8	0.75
3"	3.00	11.13	8.25	6.62	5.00	1.06	0.06	8	0.875
4"	4.00	12.00	10.00	7.88	6.19	1.19	0.06	8	0.875
6"	6.00	15.88	12.50	10.62	8.50	1.38	0.06	12	0.875
8"	8.00	19.75	15.00	13.00	10.62	1.56	0.06	12	1
10"	10.00	22.38	17.50	15.25	12.75	1.81	0.06	16	1.125
12"	12.00	25.50	20.50	17.75	15.00	1.94	0.06	16	1.25
14"	13.25	30.00	23.00	20.25	16.25	2.06	0.06	20	1.25
16"	15.25	33.00	23.27	22.50	18.50	2.19	0.06	20	1.375
18"	17.25	36.00	28.00	24.75	21.00	2.31	0.06	24	1.375
20"	19.25	39.00	30.50	27.00	23.00	2.44	0.06	24	1.375
30"	29.00	55.00	43.00	39.25	33.75	3.57	0.06	28	1.875
36"	34.50	68.00	50.00	46.00	40.25	4.07	0.06	32.00	2
42"	41.25	82.00	50.75	47.50	44.75	4.63	0.06	32.00	1.75

FIGURE NUMBER 6605-6606

SIZE	PORT	L	φG	φJ	φI	T	F	M	φN
2"	2.00	11.50	6.50	5.00	3.62	1.00	0.25	8.00	0.75
3"	3.00	14.00	8.25	6.62	5.00	1.25	0.25	8.00	0.875
4"	4.00	17.00	10.75	8.50	6.19	1.50	0.25	8.00	1.000
6"	6.00	22.00	14.00	11.50	8.50	1.88	0.25	12.00	1.125
8"	8.00	26.00	16.50	13.75	10.62	2.19	0.25	12.00	1.25
10"	10.00	31.00	20.00	17.00	12.75	2.50	0.25	16.00	1.375
12"	12.00	33.00	22.00	19.25	15.00	2.63	0.25	20.00	1.375
14"	13.25	35.00	23.75	20.75	16.25	2.75	0.25	20.00	1.5
16"	15.25	39.00	27.00	23.75	18.50	3.00	0.25	20.00	1.625
18"	17.25	43.00	29.25	25.75	21.00	3.25	0.25	20.00	1.75
20"	19.25	47.00	32.00	28.50	23.00	3.50	0.25	24.00	1.75
24"	23.25	55.00	37.00	33.00	27.25	4.00	0.25	24.00	2.00
30"	29.00	65.00	44.50	40.25	33.75	4.20	0.25	28.00	2.125
36"	34.50	82.00	51.75	47.00	40.25	4.88	0.25	28.00	2.625
42"	41.25	95.95	55.25	50.50	46.00	6.62	0.25	28.00	2.625
48"	46.00	100.00	62.80	57.50	52.52	7.44	0.25	32.00	2.875

FIGURE NUMBER 6905-6906

SIZE	PORT	L	φG	φJ	φI	T	F	M	φN
2"	2.00	14.50	8.50	6.50	3.62	1.50	0.25	8.00	1.00
3"	3.00	15.00	9.50	7.50	5.00	1.50	0.25	8.00	1.00
4"	4.00	18.00	11.50	9.25	6.19	1.75	0.25	8.00	1.25
6"	6.00	24.00	15.00	12.50	8.50	2.19	0.25	12.00	1.25
8"	8.00	29.00	18.50	15.50	10.62	2.50	0.25	12.00	1.50
10"	10.00	33.00	21.50	18.50	12.75	2.75	0.25	16.00	1.50
12"	12.00	38.00	24.00	21.00	15.00	3.12	0.25	20.00	1.50
14"	12.75	40.88	25.25	22.00	18.38	3.38	0.438	20.00	1.625
16"	14.75	44.88	27.75	24.25	20.62	3.50	0.438	20.00	1.75
18"	16.75	48.50	31.00	27.00	23.38	4.00	0.50	20.00	2.00
20"	18.63	52.50	33.75	29.50	25.50	4.25	0.50	20.00	2.125
24"	22.50	61.75	41.00	35.50	30.38	5.50	0.625	20.00	2.625
30"	28.06	74.00	48.50	42.75	33.75	5.88	0.625	20.00	3.125

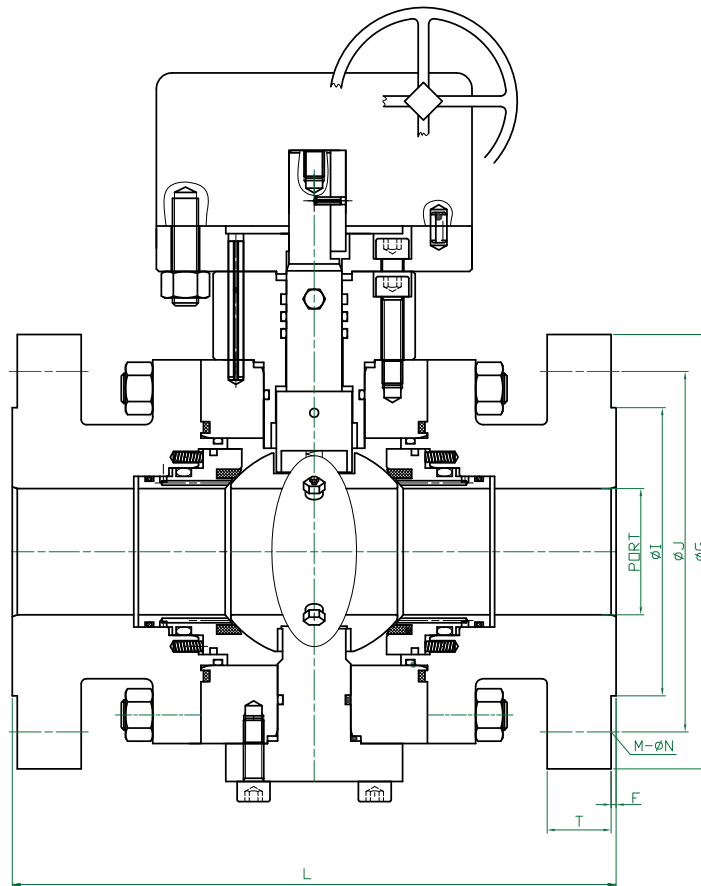


FIGURE NUMBER **6505-6506**

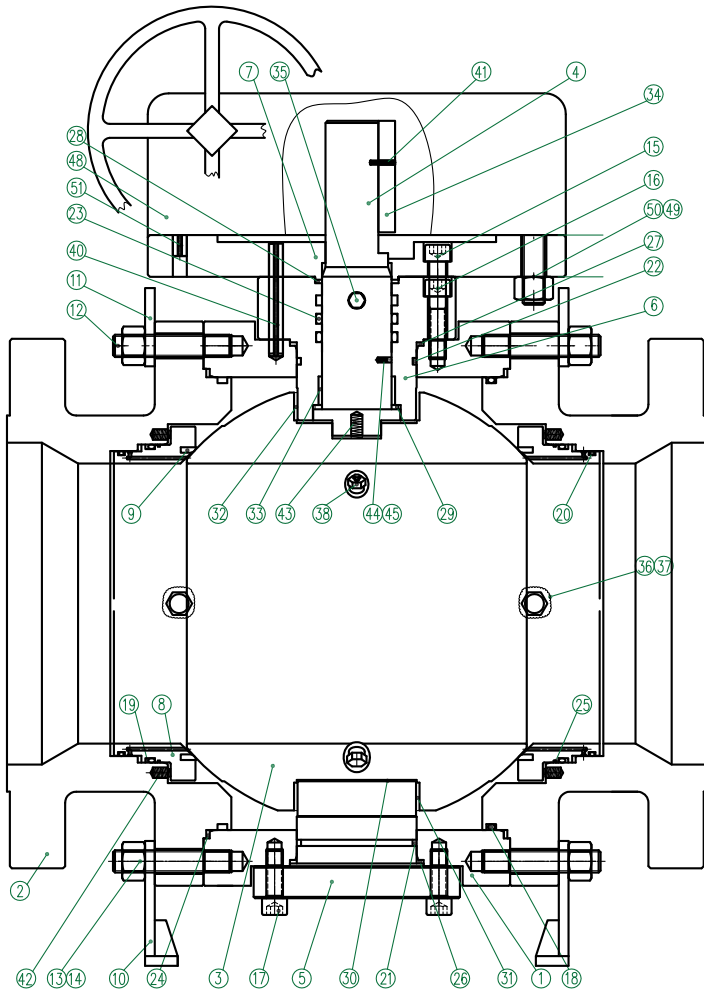
SIZE	PORT	L	ØG	ØJ	ØI	T	F	M	ØN
2"	2.00	14.50	8.50	6.50	3.62	1.50	0.25	8.00	1.00
3"	3.00	18.63	10.50	8.00	6.62	1.88	0.25	8.00	1.25
4"	4.00	21.50	12.25	9.50	6.19	2.12	0.25	8.00	1.38
6"	5.75	27.75	15.50	12.50	8.50	3.25	0.25	12.00	1.50
8"	7.63	33.13	19.00	15.50	12.50	3.62	0.438	12.00	1.75
10"	9.50	39.38	23.00	19.00	14.62	4.25	0.438	12.00	2.00
12"	11.37	45.13	26.50	22.50	17.25	4.88	0.562	16.00	2.125
18"	15.985	61.38	36.00	30.50	24.12	6.38	0.688	16.00	2.875

FIGURE NUMBER **6255-62566**

SIZE	PORT	L	ØG	ØJ	ØI	T	F	M	ØN
1"	1.00	12.12	6.25	4.25	3.25	1.38	0.344	4.00	1.00
2"	1.75	17.88	9.25	6.75	5.25	2.00	0.312	8.00	1.125
3"	2.50	22.75	12.00	9.00	5.00	2.62	0.375	8.00	1.375
4"	3.50	26.50	14.00	10.75	6.19	3.00	0.438	8.00	1.625
6"	5.25	36.50	19.00	14.50	11.00	4.25	0.5	8.00	2.125
8"	7.13	40.25	21.75	17.25	10.62	5.00	0.25	12.00	2.125
10"	8.87	50.88	26.50	21.25	16.75	6.50	0.688	12.00	2.625
12"	10.50	56.88	30.00	24.38	19.50	7.25	0.688	12.00	2.875

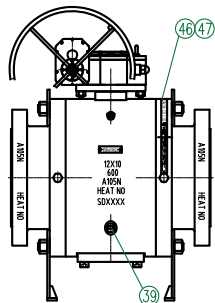
REDUCED PORT DESIGN

ANSI CLASS 150 - 300 - 600 - 900 - 1500 - 2500



A105N MATERIAL LIST

NO.	PART NAME	MATERIAL
1	BODY	ASTM A105N
2	ADAPTER	ASTM A105N
3	BALL	ASTM A105N+0.075ENP
4	STEM	AISI4140+0.075ENP
5	TRUNNION	ASTM A105N+0.075ENP
6	BONNET	ASTM A105N
7	MOUNTING PLATE	ASTM A105N
8	SEAT RETAINER	ASTM A105N+0.075ENP
9	SEAT INSERT	DEVLON
10	SUPPORT LEG	ASTM A36
11	LIFT EYE	ASTM A36
12	BOLT	ASTM A193 B7M
13	BOLT	ASTM A193 B7M
14	NUT	ASTM A194 2HM
15	SCREW	ASTM A193 B7M
16	SCREW	ASTM A193 B7M
17	SCREW	ASTM A193 B7M
18	O-RING	90-DR HNBR
19	O-RING	90-DR HNBR
20	O-RING	90-DR HNBR
21	O-RING	90-DR HNBR
22	O-RING	90-DR HNBR
23	O-RING	90-DR HNBR
24	GASKET	GRAPHITE
25	PACKING	BRAIDED GRAPHITE
26	GASKET	GRAPHITE
27	GASKET	GRAPHITE
28	GASKET	GRAPHITE
29	THRUST WASHER	PEEK
30	WASHER	PTFE
31	BEARING	ASTM A515 70+PTFE
32	BEARING	ASTM A515 70+PTFE
33	BEARING	ASTM A515 70+PTFE
34	SQUARE KEY	ASTM A29 1045
35	INJECTION VALVE	ASTM A182 F304
36	INJECTION VALVE	ASTM A182 F304
37	CHECK VALVE	ASTM A182 F304
38	VENT VALVE	ASTM A182 F304
39	DRAIN PLUG	ASTM A182 F304
40	PIN	ASTM A29 1566
41	PIN	ASTM A29 1566
42	SEAT SPRING	INCONEL X-750
43	ANTISTATIC SPRING	ASTM A313 316
44	ANTISTATIC SPRING	ASTM A313 316
45	ANTISTATIC BALL	ASTM A276 316
46	NAME PLATE	ASTM A240 316
47	RIVET	ASTM A276 316
48	GEARBOX	ASTM A48 No. 35A
49	BOLT	ASTM A193 B7M
50	NUT	ASTM A194 2HM
51	PIN	ASTM A29 1566



A182-F316 MATERIAL LIST

NO.	PART NAME	MATERIAL
1	BODY	ASTM A182 F316
2	ADAPTER	ASTM A182 F316
3	BALL	ASTM A182 F316
4	STEM	ASTM A182 F51
5	TRUNNION	ASTM A182 F316
6	BONNET	ASTM A182 F316
7	MOUNTING PLATE	ASTM A182 F316
8	SEAT RETAINER	ASTM A182 F316
9	SEAT INSERT	DEVLON
10	SUPPORT LEG	ASTM A240 304
11	LIFT EYE	ASTM A240 304

OTHER BODY AND TRIM MATERIALS AVAILABLE.

Please contact Warren Valve or your Warren Valve representative for more details.

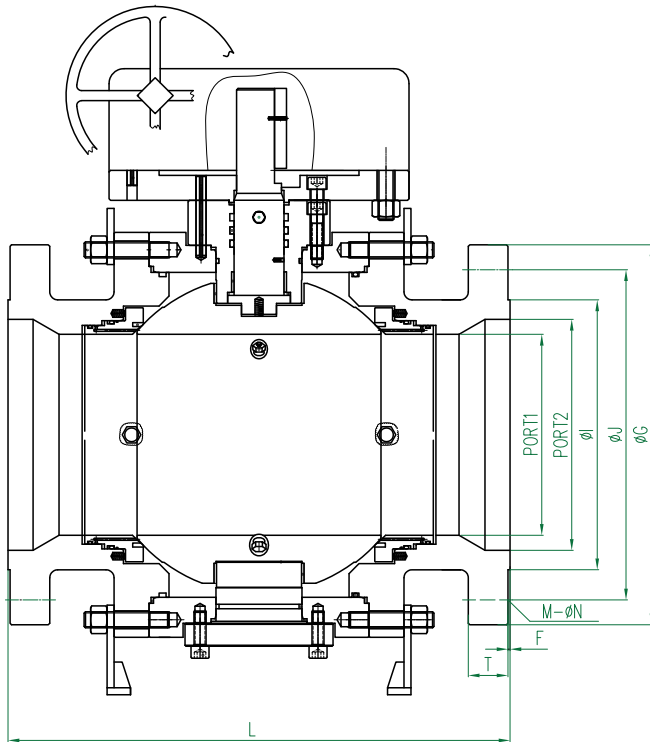


FIGURE NUMBER 5155-5156

SIZE	PORT-1	PORT-2	L	φG	φJ	φI	T	F	M
2"X1 1/2"	2.00	1.50	7.00	6.00	4.75	3.62	0.69	0.06	4
3"X2"	2.00	3.00	8.00	7.50	6.00	5.00	0.88	0.06	4
4"X3"	3.00	4.00	9.00	9.00	7.50	6.19	0.88	0.06	8
6"X4"	4.00	6.00	15.50	11.00	9.50	8.50	0.94	0.06	8
8"X6"	6.00	8.00	18.00	13.50	11.75	10.62	1.06	0.06	8
10"X8"	8.00	10.00	21.00	16.00	14.25	12.75	1.12	0.06	12
12"X10"	10.00	12.00	24.00	19.00	17.00	15.00	1.19	0.06	12
16"X12"	12.00	15.25	30.00	23.50	21.25	18.50	1.38	0.06	16
18"X16"	15.25	17.25	34.00	25.00	22.75	21.00	1.50	0.06	16

FIGURE NUMBER 5305-5306

SIZE	PORT-1	PORT-2	L	φG	φJ	φI	T	F	M	φN
4"X3"	3.00	4.00	12.00	10.00	7.88	6.19	1.19	0.06	8	0.88
6"X4"	4.00	6.00	15.88	12.50	10.62	8.50	1.38	0.06	12	0.875
10"X8"	8.00	10.00	22.38	17.50	15.25	12.75	1.81	0.06	16	1.125
24"X20"	19.25	23.25	45.00	36.00	32.00	27.25	2.69	0.06	24	1.63

FIGURE NUMBER 5605-5606

SIZE	PORT-1	PORT-2	L	φG	φJ	φI	T	F	M	φN
2"X1 1/2"	2.00	1.50	11.50	6.50	5.00	3.62	1.00	0.25	8.00	0.75
3"X2"	2.00	3.00	14.00	8.25	6.62	5.00	1.25	0.25	8.00	0.875
4"X3"	3.00	4.00	17.00	10.75	8.50	6.19	1.50	0.25	8.00	1.00
6"X4"	4.00	6.00	22.00	14.00	11.50	8.50	1.88	0.25	12.00	1.125
8"X6"	6.00	8.00	26.00	16.50	13.75	10.62	2.19	0.25	12.00	1.25
10"X8"	8.00	10.00	31.00	20.00	17.00	12.75	2.50	0.25	16.00	1.375
12"X10"	10.00	12.00	33.00	22.00	19.25	15.00	2.63	0.25	20.00	1.375
16"X12"	12.00	15.25	39.00	27.00	23.75	18.50	3.00	0.25	20.00	1.625
20"X16"	15.25	19.25	47.00	32.00	28.50	23.00	3.50	0.25	24.00	1.750
30"X24"	23.19	29.00	65.00	44.50	40.25	33.75	4.50	0.25	28.00	2.125