

SERIES 80S

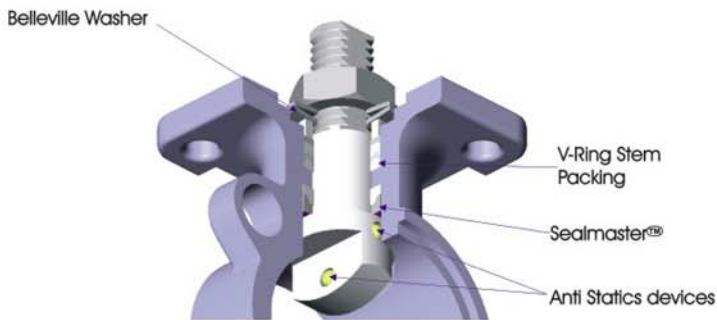


3 PC HEAVY DUTY HIGH PERFORMANCE BALL VALVE



FULL & REDUCED PORT
MANUAL OR AUTOMATED ¼"-4" (DN8-DN100)

MAINTENANCE-FREE DOUBLE SEALING Sealmaster™ Arrangement



Our sealing system is accomplished by two levels. The primary level with patented "SEALMASTER™". The secondary level with multiple layers of V-ring packings provided added protection against stem leakage. The stem is topped off with a set of high tension Belleville Washers to keep the seals tight for possible wear, pressure and temperature variations.

Pre-load 2 Belleville washers to keep the stem seals tight at all time.

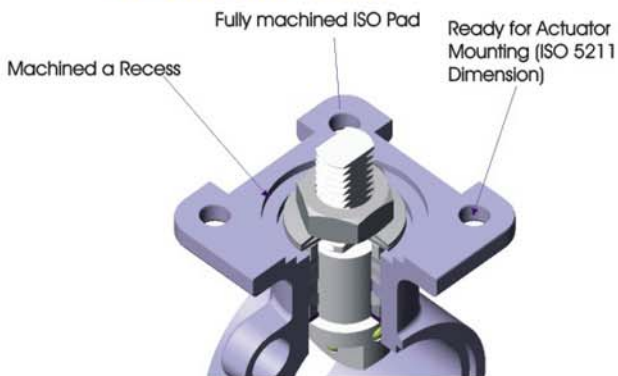
Built- in ISO 5211 mounting pad for easy automation and easy interface with other accessories.

Encapsulated body gasket to seal off any possible leak path. The design also allows welding in place (WIP) without disassembly.

All SS weld ends in SS 316L maintains the carbon content within the range of SS316 after welding heat.

Precision machined solid SS 316 ball with smooth cylindrical bore. All balls with pressure balance hole in ball slot.

ISO5211 Mounting Dimension & Machined Recess



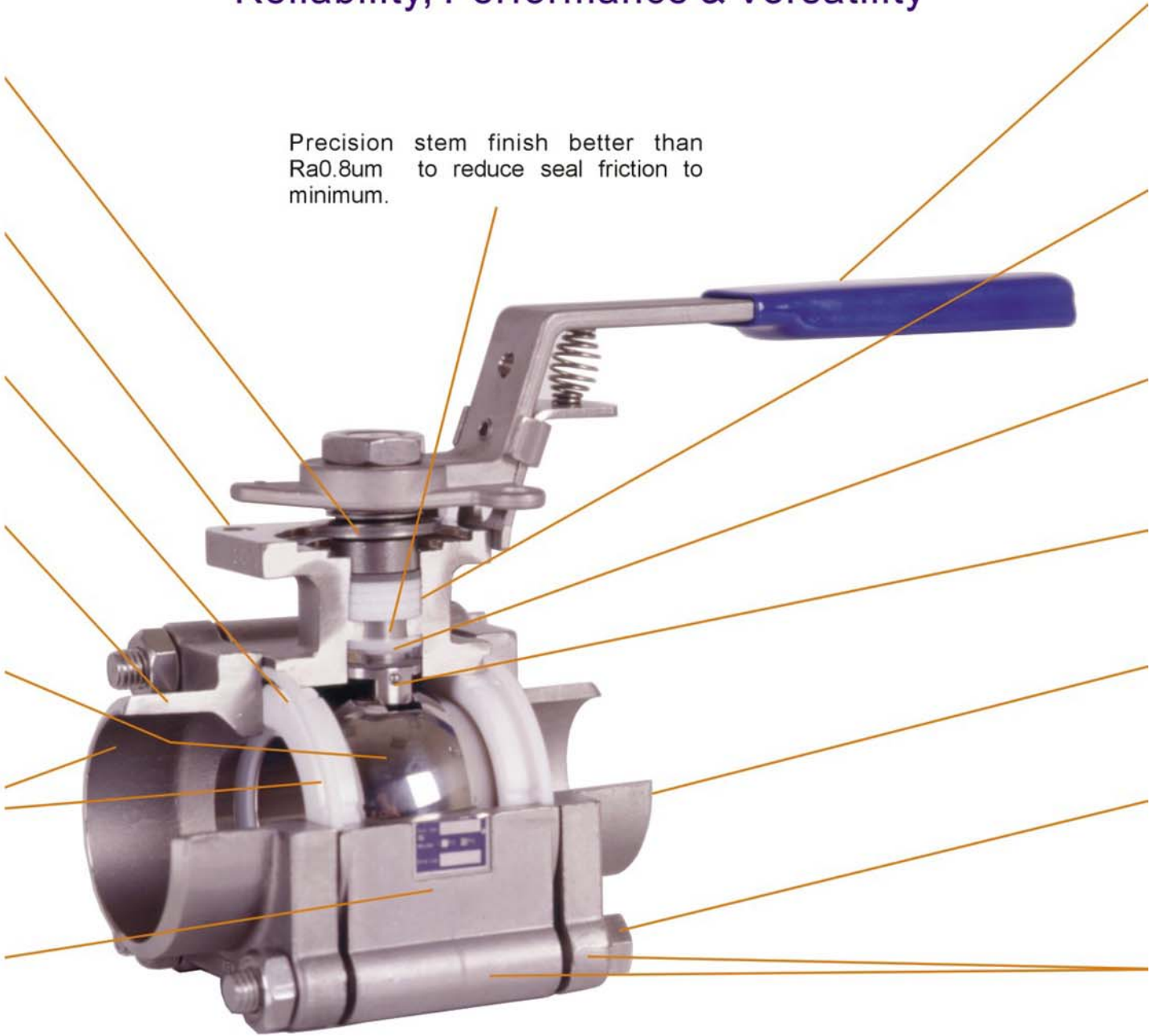
ISO5211 mounting dimension is drilled or tapped and ready for actuator mounting. Machined recess which is also provided for easy installation of secondary unit such as ELC unit, stem extension for actuation or special service valves.

Wide range of end caps and seats selections.

Swing out body design for simplified in-line maintenance of all internal parts.

Start TV's Series 80S ball valve for - Reliability, Performance & Versatility

Precision stem finish better than
Ra0.8um to reduce seal friction to
minimum.



Optional safety patented "Posilock™" air-cushioned handle for comfortable and secured operation.

Deeper stuffing box allows multiple "V" ring stem packing for rigid stem supporting and secondary stem sealing.

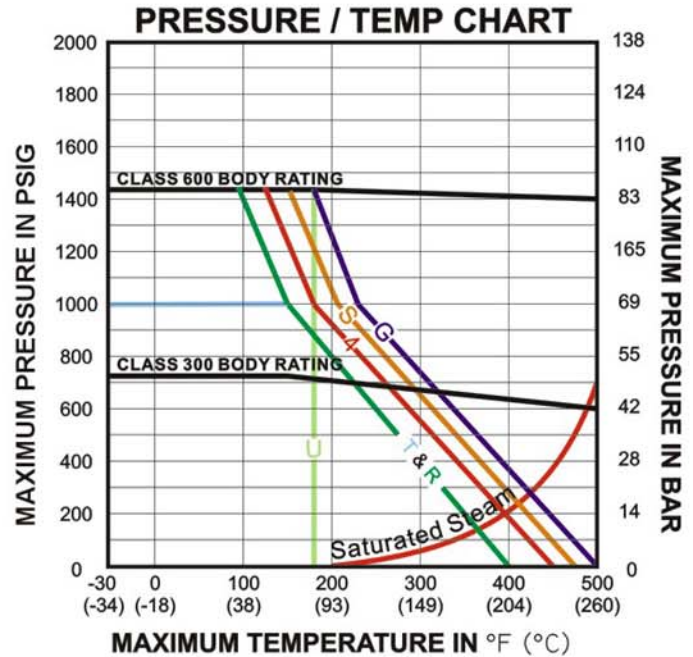
Patented "Sealmaster™" stem arrangement for extremely high cycle life.

Blow out proof anti-static stem for max. security and safety.

Full & reduced port by using same body.

Fully enclosed body bolting for precise end cap alignment up to 2"

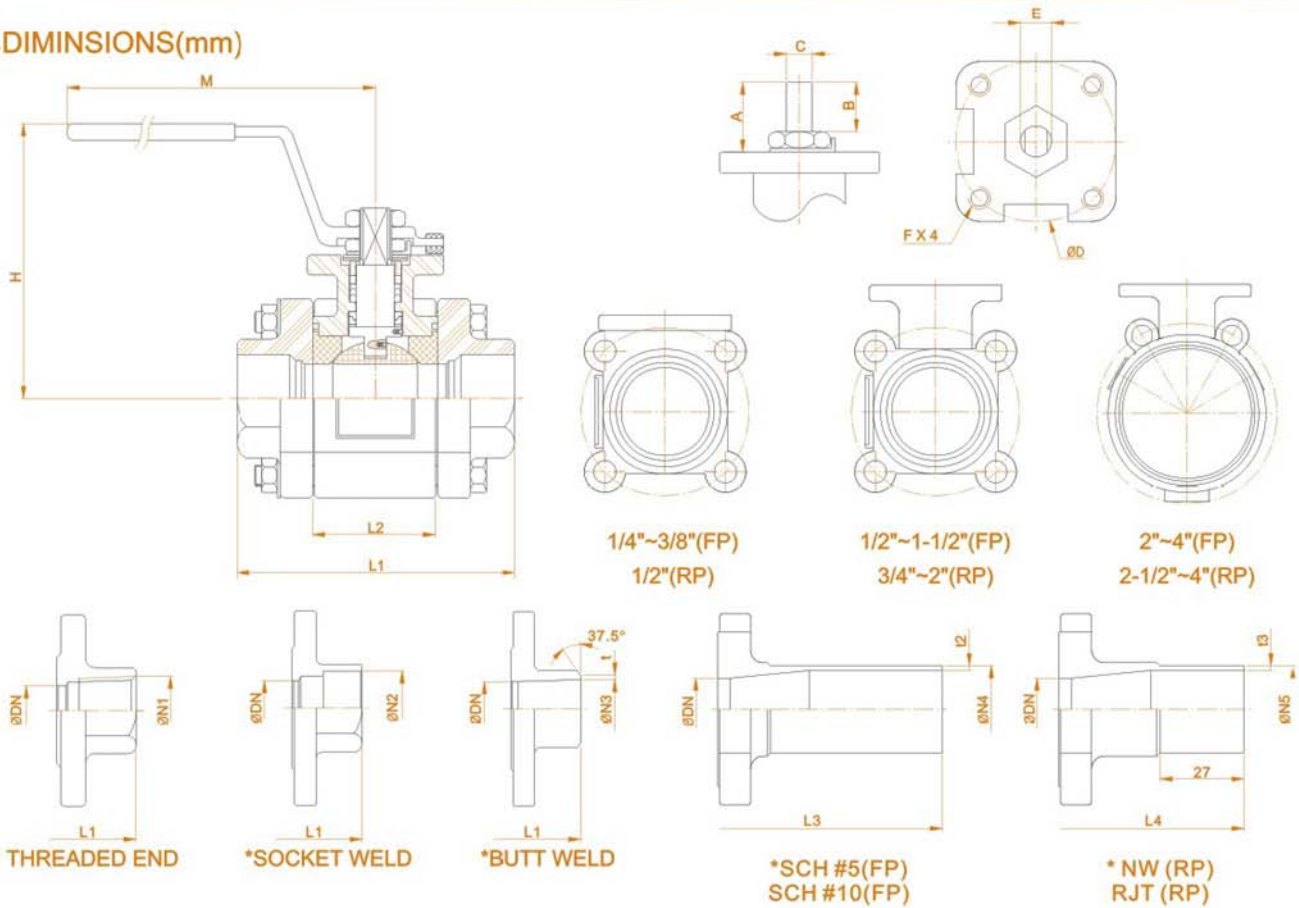
Investment castings for body and end cap. All casting with traceable heat number, marking per MSS SP-25



T=PTFE 4=25% CARBON FILLED PTFE
 G=SS, MoS2 & PTFE FILLED R=RPTFE
 S=50% SS FILLED PTFE U=UHMWP & DELRIN
 BODY RATING: ¼"-1½" FP(½"-2"RP)-CLASS 600
 2"-4"FP(2½"-4"RP)-CLASS 300

The pressure-temperature ratings of ball valves are determined, not only by valve shell materials, but also by sealing materials used for ball seats, stem packings, and body seal. Sealing materials may be high molecule, elasticity and hardness, however, the choice is limited by the characteristics of the service fluid, temperature, pressure, velocity of fluid, frequency of valves operation and sizes of ball valves etc. Above is the general rating chart for non-shock fluid service for TV's floating ball valves distinguished by sizes and seating materials. A general precautions for TV's soft seated ball valves, please refer to engineering data GP-9907-1.0

DIMENSIONS(mm)



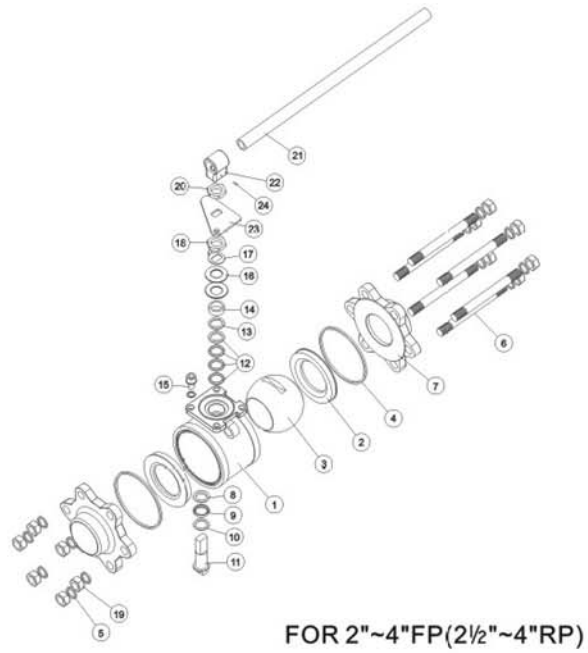
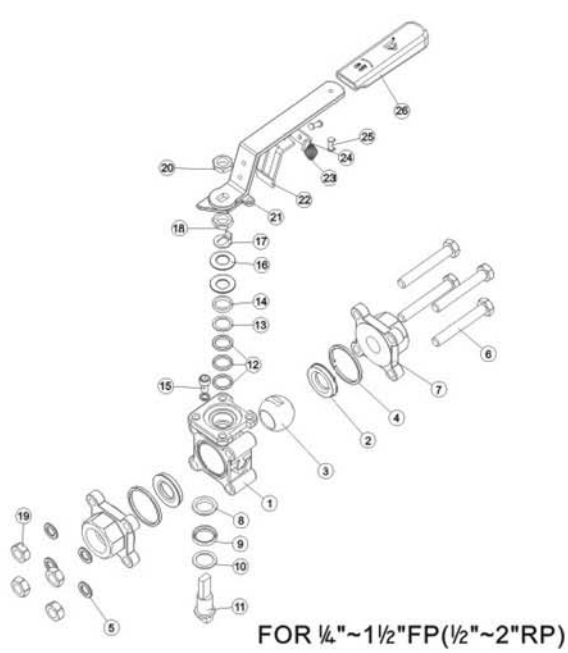
FULL PORT 1/4"~4"(DN8-DN100)

SIZE	ØDN	A	B	C	ØD	E	F	M	t1	t2		H	L1	L2	L3	ØN1	ØN2	ØN3	ØN4
										5S	10S								
1/4"	11.2	12.7	5.6	5	36	7.9	M5/Ø5.5	115	0.5	N/A	N/A	66	66.6	21.2	N/A	NPT OR PT OR PF OR DIN 2999	14.1	10.2	N/A
3/8"	12.7	12.7	5.6	5	36	7.9	M5/Ø5.5	115	0.5	N/A	N/A	66	66.6	21.2	N/A		17.5	13.5	N/A
1/2"	15	18	9	6.3	42	9.7	M5/Ø5.5	135	0.5	1.65	2.1	84	71.6	25.2	129.8		22.4	16.8	21.7
3/4"	20	17.5	9	6.3	42	9.7	M5/Ø5.5	135	0.5	1.65	2.1	88	96.6	32.3	140.9		27.4	22	27.2
1"	25	20	12	8	50	11.2	M6/Ø6.5	165	0.5	1.65	2.1	98	109	42.3	223.3		34.2	27.6	34
1-1/4"	31.8	20	12	8	50	11.2	M6/Ø6.5	165	0.5	1.65	2.8	101	117	49.4	230.4		43	36.1	42.7
1-1/2"	38.1	23.5	14	9.5	70	16	M8/Ø8.5	200	0.5	1.65	2.8	117	129	57.2	240.2		49	41.9	48.6
2"	50.8	23.5	14	9.5	70	16	M8/Ø8.5	200	1	1.65	2.8	125	142	71.4	259.4		61.1	54.5	60.5
2-1/2"	65	41.5	24.7	17	102	22.2	M12/Ø13.5	250	1	N/A	N/A	164	174	89	N/A		77.1	70.9	N/A
3"	80	38.5	25.7	17	102	22.2	M12/Ø13.5	250	1.6	N/A	N/A	173	193	108.5	N/A		90.2	81.1	N/A
4"	100	48	26	17	102	29	M12/Ø13.5	500	0.6	N/A	N/A	182	221.4	125.4	N/A	115.1	105.5	N/A	

REDUCED PORT 1/2"~4"(DN15~DN100)

SIZE	ØDN	A	B	C	ØD	E	F	M	t1	t3		H	L1	L2	L4	ØN1	ØN2	ØN3	ØN5	
										NW	RJT								NW	RJT
1/2"	12.7	12.7	5.6	5	36	7.9	M5/Ø5.5	115	0.5	1.5	1.6	66	66.6	21.2	136	NPT OR PT OR PF OR DIN 2999	22.4	16.8	18	12.7
3/4"	15	18	9	6.3	42	9.7	M5/Ø5.5	135	0.5	1.5	1.55	82	71.6	25.2	133		27.4	22	22	19
1"	20	17.5	9	6.3	42	9.7	M5/Ø5.5	135	0.5	1.5	1.6	86	96.6	32.3	151		34.2	27.6	28	25.4
1-1/4"	25	20	12	8	50	11.2	M6/Ø6.5	165	0.5	1.5	N/A	98	109	42.3	163		43	36.1	34	N/A
1-1/2"	31.8	20	12	8	50	11.2	M6/Ø6.5	165	0.5	1.5	1.6	100	117	49.4	182		49	41.9	40	38.1
2"	38.1	23.5	14	9.5	70	16	M8/Ø8.5	200	1	1.5	1.65	116	129	57.2	189		61.1	54.5	52	50.8
2-1/2"	50.8	23.5	14	9.5	70	16	M8/Ø8.5	200	1	2	1.6	125	142	71.4	236.5		77.1	70.9	70	63.5
3"	65	41.5	24.7	17	102	22.2	M12/Ø13.5	250	1.6	2	1.6	162.8	174	89	260		90.2	81.1	85	76.2
4"	80	38.5	25.7	17	102	22.2	M12/Ø13.5	250	0.6	2	2.1	170.8	193	108.5	290		115.1	105.5	104	101.6

*ALL WELD ENDS ARE ALLOWED WIP(WELDING IN PLACE) BY QUALIFIED WELDER OR ORBITAL WELDING.



MATERIALS OF CONSTRUCTION

NO.	PART NAME	MATERIAL	Q.TY
1	BODY	ASTM A351 Gr. CF8M ASTM A216 Gr. WCB	1
2	BALL SEAT	RPTFE	2
3	BALL	SUS316	1
4	BODY GASKET	PTFE	2
5	BOLT WASHER	SUS304 S45C	4-12 PCS
6	BOLT	B8 B7	4-6 PCS
7	CAP(threaded) CAP(welding ends)	ASTM A351 Gr. CF8M ASTM A216 Gr. WCB ASTM A351 Gr. CF3M ASTM A216 Gr. WCB	2
8	UPPER THRUST WASHER	TFM 1600	1
9	COMPRESS RING	SUS316	1
10	LOWER THRUST WASHER	50% S.S POWDER/50% PTFE	1
11	ANTI - STATIC	SUS316	1
12	V-RING STEM PACKING	PTFE	1 SET

NO.	PART NAME	MATERIAL	Q'TY
13	BUSHING	50% S.S POWER/50% PTFE	1
14	GLAND	SUS304	1
15	STOP BOLT	A193 Gr. B8	1
16	BELLEVILLE WASHER	SUS301 WCB 1075	2
17	LOCK SADDLE	SUS304	1
18	SETM NUT	SUS304 S45C	1
19	BOLT NUT	A194 Gr. B8 A194 2H	4 - 6
20	HANDLE NUT	SUS304 S45C	1
21	HANDLE	SUS304	1
22	LOCKING TRIGGER	SUS304	1
23	STEM ADAPTER	SUS304	1
24	SPRING	SUS304	1
25	STOP PLATE	SUS304	1
26	FIX PLATE	SUS304	1
27	SET SCREW	SUS304	1
28	RIVET	SUS304	2
29	HANDLE SLEEVE	VINYL	1

ORDERING INFORMATION

80S 80 STANDARD	BUTT WELD	REDUCED PORT	SS316	RPTFE	1-1/2"	1440cwp	STANDARD HANDLE
	B	3	1	R	G	M	2
	END CAP TYPE	PORT TYPE	BODY/END CAP MATERIAL	SEAT MATERIAL	SIZE	PRESSURE	HANDLE TYPE
A	EXTEND BUTT WELD SCH-5	1 FULL PORT	1 316 CF8M 1.4408 SCS14	T PTFE	A 1/4"	C PN50/720cwp	2 STANDARD HANDLE
B	BUTT WELD	3 REDUCED PORT	3 ALLOY-20	R RPTFE	B 3/8"	D PN63/1000cwp	3 T - HANDLE
C	EXTEND BUTT WELD SCH-10		4 WCB GS-C25 1.0619	N 50% S/S Filled PTFE	C 1/2"	M PN100/1440cwp	5 OVAL HANDLE
S	SOCKET WELD		5 316L CF3M	4 25% CARBON 75% PTFE	D 3/4"		6 EXTEND T HANDLE
N	THREADED END(NPT)			U UHMWPE	E 1"		7 POSILOCK HANDLE
P	THREADED END(PF)			M MG1241	F 1-1/4"		8 BARE SHAFT
H	THREADED END(PT)			D DELRIN	G 1-1/2"		
V	EXTENDED BUTT WELD - NW			O OTHER	H 2"		
W	EXTENDED BUTT WELD - RJT				J 2-1/2"		
					K 3"		
					L 4"		

• ALL VALVES 100% AIR TESTED UNDER WATER AT 100 PSI, OPEN & CLOSE POSITION

With continuous product improvement, all specifications, descriptions and information contained herein are subject to change with liability excluded. All information contained herein was current at the time of publication.

