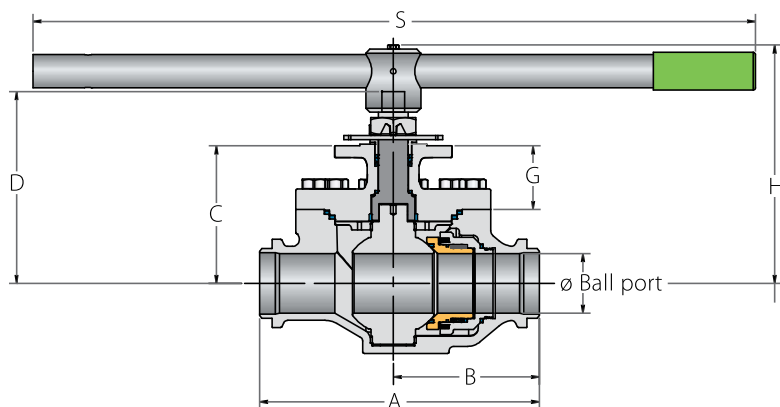


Top Entry Trunnion Mounted Ball Valve

PATENT
PENDING

Valve dimensions



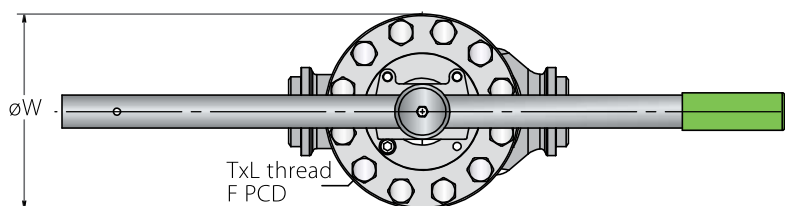
Standard stem tops

DD Type
for sizes ½" - 1½"

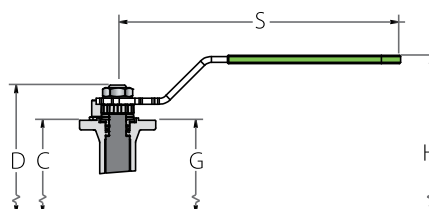
Stem flats
show valve
ball position

Square Type
for sizes 2" - 6"

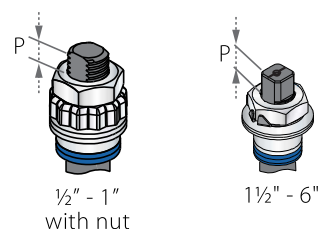
Stem groove
shows valve
ball position



Handle type for sizes ½" - 1"



Preparation for actuation



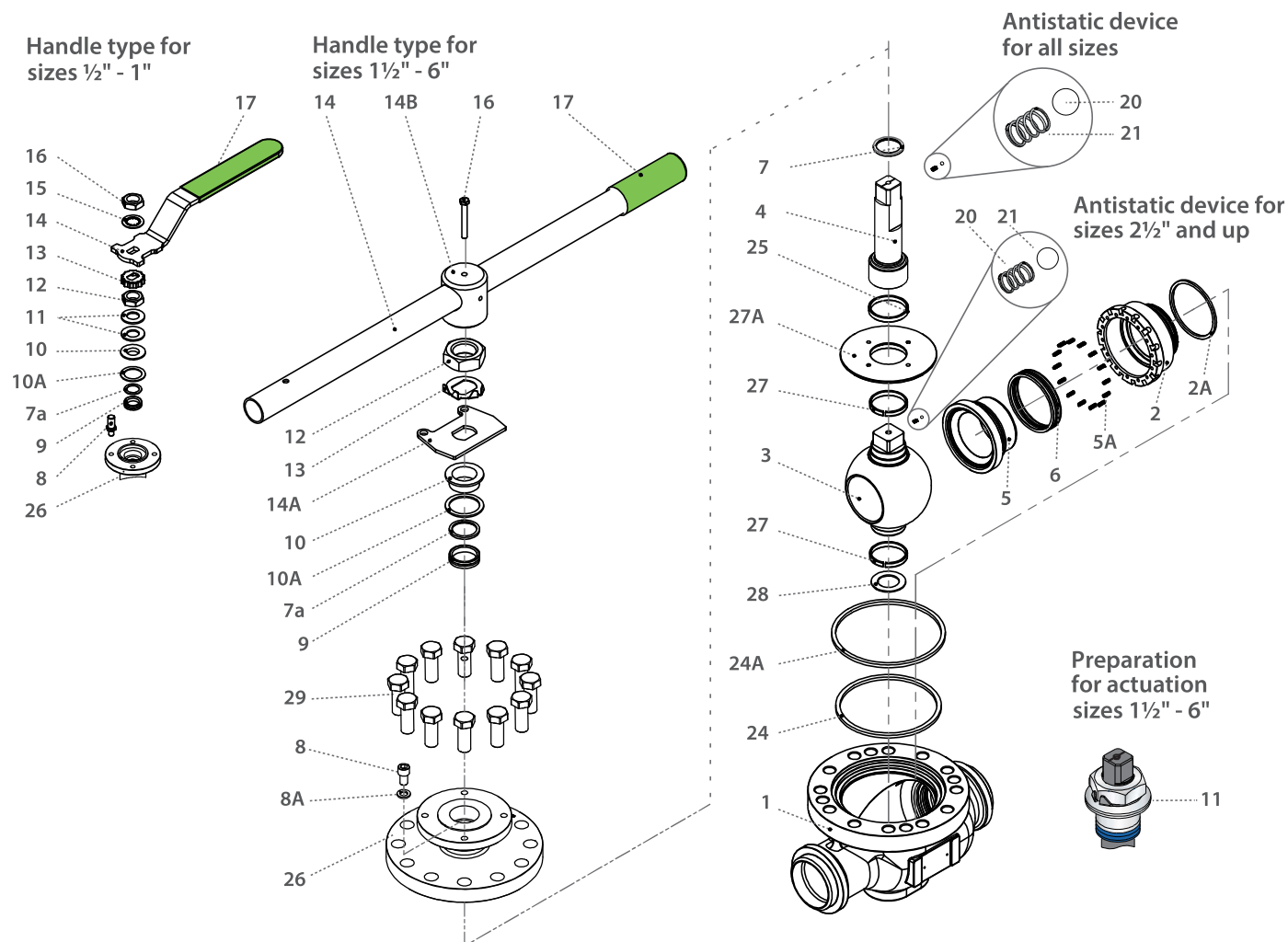
Full port	Unit	Ball port	A	B	C	D	G	H	S ⁽¹⁾	W	M	N	P	Q	F	TxL	Weight kg/lb	Kv Cv
DN15	mm	14.0	165.0	88.0	69.4	86.8	30.4	112.6	187.0	105.0	7.5	7/16"-20	6.4		F04	42.0	4.2	20
½"	inch	0.55	6.50	3.46	2.73	3.42	1.20	4.43	7.36	4.13	0.30	UNF	0.25		F04	1.65	9.26	23
DN20	mm	20.0	190.0	100.0	77.0	106.5	33.0	131.5	237.0	121.0	8.7	9/16"-18	8.5		F05	50.0	6.0	31
¾"	inch	0.79	7.48	3.94	3.03	4.19	1.30	5.18	9.33	4.76	0.34	UNF	0.33		F05	1.97	13.23	36
DN25	mm	25.4	216.0	113.0	82.0	111.5	46.0	136.5	237.0	131.0	8.7	9/16"-18	8.5		F05	50.0	7.2	61
1"	inch	1.00	8.50	4.45	3.23	4.39	1.81	5.37	9.33	5.16	0.34	UNF	0.33		F05	1.97	15.87	70
DN40	mm	38.2	241.0	129.0	104.6	146.2	74.5	172.2	401.0	173.0	13.9	M20x2.5	15.2	20.0	F07	70.0	13.6	164
1½"	inch	1.50	9.49	5.08	4.12	5.76	2.93	6.78	15.79	6.81	0.55		0.60	0.79	F07	2.76	29.98	190
DN50	mm	50.8	292.0	151.0	149.5	196.0	74.5	235.5	610.0	205.0	18.9	1"-14	16.6	22.7	F10	102.0	27.0	327
2"	inch	2.00	11.50	5.94	5.89	7.72	2.93	9.27	24.02	8.07	0.74	UNS"	0.65	0.89	F10	4.02	59.52	378
DN65	mm	62.7	330.0	168.0	156.4	225.5	75.4	284.6	610.0	228.0	18.90	1"-14	16.6	22.7	F10	102.0	32.0	668
2½"	inch	2.47	12.99	6.61	6.16	8.88	2.97	11.20	24.02	8.98	0.74	UNS"	0.65	0.89	F10	4.02	70.55	772
DN80	mm	74.0	356.0	186.0	175.0	244.1	81.0	303.2	916.0	248.0	28.45	1½"-12	26.2	35.2	F12	125.0	50.0	823
3"	inch	2.91	14.02	7.32	6.89	9.61	3.19	11.94	36.06	9.76	1.12	UNF	1.03	1.39	F12	4.92	110.23	951
DN100	mm	100.0	432.0	220.0	192.4	261.5	80.4	321.3	916.0	305.0	28.45	1½"-12	26.2	35.2	F12	125.0	77.0	1678
4"	inch	3.94	17.01	8.66	7.57	10.30	3.17	12.65	36.06	12.01	1.12	UNF	1.03	1.39	F12	4.92	169.76	1940
DN150	mm	150.0	559.0	280.0	264.0	376.7	115.0	440.7	916.0	419.0	35.9	2"-8	40.0	43.5	F14	165.0	163.0	4199
6"	inch	5.91	22.01	11.02	10.39	14.83	4.53	17.35	36.06	16.50	1.41	UN	1.57	1.71	F14	6.50	359.35	4854

⁽¹⁾ Manual gear or actuation is recommended, when the operation force on the handle overcomes 360N



Top Entry Trunnion Mounted Ball Valve

Components & materials



Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2*	Seat Housing	S. Steel	1
2A*	Housing Seal	S. Steel	1
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Hybrid seat	A479 316/316L + TFM, CF PTFE, PCTFE	1
5A*	Seat spring	Inconel X750	6-18
6*	Seat seal	O-Ring + Two Back-up Rings	1
7*	Stem thrust seal	PCTFE, TFM	1
7a*	Anti-abrasion ring	PCTFE, TFM	1
8	Stop screw	EN 3506-1 A4-80	1
8A	Spring washer	S. Steel	1
9*	Stem seal	TFM	1
10	Follower	S. Steel	1
10A*	Slide bearing	S. Steel	1
11	Disc spring	S. Steel	2
12	Stem nut	S. Steel	1
13	Locking clip (Tab lock washer for 1.5" and up)	S. Steel	1
14**	Handle	S. Steel	1

Item	Description	Material specification	Qty.
14A	Stop plate	S. Steel	1
14B	Wrench head	S. Steel	1
15	Serrated washer	S. Steel	1
16	Handle nut (Wrench bolt for 1.5" and up)	S. Steel	1
17	Sleeve	PVC	1
20	Anti static spring	S. Steel	1-2
21	Anti static plunger	S. Steel	1-2
23	Tag (not shown)	S. Steel	1
24*	Cover primary seal	TFM	1
24A*	Cover secondary seal	Graphite	1
25*	Stem bearing	TFM	1
26	Cover	S. Steel	1
27*	Ball radial bearing	316L + PTFE	2
27A	Centering plate	S. Steel	1
28*	Lower thrust washer	DIN 127 A2	1
29	Cover bolt	A193 B8M, DIN 3506 A2-70	12

* Repair kit components

** Manual gear or actuation recommended, when the operation force on the handle overcomes 360N



Top Entry Trunnion Mounted Ball Valve - Ordering Code System

"Mandatory option" options are marked with **green background** | "Standard offer" options are marked with **light green background**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	.	.	30
6	0			F	B	5	2	W	-	6	6	6	D	P	A	G	/	X	B	W		-				
Size		Features			Series			Design		Body & Bonnet material	Stem material	Ball & seat ring material	Seat feature	Seat insert material	Primary bonnet seal material	Secondary bonnet seal material	End connection				Special features					

Size (1-2)		
Code	inch	mm
05	½"	15
07	¾"	20
10	1"	25
15	1½"	40
20	2"	50
25	2½"	65
30	3"	80
40	4"	100
60	6"	150

Features (3-6)	
F	Fire safe
B	Full port
H	Hydrogen Service
Series (7-8)	
52	ASME #300 Top Entry
Design (9)	
W	Total HermetiX Integrity package
Body & Bonnet material (11)	
6	S.Steel
Stem material material (12)	
M	High Strength S. Steel
Z	Inconel

Ball & seat ring material (13)	
6	S. Steel A182 F316
Seat feature (14)	
D	Double Piston Effect (DPE)
Seat insert material (15)	
P	CF PTFE
A	TFM
Primary bonnet seal material (16)*	
A	TFM
* Graphite seal used as a secondary bonnet seal for a fire safe valve and TFM for non-fire safe	
Seat Housing Seal material (17)	
G	Graphite
M	PTFE coated SS

End Connection (19-22)	
Welded ends	
XBW	Extended butt weld sch 40
XBW10	Extended butt weld sch 10
XBW80	Extended butt weld sch 80
ETI-S	Extended Butt weld ISO 1127, S=wall thickness in mm
Special Features (24-30)	
EXH	Extended Hub
EXS	Semi-Extended Hub