



**Direct mount
of actuators**

Series 77

3-pcs ball valve PN69/55

- Stainless steel "CF8M"
- High quality industrial 3-pcs ball valve
- Unique stuffing box ensuring long and reliable service
- Direct mount of actuators
- Food grade materials used throughout the valve



Make it better.



Series 77

3-pcs ball valve PN69/55 • EU1935/2004, FDA, ATEX, TA-LUFT, SIL3

Connection

Butt weld ends, ISO1127, and BSPP threaded ends.

Usable for

Water, air, steam, oil etc.

Options (on request)

Body, flanges: WCB

Seat rings: RTFE, CTFE, TFM1600 i.a.

Connections: NPT, ASME, "rotating welding ends"

Pressure rating

DN10-DN50: 69bar / 1000psi

DN65-DN100: 55bar / 800psi

Temperature

-20° C to 180° C

Accessories

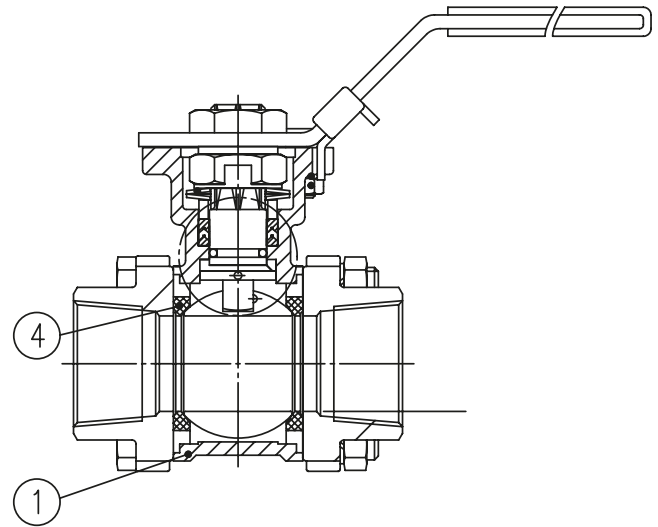
- Closed stem extension, without stuffing box
- Handle with position indication, lockable
- Position indication, handle operated (inductive or mechanical)

Spare parts

- Complete kit/set of gaskets
- Seat rings
- Joint (body) gaskets
- Ball

Parts description, excerpt

Pos	Description	Material
1	Body.....	Stainless Steel CF8M
4	Seat.....	PTFE



Developed for your industry



Additional specification can be requested.

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MARS Valve Europe A/S • marsvalve.com

➤ Improve the quality

We help Engineers to improve the quality of your manufacturing process.

➤ Optimize total cost

We help Purchasing Officers to optimize total cost of production, prevent downtime and safeguard your brand.

➤ Work smarter

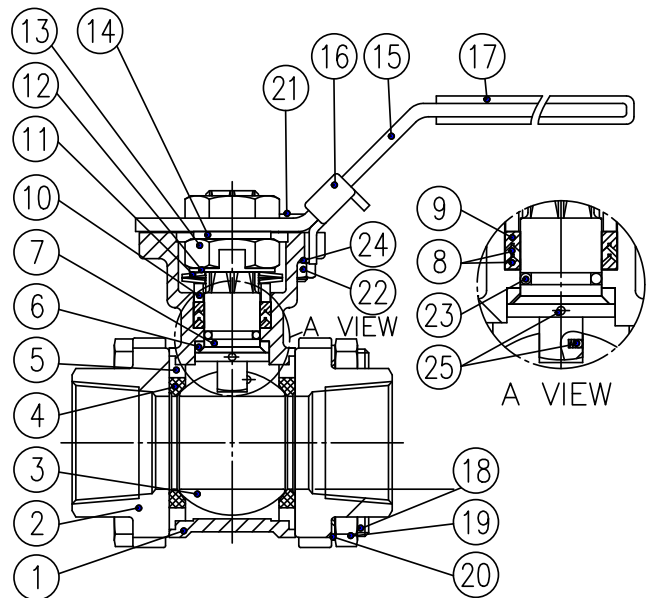
We help Maintenance Crews to work smarter, while preventing time-consuming mistakes.

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Materials

Pos	Description	Material
1	Body	Stainless Steel CF8M
2	Connection	Stainless Steel CF8M
3	Ball	Stainless Steel CF8M
4	Seat	PTFE
5	Joint gasket/support ring..	PTFE
6	Pyramid segment	PTFE
7	Stem.....	Stainless Steel AISI316
8	Stem seal V-ring.....	PTFE
9	Stem seal top ring	RTFE (25%Glass 75%PTFE)
10	Gland	Stainless steel AISI304
11	Belleville washer	Stainless steel AISI301
12	Locking saddle	Stainless steel AISI304
13	Stem nut	Stainless steel AISI304
14	Washer.....	Stainless steel AISI304
15	Handle.....	Stainless steel AISI304
16	Locking device	Stainless steel AISI304
17	Handle.....	Vinyl
18	Body bolts.....	Stainless steel AISI304
19	Nut.....	Stainless steel AISI304
20	Locking washer.....	Stainless steel AISI304
21	Stop bolt.....	Stainless steel AISI304
22	Nut.....	Stainless steel AISI304
23	O-ring	FPM
24	Washer.....	Stainless steel AISI304
25	Antistatic device	Stainless steel AISI316



Welding	DIM		No pressure	*) Moment [Nm]			PN [bar]	Weight [kg]	Kv-value [m ³ /t] 90°	Butt weld end CF3M ISO 1127 ØG x T (ØC)
	Thread BSPP			50% max. pressure	100% max. pressure					
	DN10	1/4"	5	5	5	69	0.8	6.9	13.5 x 1.6 (10.3)	
	DN15	1/2"	5	5	7	69	0.9	10.3	21.3 x 1.6 (18.1)	
	DN20	3/4"	6	6	8	69	0.9	27.5	26.9 x 1.6 (23.7)	
	DN25	1"	11	13	15	69	1.3	48.2	33.7 x 2.0 (29.7)	
	DN32	1 1/4"	15	22	34	69	2.0	70.5	42.4 x 2.0 (38.4)	
	DN40	1 1/2"	22	31	49	69	2.9	103.2	48.3 x 2.0 (44.3)	
	DN50	2"	30	51	84	69	3.5	207.0	60.3 x 2.6 (55.1)	
	DN65	2 1/2"	45	91	123	55	7.9	275.0	76.1 x 2.6 (70.9)	
	DN80	3"	70	140	195	55	11.9	499.0	88.9 x 2.6 (83.7)	
	DN100	4"	95	238	286	55	21.2	877.0	114.3 x 2.6 (109.1)	

*) Torques are listed without safety factor at 20°C. See section for actuator sizing in the following pages.

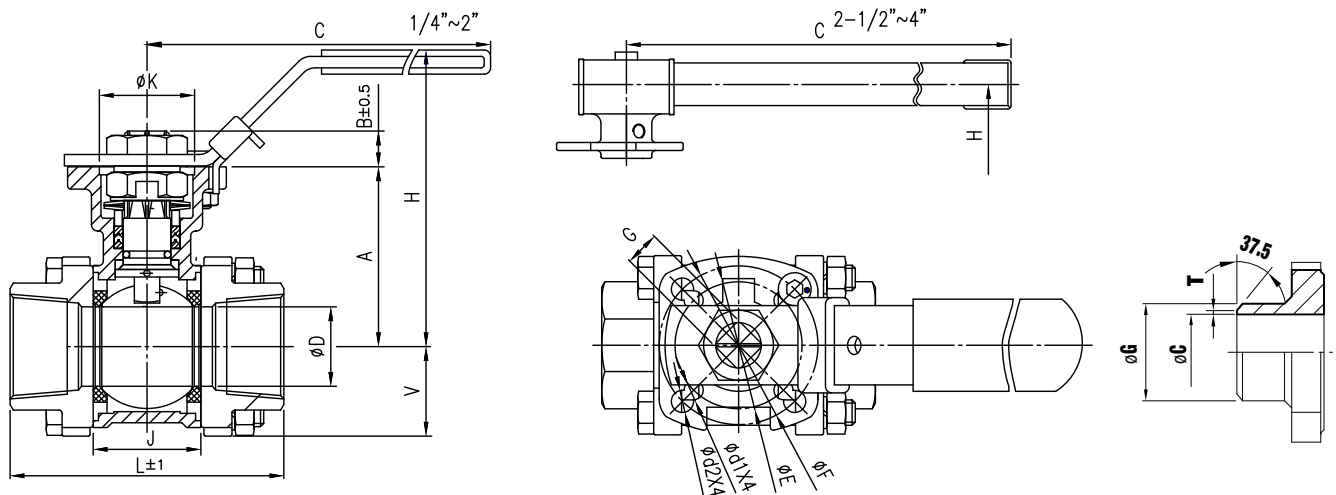
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Dimension



DIM [mm]	ØD	A	B	C	ØK	ØE	ØF	G	L	H	J	V	Ød1	Ød2	ISO5211
1/4"	11.6	42.1	6.1	139	25	36	42	9	63.7	77	23.6	23.3	6	6	F03/F04
3/8"	12.7	42.1	6.1	139	25	36	42	9	63.7	77	23.6	23.3	6	6	F03/F04
1/2"	15.0	42.1	6.1	139	25	36	42	9	65.7	77	23.6	23.3	6	6	F03/F04
3/4"	20.0	48.0	10.9	139	25	36	42	9	76.2	83	28.0	25.4	6	6	F03/F04
1"	25.0	56.6	10.9	165	30	42	50	11	86.2	96	33.9	28.3	6	7	F04/F05
1-1/4"	32.0	60.9	13.9	165	30	42	50	11	102.8	100	42.5	34.5	6	7	F04/F05
1-1/2"	38.0	77.5	13.9	215	35	50	70	14	119.4	127	53.2	39.3	7.5	9	F05/F07
2"	50.0	85.2	16.8	215	35	50	70	14	131.4	134	64.6	47.3	7.5	9	F05/F07
2-1/2"	65.0	108.7	17.8	300	55	70	102	17	164.0	167	87.0	58.5	10	12	F07/F10
3"	80.0	117.7	17.8	370	55	70	102	17	182.7	176	99.0	69.0	10	12	F07/F10
4"	100.0	135.6	17.8	370	55	70	102	17	235.6	192	127.0	95.4	10	12	F07/F10

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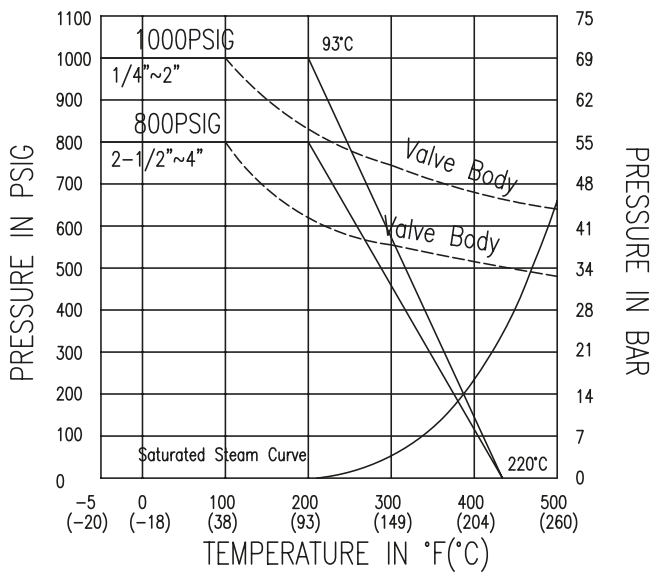
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Temperature vs. pressure table for PTFE seats

Valid for fluids and dry gasses. For steam and similar services, contact Mars Valve Europe A/S.



Actuator sizing

Media factor	Multiply by
Clean, particle free, lubricating (oil, hydraulic fluids etc)	1.00
Clean, particle free, non-lubricating (water, alcohol etc)	1.20
Moist gas or saturated steam	1.20
Dry gas or saturated steam	1.40
Gas, dirty unfiltered i.e. Natural gas	1.50
Particle filled, corrosive, solvents and polluted systems	2.00 #
Service factor	Multiply by
Simple on / off maneuvering	1.00
Regulating / Throttling	1.20
Maneuvering once per week	1.20
Maneuvering every second week or critical component	1.50

For actuator dimensioning:

Torque x Media factor x Service factor

Polluted systems will reduce the expected life span of the seat rings