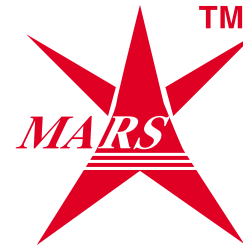


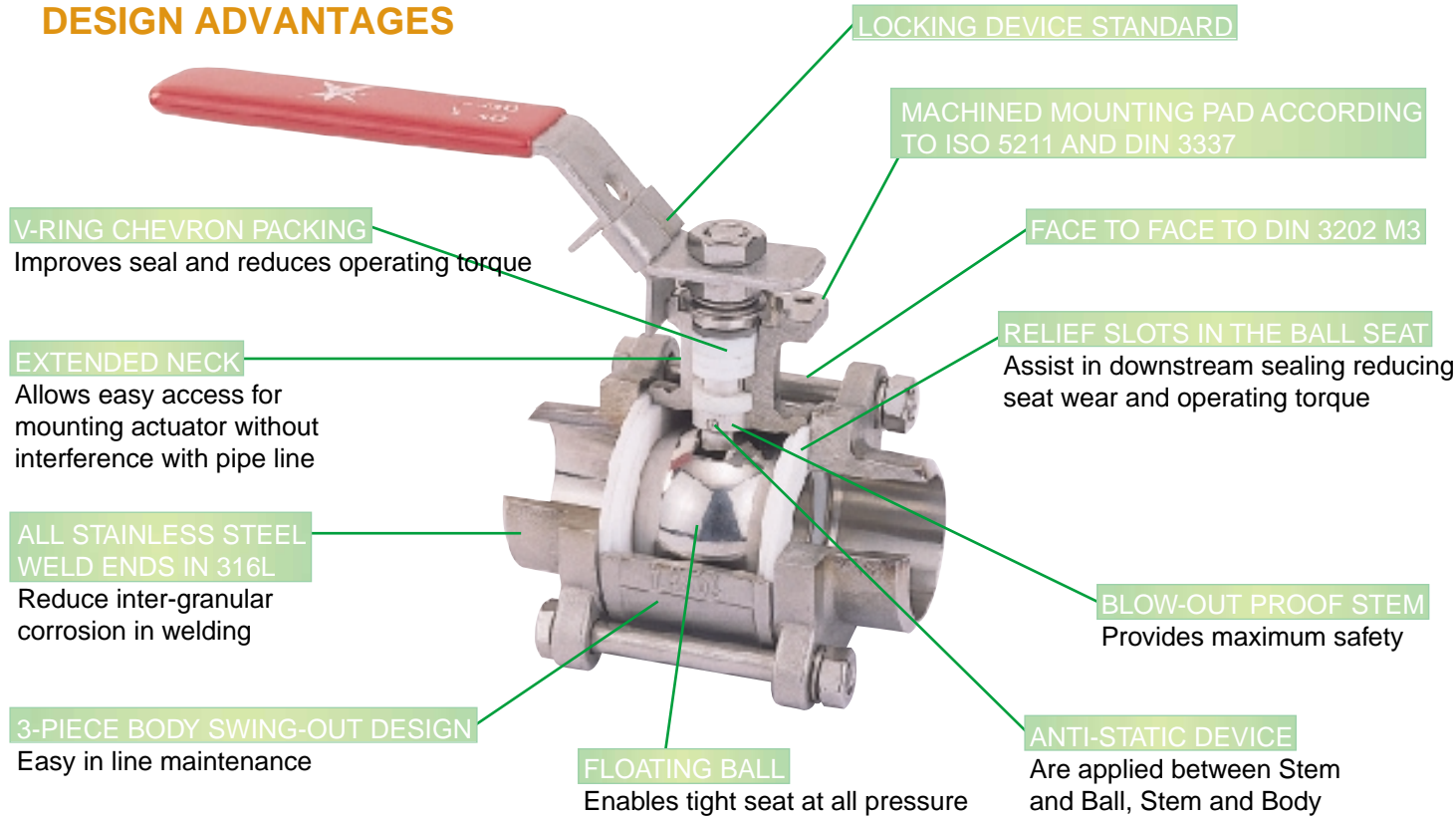
MARS SERIES 70



HIGH PERFORMANCE THREE-PIECE BALL VALVE

1/4"(DN 8) TO 4"(DN 100) FULL PORT
1000/800 PSI PN 64/50

DESIGN ADVANTAGES



MATERIAL AND TEST CERTIFICATE ACCORDING TO EN1024/ DN 50.049-3.1 B AVIALABEL ON REQUEST

Size Range:

- 1/4"(DN 8) to 4"(DN 100) Full Bore

Body Materials:

- Stainless Steel
- Carbon Steel

OPTIONS

- DN 8 to DN 100 Face to Face DIN 3202 M3
- Butt weld ends according to DIN 3239
- All Body Bolts with Metric thread

Available End Connections:

- NPT, BSP, BSPT
- Socket Weld
- Butt Weld
- Extend Butt Weld
- Flanged(PN 25/40 F1)

Seat Materials:

- PTFE, R-PTFE, MG1241...& etc.

Pressure Rating:

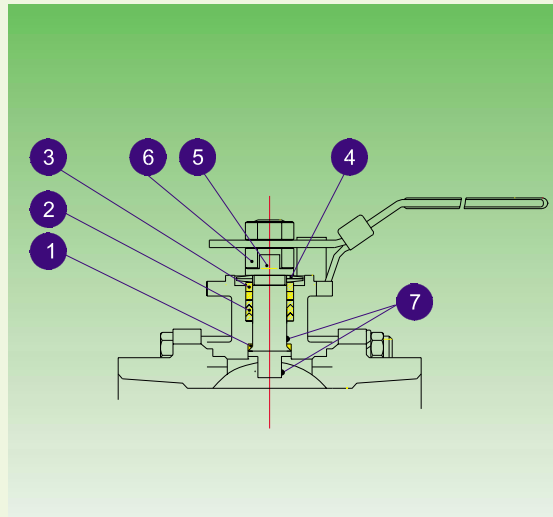
- 1/4" to 2" 1000 PSI PN 64
- 2 1/2" to 4" 800 PSI PN 50

EASY INSTALLATION OF ACTUATORS

Stem Coupler, Adaptor, Bracket and IP65/NEMA 4 "NAMUR" version Solenoid Valve are available from Mars Valve



MAINTENANCE FREE LIVE LOADED DOUBLE SEALING HIGH CYCLES STEM DESIGN PROVIDES OPTIMUM SEALS



1. PYRAMIDAL STEM WITH STEM SEAL

First stage of defense against leakage. The 45 degree slope of the stem accompanied by the stem seal effectively blocks all leak paths from forming during rotation.

2. V-RING STEM PACKING

Second stage of defense against leakage. Triple layers of V-Ring Chevron packing expand sideways as it is being compressed, blocking all air pockets thus preventing leak paths. The grinding effect of metal to PTFE contact.

3. GLAND

Made of stainless steel, equally distributes the compressive force on the packing and the seal.

4. BELLEVILLE WASHER

Release stored compressive energy for automatic compensation of seals due to wear and tear fluctuation of temperature and pressure.

5. LOCK SADDLE

Stabilizes the stem nut to keep it from loosening.

6. STEM NUT

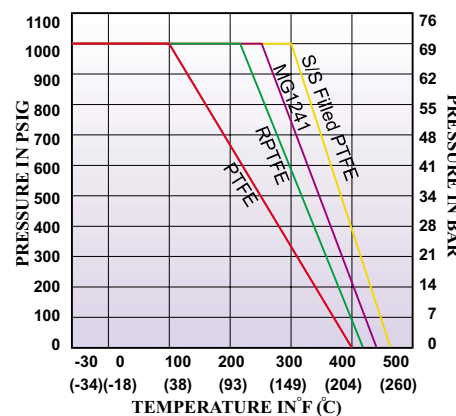
Compress the entire stem system to enable blocking of leakage.

7. ANTI-STATIC DEVICE

Standard applied between stem and ball, stem and body.

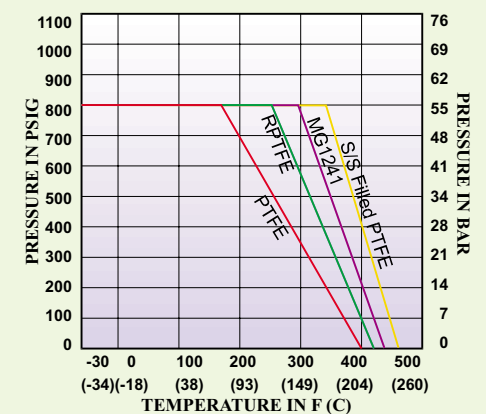
Pressure Vs. Temperature Chart

for Valve 1/4"(DN8) to 2"(DN50)



Pressure Vs. Temperature Chart

for Valve 2 1/2"(DN65) to 4"(DN100)





MARS SERIES 70

THREE PIECE HIGH PERFORMANCE BALL VALVES

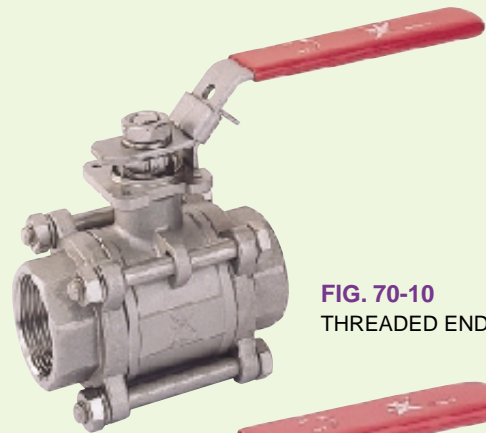


FIG. 70-10
THREADED END

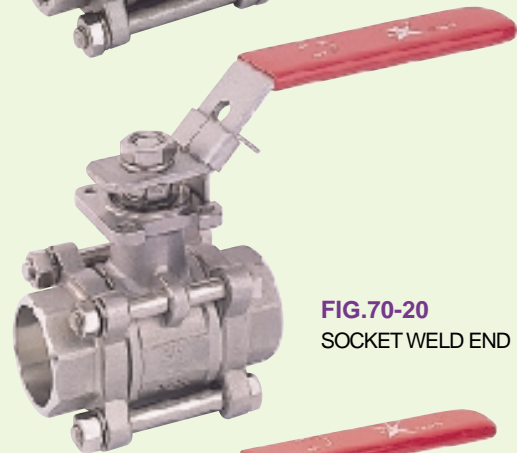


FIG. 70-20
SOCKET WELD END

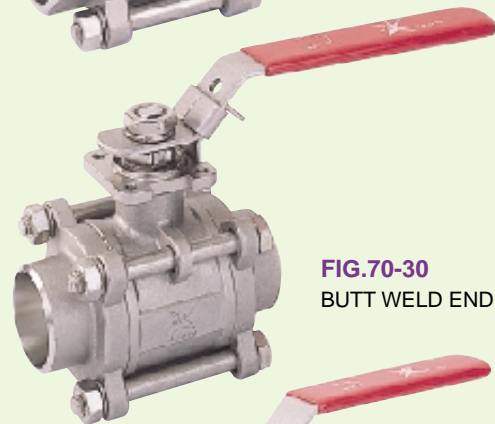


FIG. 70-30
BUTT WELD END

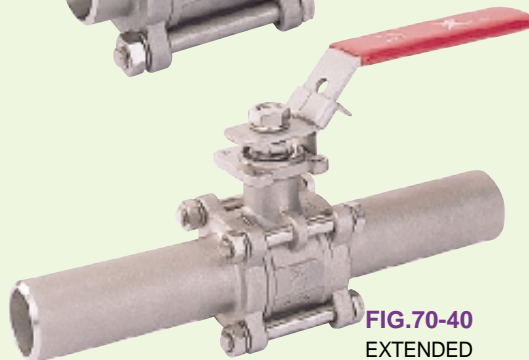


FIG. 70-40
EXTENDED
BUTT WELD END

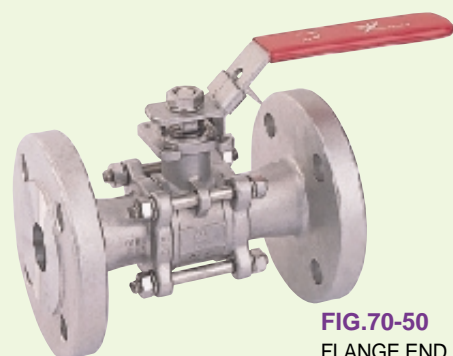
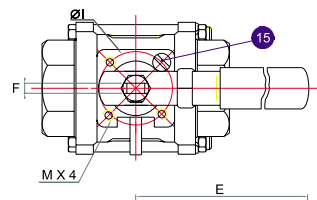
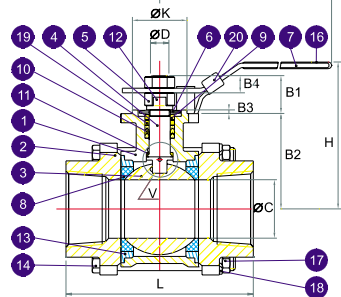
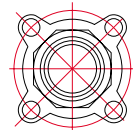


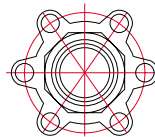
FIG. 70-50
FLANGE END
(PN 25/40 F1)



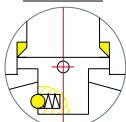
1/4" ~ 2"



2 1/2" ~ 4"



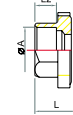
V-VIEW



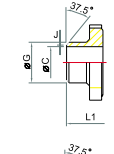
Pyramidal Stem &
Anti-static Device



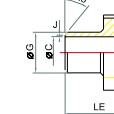
70-10
Threaded
End



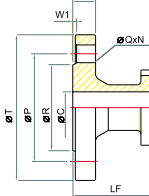
70-20
Socket Weld
End



70-30
Butt Weld
End
Butt Weld Ends acc. To DIN
3239 Available on request



70-20
Extended Butt
Weld End



70-50
Flange End
(PN 25/40 F1)

MATERIALS LIST

NO.	PART NAME	MATERIAL	Q'TY
1	Body	CF8M WCB	1
2	End Cap	CF8M WCB	2
3	Ball	SUS 316	1
4	Stem	SUS 316	1
5	Stem Nut	SUS 304	2
6	Belleville Washer	SUS 301	2
7	Handle	SUS 304	1
8	Seat	PTFE	2
9	Gland	SUS 304	1
10	V-Ring Packing	PTFE	S
11	Stem Seal	RPTFE	1
12	Lock Saddle	SUS 304	1
13	Joint Gasket	PTFE	2
14	Bolt	SUS 304	*
15	Stop Pin	SUS 304	1
16	Handle Sleeve	Vinyl	1
17	Bolt Nut	SUS 304	f
18	Washer	SUS 304	f
19	Bushing	‡	1
20	Locking Device	SUS 304	1

- ☒ Socket weld, butt weld, and extended butt weld use CF3M material
- § For 1/4" to 3/4" 1 set of v-ring packing consists 2pcs of v-ring
For 1" to 4" 1 set of v-ring packing consists 3pcs of v-ring
- * For 1/4" to 2" -4pcs of bolts (single ended external thread)
For 2 1/2" to 4" -6pcs of studs (double ended external thread)
- f For 1/4" to 2" -4pcs; For 2 1/2" to 4" - 12pcs
- ‡ 50% Stainless steel powder filled PTFE

DIMENSIONS(mm)

SIZE	ØA	B1	B2	B3	B4	ØC	ØD	E	F	ØG	H	ØI	J	ØK	L	L1	L2	LE	LF	M	N	ØP	ØQ	ØR	ØT	W	W1	ISO5211
1/4"	14.1	18.8	37.0	2	9.3	11.6	9.5	137	6.3	17.5	72	36	1.6	25	60	70	10	225	N/A	M5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	F03
3/8"	17.6	18.8	37.0	2	9.3	12.7	9.5	137	6.3	17.5	72	36	1.6	25	60	70	10	225	N/A	M5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	F03
1/2"	21.8	18.8	37.0	2	9.3	15.0	9.5	137	6.3	22.7	72	36	1.6	25	75	75	10	225	130	M5	4	65	14	45	95	16	2	F03
3/4"	27.5	18.8	40.3	2	9.3	20.0	9.5	137	6.3	27.5	74	36	1.6	25	80	90	13	225	150	M5	4	75	14	58	105	18	2	F03
1"	34.7	20.4	50.0	2	10.7	25.0	11.1	150	8.0	33.5	92	42	1.6	30	90	100	13	245	160	M5	4	85	14	68	115	18	2	F04
1 1/4"	43.0	20.4	55.5	2	10.7	32.0	11.1	150	8.0	42.0	98	42	1.6	30	110	110	13	255	180	M5	4	100	18	78	140	18	2	F04
1 1/2"	49.0	26.8	63.0	3	12.6	38.0	14.3	189	9.5	48.6	109	50	1.6	35	120	125	13	260	200	M6	4	110	18	88	150	18	3	F05
2"	61.5	26.8	71.3	3	12.6	50.0	14.3	189	9.5	60.5	117	50	1.6	35	140	150	16	275	230	M6	4	125	18	102	165	20	3	F05
2 1/2"	77.0	33.5	89.9	3	17.0	65.0	19.1	253	15.0	76.3	157.5	70	1.6	55	185	190	16	334	290	M8	8	145	18	122	185	22	3	F07
3"	90.0	33.5	99.0	3	17.0	80.0	19.1	253	15.0	90.0	167	102	1.6	70	205	220	16	354	310	M10	8	160	18	138	200	24	3	F10
4"	115.0	33.5	120	3	17.0	100	19.1	275	15.0	116.0	188	102	1.6	70	240	270	20	385	350	M10	8	190	22	162	235	24	3	F10

BREAK AWAY TORQUE Cv VALUES

SIZE	BREAK AWAY TORQUE		Cv U.S.GPM
	Nm	In-Ibs.	
1/4"	3	27	8
3/8"	3	27	8
1/2"	3	27	12
3/4"	7	62	32
1"	12	106	56
1 1/4"	15	133	82
1 1/2"	20	177	120
2"	23	204	240
2 1/2"	35	310	320
3"	55	487	580
4"	85	753	1020

HOW TO ORDER

STYLE	SIZE	BODY & END MATERIAL	SEAT
70-10 Threaded End	01- 1/4" 02- 3/8" 03- 1/2"	S-CF8M W-WCB	P-Virgin PTFE R-R-PTFE
70-20 Socket Weld End	04- 3/4" 05- 1"	L-316L F-CF8	S-50/50 St. St. filled PTFE
70-30 Butt Weld End	06- 1 1/4" 07- 1 1/2" 08- 2" 09- 2 1/2"		C-Carbon filled PTFE
70-40 Extended Butt Weld End	10- 3" 11- 4"		M-MG1241 D-Delrin U-UHMWPE



MARS VALVE CO.,LTD.

7F-6, NO.200, SEC.4, WEN-SHIN ROAD,
TAICHUNG, TAIWAN, R.O.C.

TEL:++886-4-297 3808

FAX:++886-4-297 3608

E-MAIL:mars@marsvalve.com.tw