



## Mars Series 90D-60 (PN25/40) Antistatic / Firesafe

- Fire-safe and Antistatic
- Full Bore
- ISO Top for Easy Actuation
- Supplied with Lockable Lever
- RTFE seats and Graphite seals
- Stainless Steel Body and Ball

### Description

Fire safe Certified the Series 90D-60 is a high performance, full bore, flanged ball valve with PN25/40 flanges. The valve is a split 2 piece body that is Certified firesafe to API 607 4<sup>th</sup> Edition with the addition of an antistatic spring loaded stem to ball and stem to body anti-static device, fitted as standard.

The valve has an ISO 5211 mounting pad with a square stem top for direct mounting for actuation. A Lockable lever is supplied as standard for manual operation The seats are RTFE with Graphite seals and can be replaced and maintained. The valve is a floating ball design and provides pressure assisted sealing. The ball is solid and mirror polished, with relief hole in the stem to balance the pressure in the body cavity ensuring tight shut off and long service life.

Face to face ANSI B16.10, EN 558-1, GR. 1/GR.27 (DIN 3202-F1, F4/F5) NACE on request.



### Description

Lever operated, direct mount, flanged manual ball valve with full port. Offering high performance, Fire safe seals and antistatic feature.  
Sizes ½" to 6" PN25/PN40  
Temperature Range -20°C to 180°C.



### Beschreibung

Hebelbetätigter, direkt montierter, angeflanschter manueller Kugelhahn mit vollem Durchgang. Bietet hohe Leistung, feuersichere Dichtungen und antistatische Eigenschaften.  
Größen ½" bis 6" PN25/PN40  
Temperaturbereich -20°C bis 180°C.



### Descripción

Válvula de bola manual bridada, de montaje directo, operada por palanca, con puerto completo. Ofrece un alto rendimiento, sellos a prueba de fuego y función antiestática.  
Tamaños de ½" a 6" PN25 / PN40  
Rango de temperatura -20°C a 180°C.



### Description

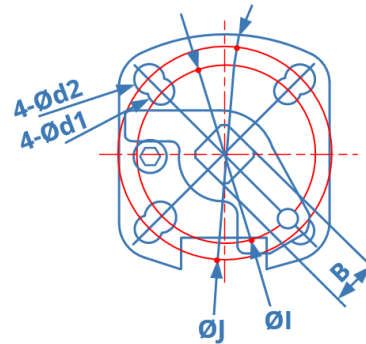
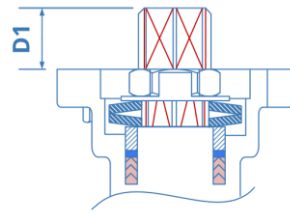
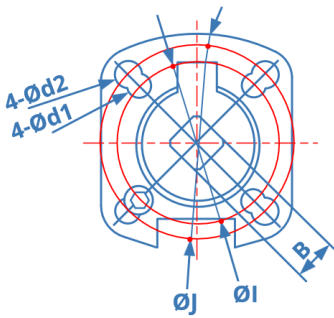
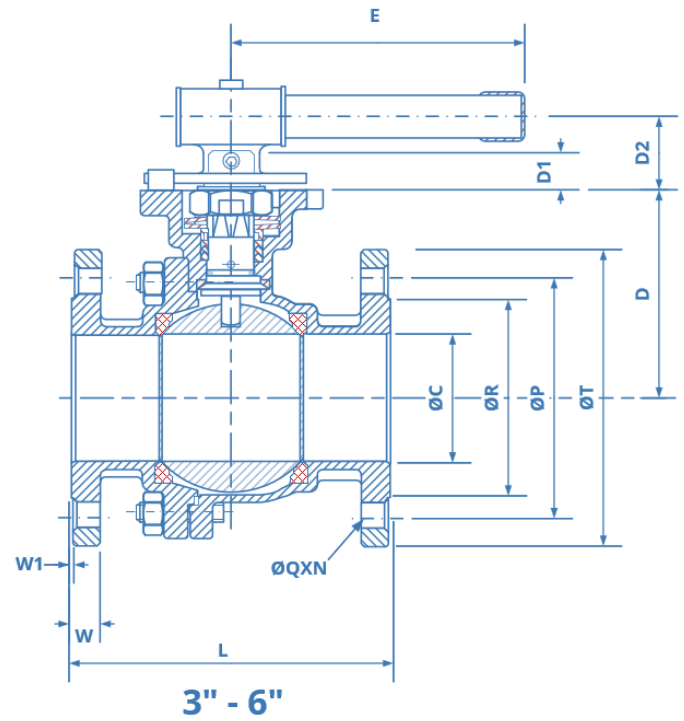
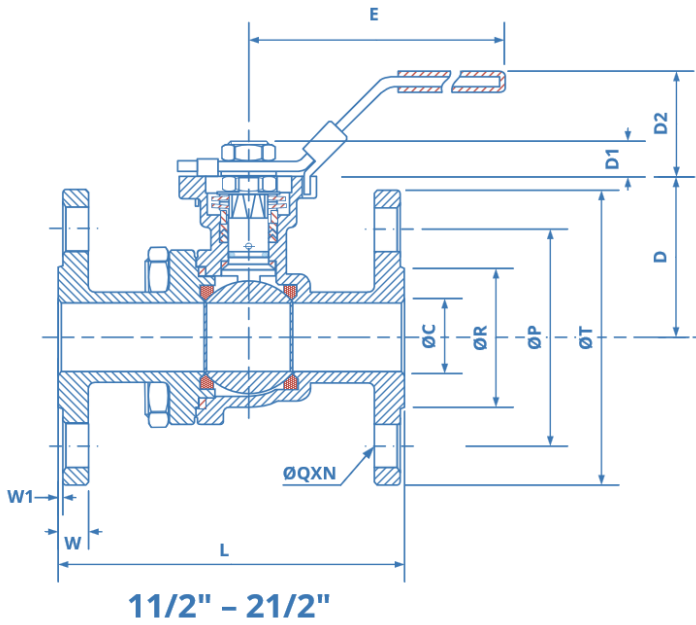
Vanne à boisseau sphérique manuelle à bride, à montage direct, à levier avec passage intégral. Offrant des performances élevées, des joints coupe-feu et une fonction antistatique.  
Tailles ½" à 6" PN25/PN40  
Plage de température -20°C à 180°C.



## Suitable for both Electric and Pneumatic Actuation

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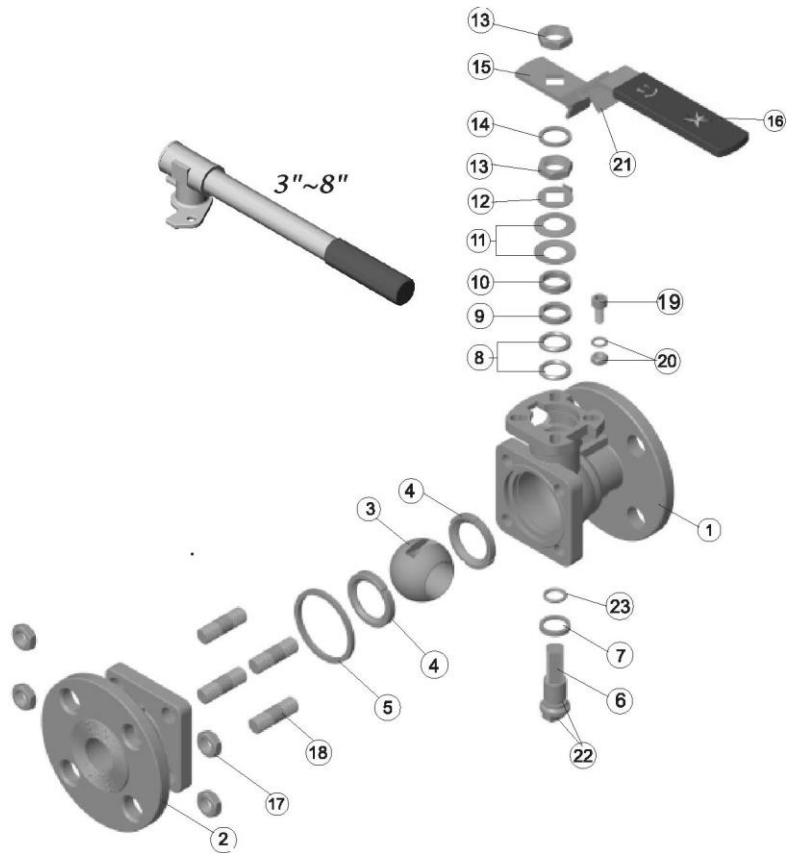


## 90D - 60 F4 / F5 Dimensions PN25/40

Size	ØC	B	E	D	D1	D2	ØI	ØJ	L		N	ØP	ØQ	ØR	ØT	W	W1	Ød1	Ød2	Wt (kg)	ISO5211
									F4	F5											
1/2"	15	11	165	48.7	9.9	36	42	50	115	/	4	65	14	45	95	16	2	6	7	2.35	F04/F05
3/4"	20	11	165	53.7	9.9	36	42	50	120	/	4	75	14	58	105	18	2	6	7	3.05	F04/F05
1"	25	11	165	58.8	10.3	36	42	50	125	/	4	85	14	68	115	18	2	6	7	3.89	F04/F05
1 1/4"	32	14	215	72.6	12.9	49	50	70	130	/	4	100	18	78	140	18	2	7.5	9	5.78	F05/F07
1 1/2"	38	17/19	262	89.1	19	58	70	102	140	/	4	110	18	88	150	18	3	10	12	7.88	F07/F10
2"	50	17/19	262	96.6	19	58	70	102	150	/	4	125	18	102	165	20	3	10	12	10.16	F07/F10
2 1/2"	65	17/19	262	116	19	58	70	102	170	/	8	145	18	122	185	22	3	10	12	-	F07/F10
3"	80	22	365	132.5	23	46.2	102	125	180	/	8	160	18	138	200	24	3	12	14	21.58	F10/F12
4"	100	22	365	157	23	46.2	102	125	190	/	8	180	22	162	235	24	3	12	14	30.63	F10/F12
6"	150	27	750	210.2	28.5	66.5	125	140	/	350	8	250	26	218	300	28	3	14	18	79.31	F12/F14

## Materials

No	Part Name	Material	Qty
1	Body	CF8M / WCB	1
2	Cap	CF8M / WCB	1
3	Ball	SUS316	1
4	Seat	RPTFE	1
5	Joint Gasket	PTFE	2
6	O-Ring	Viton	2
7	Stem	SUS304	1
8	Stem Seal	RPTFE	2
9	O-Ring	SUS304	1
10	Stem Packing	Graphite	5
11	Gland Packing	RPTFE	1
12	Gland Bush	SUS304	1
13	Belleville washer	PTFE	1
14	Stop Washer	SUS304	*
15	Stem Nut	SUS304	1
16	Stem Washer	Vinyl	1
17	Handle	25% RTFE	1
18	Stop Pin	SUS304	1
19	Locking Device	SUS304	1
20	Handle Sleeve	SUS304	1
21	Pin Nut		
22	Anti-static Device		



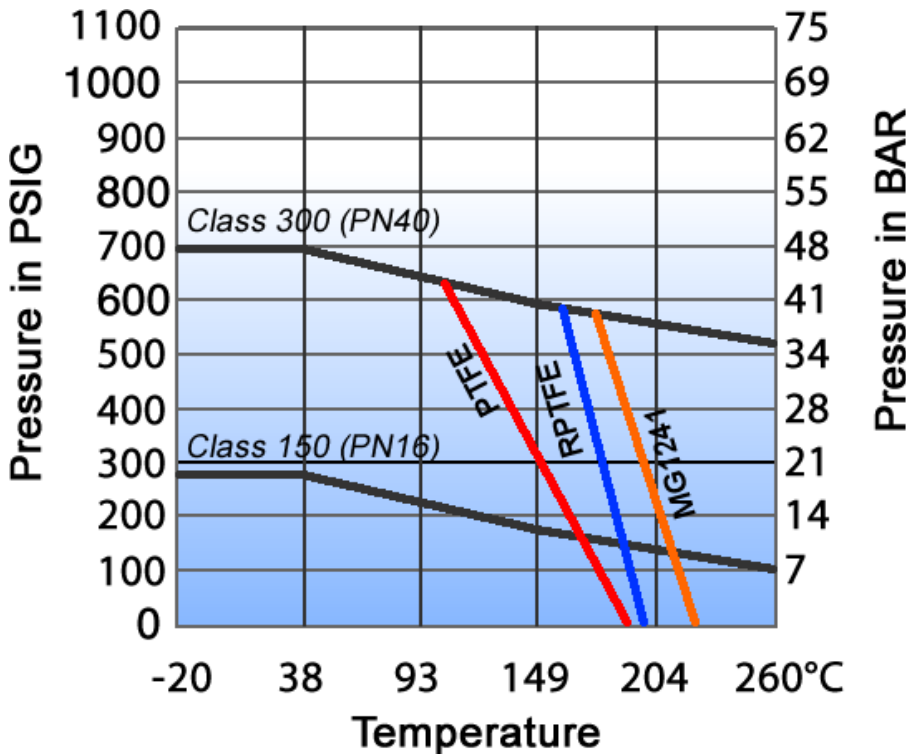
## Standard Specification

<b>Construction</b>	Split Body Flanged Ball Valves, Full Port Investment Cast: 1/2" to 6" Sand Cast 5" to 10"	<b>Compliance Standards</b>	ANSI B16.34, ANSI B16.5, ANSI B16.10, API 6D, API 509, API 607, BS5351, BS6755, ISO5211, DIN3337, DIN 3202, DIN 2501, MSS SP25, MSS SP55
<b>Size Range</b>	1/2" - 6"	<b>Material Certificate</b>	EN 10204 - 3.1
<b>Pressure rating</b>	6098 - 90D Carbon Steel ANSI 150 6097 - 90D Stainless Steel ANSI 150 6099 - 90D Stainless Steel ANSI 300 6087 - 90D Stainless Steel PN16 6085 - 90D Stainless Steel PN40	<b>Quality System</b>	ISO 9001
<b>Valve Material</b>	Standard: ASTM A351 Gr. CF8M / DIN 1.4408 Options: WCB, 316L S/S, Titanium, Duplex, Hastelloy C, Alloy 20	<b>Options</b>	NCE MR - 0175 Stand Valve is non-fire safe design, fire safe valve is optional
<b>Seat Material</b>	Standard: R-TFE / PTFE Options: TFM 1600, PEEK, Carbon Filled PTFE, DERLIN, UHMWPE, 50/50 S/S filled PTFE, Metal Seats... and others	<b>Inspection and Test</b>	API 598, BS6755 Part 1



**TORQUE FIGURES**

Valve Size		Break Away Torque (R-PTFE Seats)		C.v.
Size	DN	In/LB	Nm	G.P.M
1/2"	15	92	10	28
3/4"	20	127	14	50
1"	25	150	17	95
1 1/4"	32	207	23	132
1 1/2"	40	357	40	260
2"	50	392	44	485
2 1/2"	65	518	59	800
3"	80	852	96	1250
4"	100	1302	147	2250
5"	125	2073	234	3620
6"	100	2188	247	5400



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