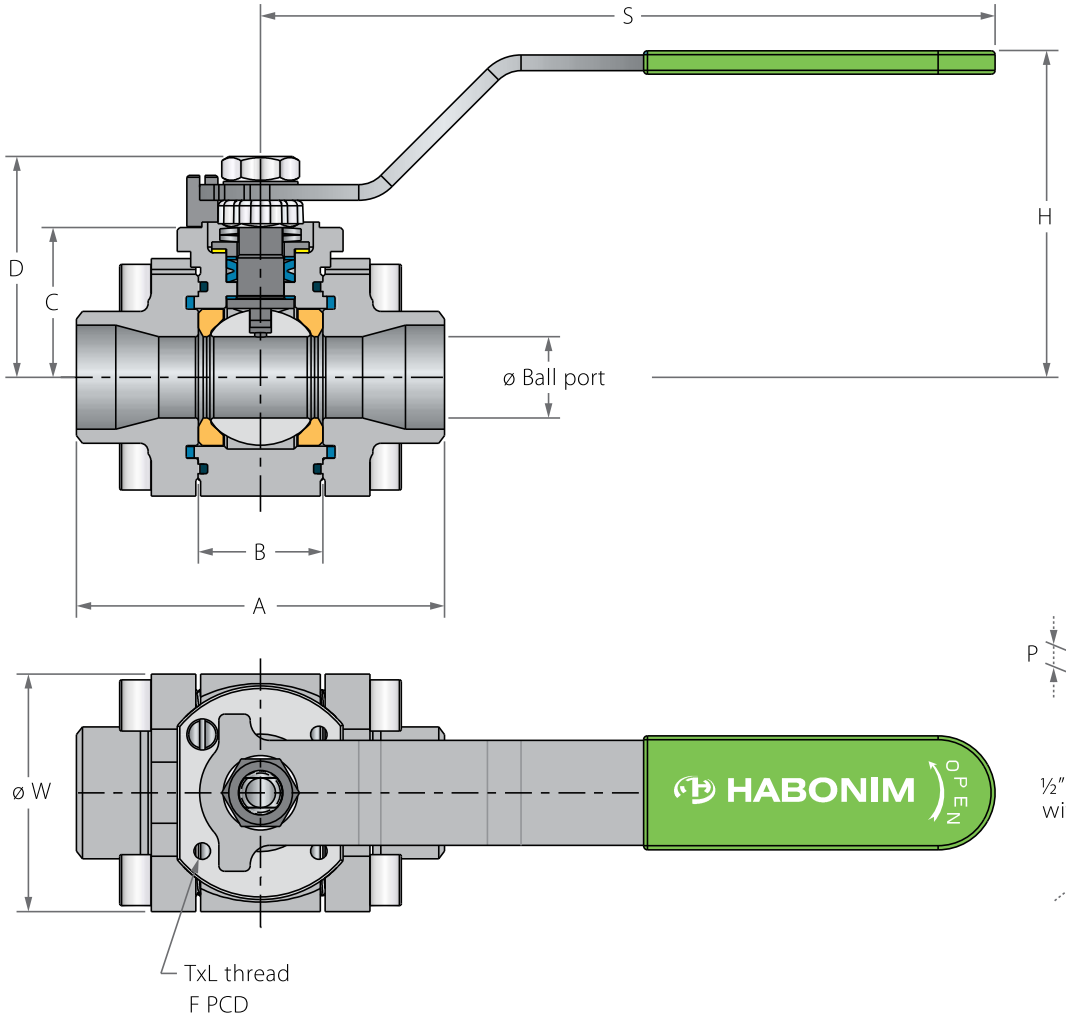
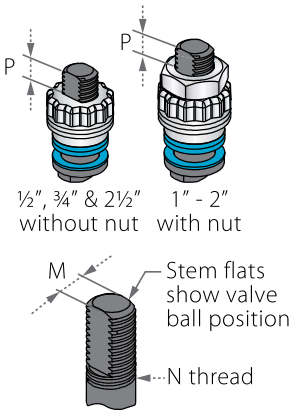
Floating Ball 3 Piece

Valve dimensions



Preparation for actuation

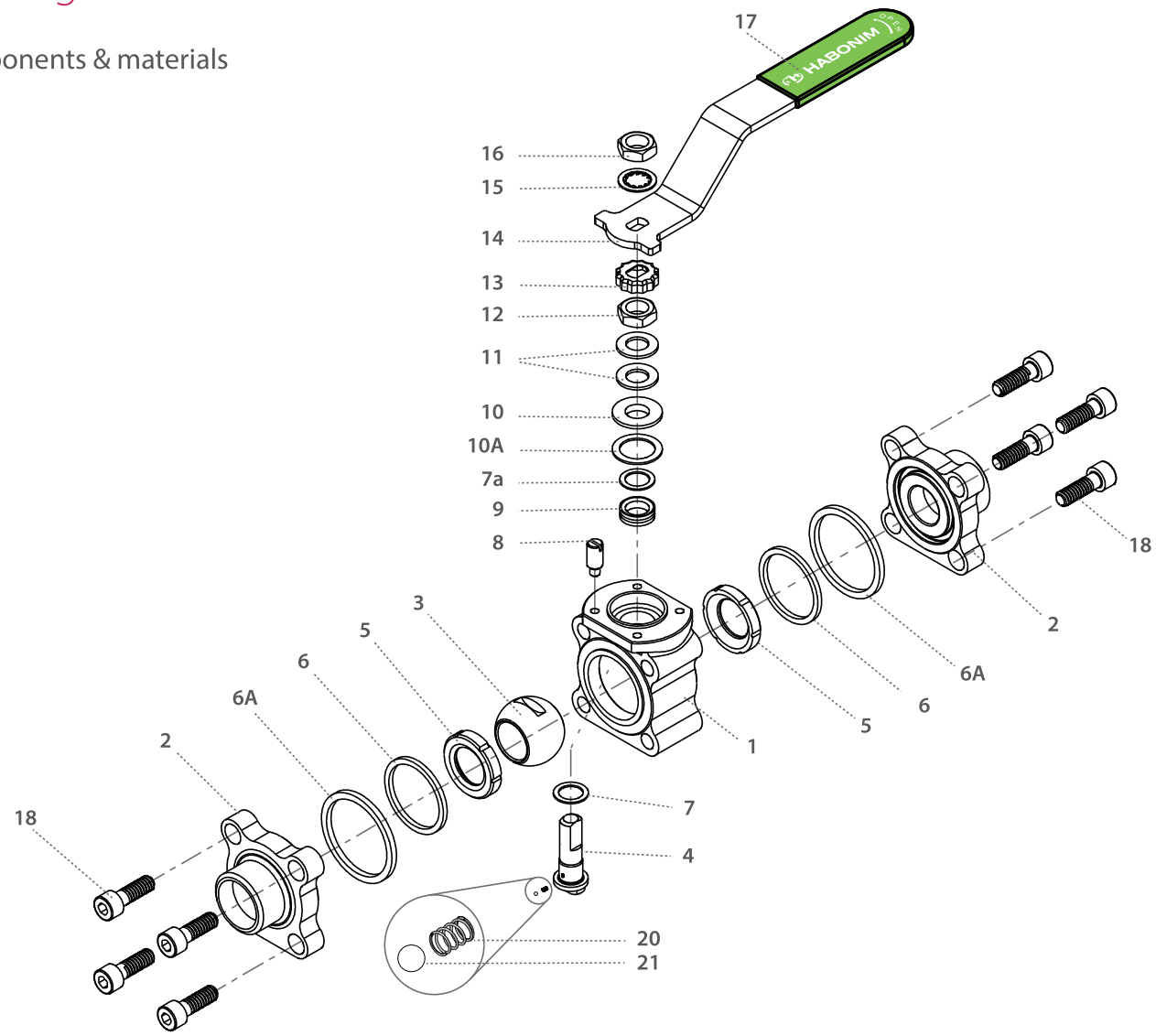


Valve Face To Face sizes are according to Habonim catalog data only, for Extended-weald/Flanged/Tri-clamp end see Face To Face sizes page.

Std. port	Full port	Unit	Ball port	A	B	C	D	H	S	W	M	N	P	F		TxL	Weight kg/lb	Kv Cv
	DN8	mm	11.15	66.00	20.60	29.00	37.90	61.50	150.00	47.00	5.54	⅜ UNF	6.65	(F03)	36.00	M5X10	0.60	2.6
	¼"	inch	0.44	2.60	0.81	1.14	1.49	2.42	5.91	1.85	0.22		0.26		1.42		1.33	3.0
DN15	DN10	mm	11.15	66.00	20.60	29.00	37.90	61.50	150.00	47.00	5.54	⅜ UNF	6.65	(F03)	36.00	M5X10	0.60	6.9
½"	⅜"	inch	0.44	2.60	0.81	1.14	1.49	2.42	5.91	1.85	0.22		0.26		1.42		1.33	8.0
DN20	DN15	mm	14.30	70.60	24.50	31.40	40.30	63.90	150.00	53.70	5.54	⅜ UNF	6.65	(F03)	36.00	M5X10	0.80	10
¾"	½"	inch	0.56	2.78	0.97	1.24	1.59	2.52	5.91	2.11	0.22		0.26		1.42		1.77	12
DN25	DN20	mm	20.60	93.70	31.70	38.10	55.60	79.40	187.00	63.70	7.54	7/16 UNF	7.40	(F04)	42.00	M5X10	1.60	28
1"	¾"	inch	0.81	3.69	1.25	1.50	2.19	3.13	7.36	2.51	0.30		0.29		1.65		3.54	32
DN32	DN25	mm	25.40	108.00	41.30	42.70	60.20	84.10	187.00	71.70	7.54	7/16 UNF	7.40	(F04)	42.00	M5X10	2.50	49
1¼"	1"	inch	1.00	4.25	1.62	1.68	2.37	3.31	7.36	2.82	0.30		0.29		1.65		5.53	57
DN40	DN32	mm	31.80	115.50	48.40	43.60	73.00	97.00	237.00	86.70	8.71	9/16 UNF	8.50	(F05)	50.00	M6X12	3.60	69
1½"	1¼"	inch	1.25	4.55	1.91	1.72	2.87	3.82	9.33	3.41	0.34		0.33		1.97		7.96	80
DN50	DN40	mm	38.10	128.00	56.30	48.30	77.80	101.80	237.00	96.90	8.71	9/16 UNF	8.50	(F05)	50.00	M6X12	4.50	102
2"	1½"	inch	1.50	5.04	2.22	1.90	3.06	4.01	9.33	3.82	0.34		0.33		1.97		9.95	118
DN65	DN50	mm	50.80	158.00	72.60	70.00	88.10	115.10	237.00	108.00	8.71	9/16 UNF	13.50	(F07)	70.00	M8X12	9.50	208
2½"	2"	inch	2.00	6.22	2.86	2.76	3.47	4.53	9.33	4.25	0.34		0.53		2.76		21.00	241

Floating Ball 3 Piece

Components & materials



Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Ends	Acc. Ordering Code	2
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	2
6*	Inner seal	PTFE	2
6A*	Outer seal	Acc. Ordering Code	2
7*	Stem thrust seal	VIRGIN PEEK, PCTFE	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE	1
8	Stop pin	S. Steel	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	S. Steel	1

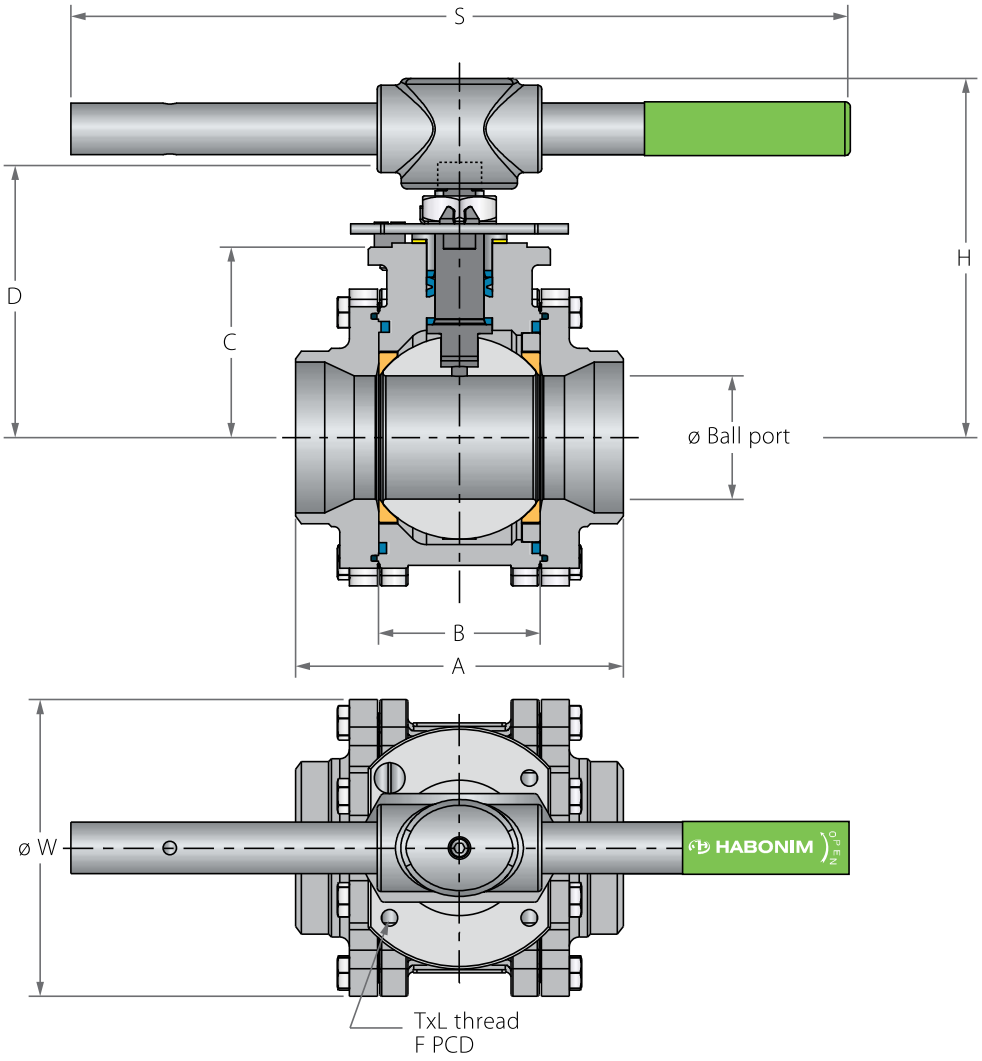
Item	Description	Material specification	Qty.
10A*	Slide bearing	S. Steel	1
11	Disc spring	S. Steel	2
12	Stem nut	S. Steel	1
13	Locking clip	S. Steel	1
14	Handle	S. Steel	1
15	Serrated washer	S. Steel	1
16	Handle nut	S. Steel	1
17	Sleeve	PVC	1
18	Body bolt	S. Steel	8
20	Anti-static spring	S. Steel	1
21	Anti-static plunger	S. Steel	1
23	Tag (not shown)	A167S. Steel304	1

(1) 2½" (DN65) size maximum pressure rating is Class 400.

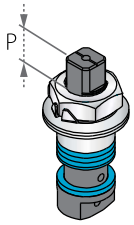
* Repair kit components

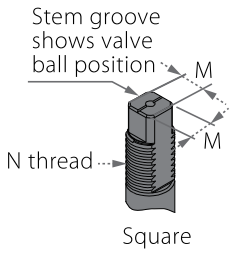
Floating Ball 3 Piece

Valve dimensions



Preparation for actuation



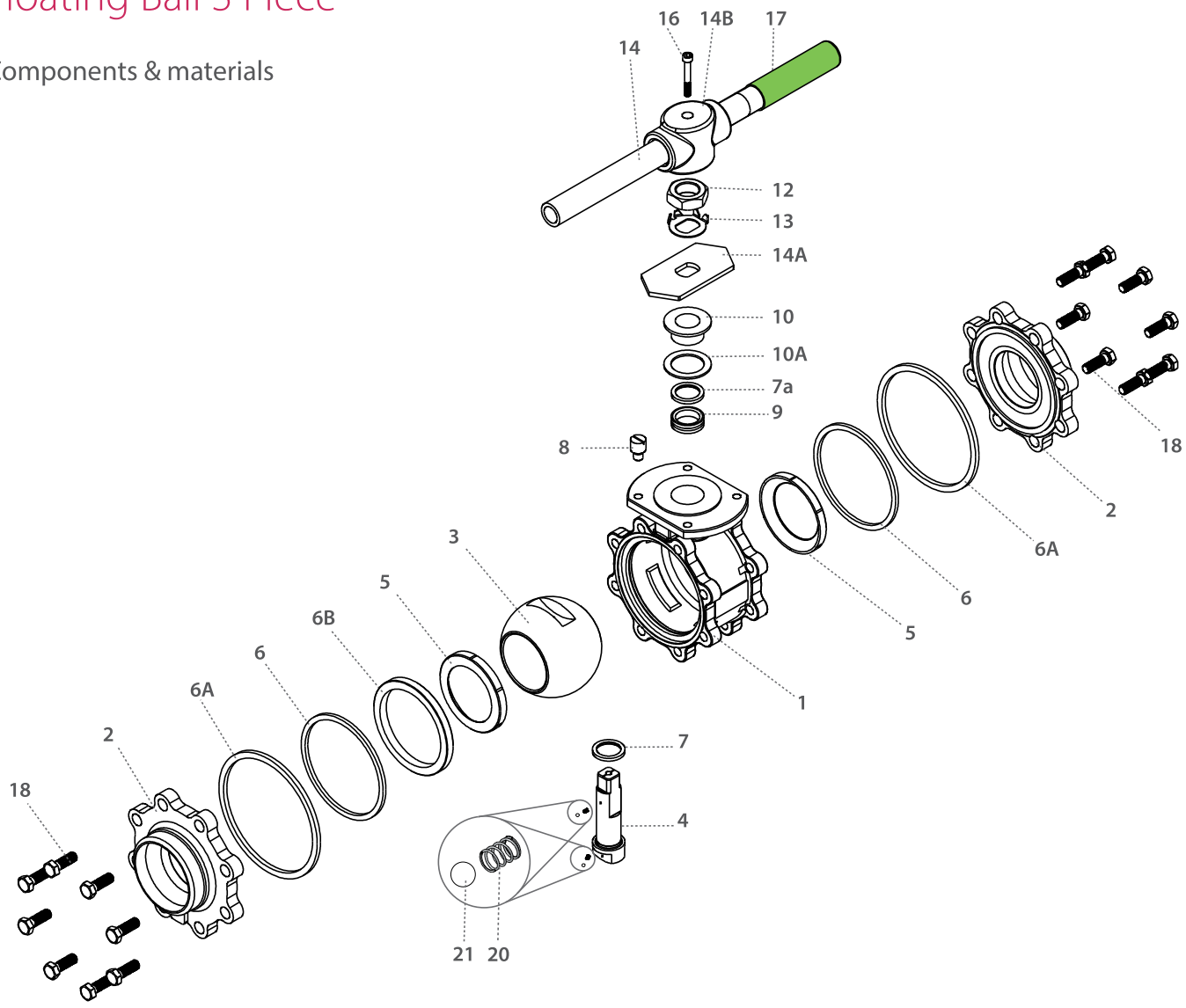


Valve Face To Face sizes are according to Habonim catalog data only, for Extended-weald/Flanged/Tri-clamp end see Face To Face sizes page.

Std. port	Full port	Unit	Ball port	A	B	C	D	H	S	W	M	M-DD	N	P	F		TxL	Weight kg/lb	Kv / Cv
DN80	DN65	mm	63.50	169.00	83.30	98.30	144.90	185.00	400.00	140.00	18.90	15.90	1"-14 UNS-2A	16.70	(F10)	102.00	M10x20	13.70	300
3"	2½"	inch	2.50	6.65	3.28	3.87	5.71	7.29	15.75	5.50	0.74	0.63		0.66		4.02		30.30	348
DN100	DN80	mm	82.60	214.00	108.80	114.10	160.70	200.00	600.00	177.00	18.90	15.90	1"-14 UNS-2A	16.70	(F10)	102.00	M10x20	23.70	615
4"	3"	inch	3.25	8.43	4.28	4.49	6.33	7.89	23.62	6.97	0.74	0.63		0.66		4.02		52.40	713
	DN100	mm	100.00	239.00	123.00	124.00	170.50	211.00	600.00	217.00	18.90	15.90	1"-14 UNS-2A	16.70	(F10)	102.00	M10x20	30.00	744
	4"	inch	3.94	9.41	4.84	4.88	6.71	8.30	23.62	8.54	0.74	0.63		0.66		4.02		66.30	863
DN150		mm	111.10	346.00	146.00	157.00	226.00	286.00	916.00	266.00	28.45	23.75	1½"-12 UNF-2A	26.20	(F12)	125.00	M12x20	63.00	872
6"		inch	4.37	13.62	5.75	6.18	8.90	11.26	36.06	10.47	1.12	0.94		1.03		4.92		138.90	1012

Floating Ball 3 Piece

Components & materials



Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Ends	Acc. Ordering Code	2
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	2
6*	Inner seal	PTFE	2
6A*	Outer seal	Acc. Ordering Code	2
6B	Support ring	S. Steel	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1
8	Stop pin	S. Steel	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	S. Steel	1
10A*	Slide bearing	S. Steel	1

Item	Description	Material specification	Qty.
11	Disc spring	S. Steel	2
12	Stem nut	S. Steel	1
13	Tab lock washer	S. Steel	1
14	Handle	S. Steel	1
14A	Stop plate	S. Steel	1
14B	Wrench head	S. Steel	1
16	Wrench bolt	S. Steel	1
17	Sleeve	PVC	1
18	Body bolts	S. Steel	16-24
20	Anti-static spring	S. Steel	2
21	Anti-static plunger	S. Steel	2
23	Tag (not shown)	S. Steel	1

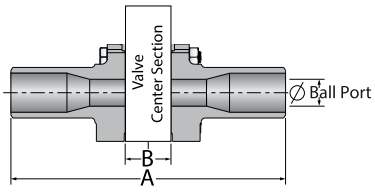
* Repair kit components

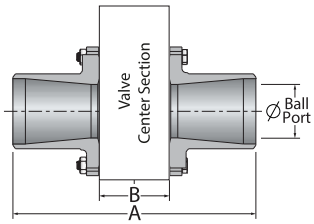
Face To Face Sizes

Valve Size	Unit	B		A-XBW		A-ETO	A-Flanged CLASS 150 FTF CLASS 300		A-Flanged CLASS 300 FTF CLASS 300		A-Flanged CLASS 600 FTF CLASS 600		A-Flanged DIN F1		A-TC
		Std. port	Full port	Std. port	Full port	Std. port	Std. port	Full port	Std. port	Full port	Std. port	Full port	Std. port	Full port	Full port
DN10	mm	20.6	20.6	140.6	143	108.6									
⅜"	inch	0.8	0.8	5.5	5.6	4.3									
DN15	mm	20.6	24.6	140.6	147	137	140	140	140	140	165	140*	130	130	88.8
½"	inch	0.8	1	5.5	5.8	5.4	5.5	5.5	5.5	5.5	6.5	5.5*	5.1	5.1	3.5
DN20	mm	24.6	31.7	147	168.7	147	152	152	152	152	152*	152*	150	150	101.6
¾"	inch	1	1.2	5.8	6.6	5.8	6	6	6	6	6*	6*	5.9	5.9	4
DN25	mm	31.7	41.3	168.7	179.3	164.1	165.1	165.1	165.1	165.1	216	165.1*	160	160	114.3
1"	inch	1.2	1.6	6.6	7.1	6.5	6.5	6.5	6.5	6.5	8.5	6.5*	6.3	6.3	4.5
DN32	mm	41.3	48.4	179.3	189.4	179.3	178.1	178.1	178.1	178.1	178.1*	178.1*	180	180	
1¼"	inch	1.6	1.9	7.1	7.5	7.1	7	7	7	7	7*	7*	7.1	7.1	
DN40	mm	48.4	56.3	189.4	200.3	184	190	190	190	190	241	190*	200	200	139.8
1½"	inch	1.9	2.2	7.5	7.9	7.2	7.5	7.5	7.5	7.5	9.5	7.5*	7.9	7.9	5.5
DN50	mm	56.3	72.6	200.3	232.6	193.5	216.1	216.1	216.1	216.1	292	216.1*	230	230	158.9
2"	inch	2.2	2.9	7.9	9.2	7.6	8.5	8.5	8.5	8.5	11.5	8.5*	9	9	6.3
DN65	mm	72.6	83.4	232.6	283.4	222.6	241	241	241	241	241*	330	290	290	213
2½"	inch	2.9	3.3	9.2	11.2	8.8	9.5	9.5	9.5	9.5	9.5*	13	11.4	11.4	8.4
DN80	mm	83.4	108.8	283.4	348.8	250.4	282	282	282	282	356	356	310	310	215.8
3"	inch	3.3	4.3	11.2	13.7	9.9	11.1	11.1	11.1	11.1	14	14	12.2	12.2	8.5
DN100	mm	108.8	123	348.8	390	348.8	305	305	305	305	432	432	350	350	245.4
4"	inch	4.3	4.8	13.7	15.4	13.7	12	12	12	12	17	17	13.78	13.78	9.7
DN150	mm	146.1	180	444.1	180	444.1	403.1	403.1	403.1	403.1	559	559	480	480	146.1
6"	inch	5.8	7.1	17.5	7.1	17.5	15.9	15.9	15.9	15.9	22	22	18.9	18.9	5.8

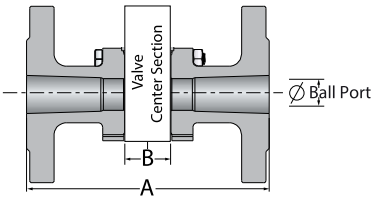
* Complay with class 300 FTF

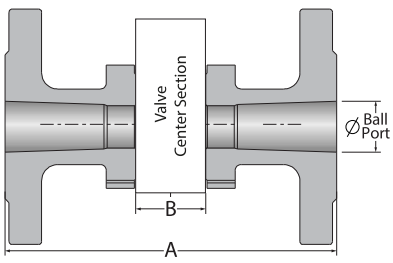
XBW / ETO



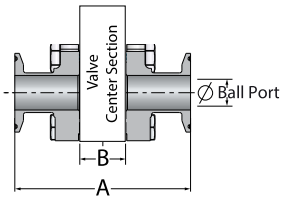


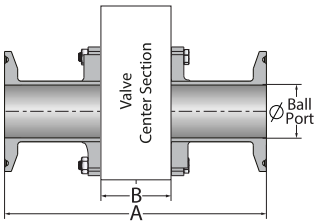
Flanged





TC





Floating Ball 3 Piece - 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	4	7	W	-	6	6	6	6	A	T	G	/	B	W			-				
Size		Features				Series		Design		Body material	Ends material	Ball/Stem material		Seat material	Inner Seal material	Outer Seal material		End connection					Special features			

Size (1-2)

Code	inch	mm
02	¼"	8
03	⅜"	10
05	½"	15
07	¾"	20
10	1"	25
12	1¼"	32
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
O	Oxygen service
M	Ammonia service
K	Chlorine service
V	Vacuum service
Q	Cavity filler seats
I	High purity Class 10000
H	Hydrogen Service

Series (7-8)

47	Floating ball 3 piece

Design (9)

W	Total HermetiX Integrity package
G	Total HermetiX Integrity package - FDA compliant

Body material (11)

6	S. SteelCF8M/CF3M
4	C. steel
W	Hasteloy-C22
S	254SMO
D	Duplex
9	Low Temp C. steel
1	Bronze
K	Super Duplex
7	Monel
A	Alloy-20
C	Hasteloy-C276

Ends material (12)

6	S. SteelCF8M/CF3M
4	C. steel
W	Hasteloy-C22
S	254SMO
D	Duplex
9	Low Temp C. steel
1	Bronze
K	Super Duplex
7	Monel
A	Alloy-20
C	Hasteloy-C276

Ball material (13)

6	S. SteelCF8M/CF3M
W	Hasteloy-C22
S	254SMO
D	Duplex
1	Bronze
K	Super Duplex
7	Monel
A	Alloy-20
C	Hasteloy-C276

Stem material (14)

6	S. Steel316L
M	High Strength S. Steel
Z	Inconel 718 B637
W	Alloy-C22 B574
S	254SMO A479
A	Alloy-20 A351 CN7M
D	Duplex A479
K	Super Duplex A479
7	Monel
C	Hasteloy-C276

Seat material (15)

A	TFM
P	CF PTFE
K	CF PEEK
L	Virgin Peek
U	UHMWPE
C	PCTFE
Y	Delrin
W	PVDF
T	PTFE

Inner Seal Material (16)

T	PTFE
G	Expanded graphite
U	UHMWPE
V	Viton
B	NBR

Outer Seal Material (17)

G	Expanded graphite
A	TFM

End Connection (19-22)

Welded	
BW10	Buttweld schd. 10
BW	Buttweld schd. 40
SW	Socket weld
XBW10	Extended buttweld schd. 10
XBW	Extended buttweld schd. 40
XSW	Extended socket weld
BW5	Buttweld schd. 5
BW80	Buttweld schd. 80
BWO	Buttweld tube OD
BWD	Buttweld DIN 11850
BWI	buttweld ISO
SWO	Socket weld tube OD
ETO	Extended tube OD
ETI	Extended buttweld ISO
ETD	Extended buttweld DIN
Threaded	
NPT	ASME B1.20.1 - National Pipe Taper thread
BSPT	EN 10226 - Pipe Taper thread
BSPP	ISO228-1, DIN3852 - Pipe Parallel thread
DIN3852	DIN3852 - Pipe Parallel thread
AS5202	SAE internal straight thread
MNPT	Male NPT
MBSPT	Male BSPT
Flanged	
150	ASME B16.5 #150 RF
300	ASME B16.5 #300 RF
600	ASME B16.5 #600 RF
900	ASME B16.5 #900 RF
PN16	EN1092 PN16 RF
PN40	EN1092 PN40 RF
PN63	EN1092 PN63 RF
PN100	EN1092 PN100 RF
PN160	EN1092 PN160 RF
Clamp	
LL	Compression fitting (Imperial) - **No** Nuts & Ferrules
LM	Compression fitting (metric) - **No** Nuts & Ferrules
LL-NF	Compression fitting (Imperial) - **with** Nuts & Ferrules
LM-NF	Compression fitting (metric) - **with** Nuts & Ferrules
TC	Tri-Clamp
GR	Grayloc© compatible hub (Grayloc© is a registered trademark of Grayloc Products, L.L.C.)

Special Features (24-30)

P250	Ball with Upstream Relief Hole
SRS	Self Relief Seat
B	Body made from barstock
EP	Electropolished
J2N05	Jacketed valve - number of ports (2), type (NPT) and size (½")
Valve Special Stem Seals	
LAX	FDA Compliant, Stem seal, Virgin Peek thrust and TFM, X shape, gasket
HC	High Cycle service