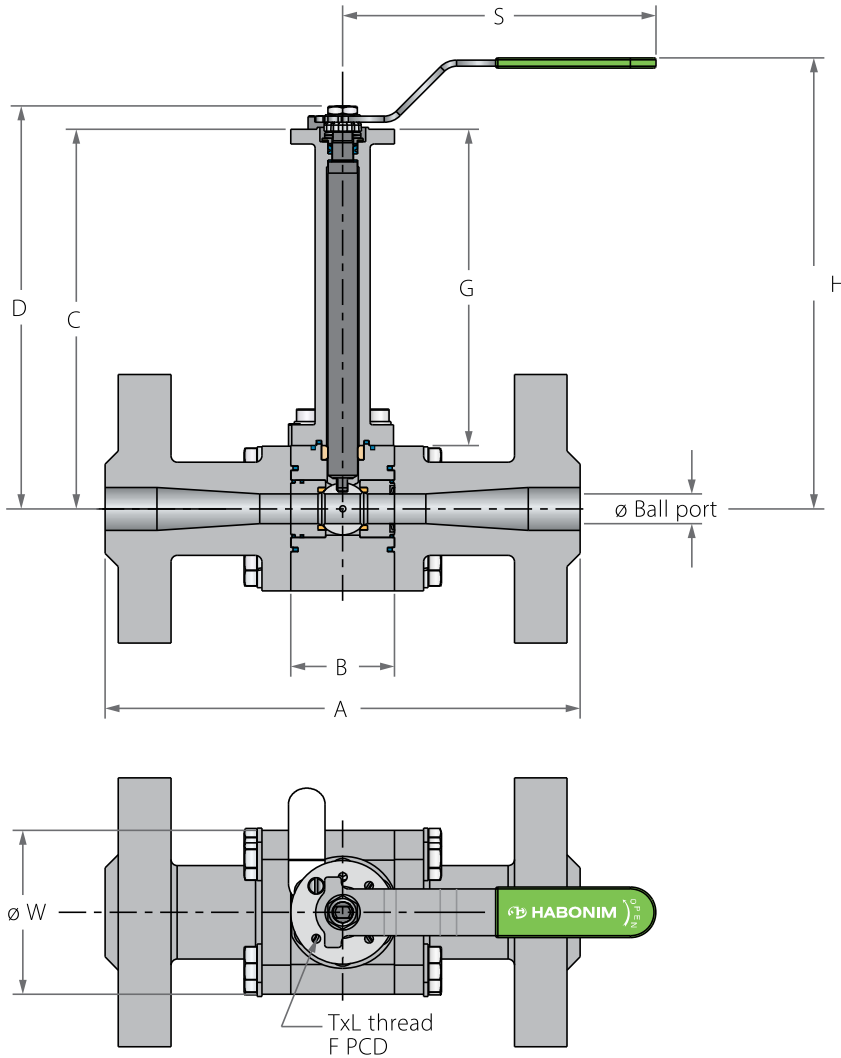
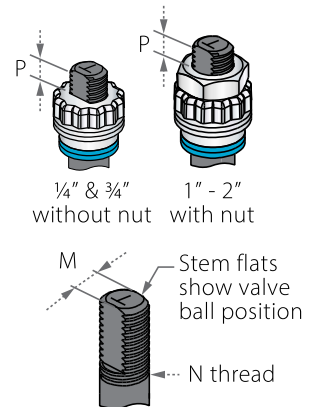


Cryogenic High Pressure Floating Ball 3 Piece

Valve dimensions



Preparation for actuation

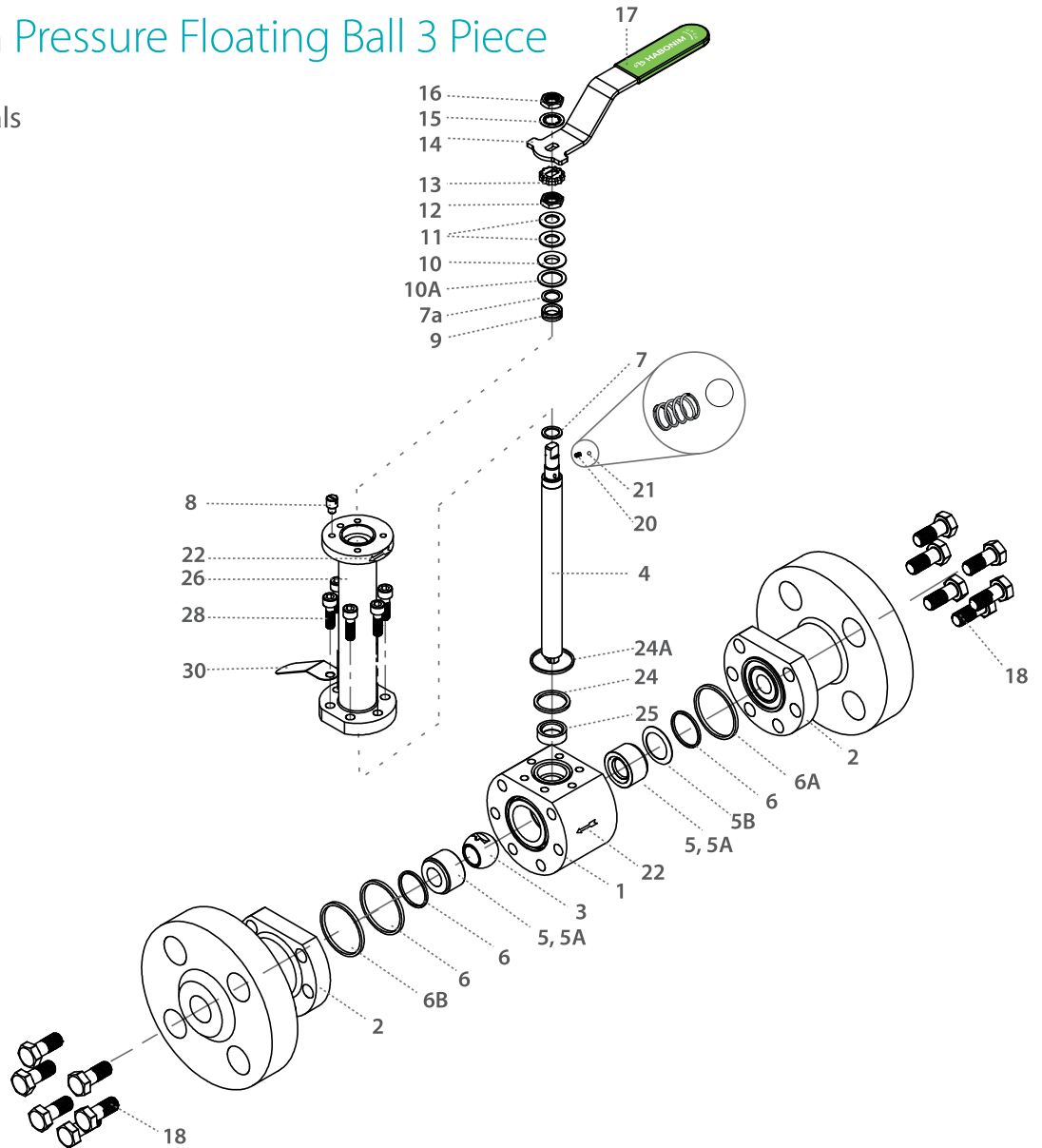


Std. port	Full port	Unit	Ball port	A				B	Standard design				6.0" bonnet				S	W	M	N	P	F	TxL	Kv	Weight	
				Welded	Threaded	#1500	#2500		C	D	G	H	C	D	G	H										Cv
DN15	DN8, DN10	mm	11.15	173.6	107.2	216	264	50	333	341.9	304	380.6	181.4	190.3	152.4	229	150	78	5.50	3/8"	7.2	F03	36	M5X8	6.9	3.9
1/2"	3/8"	inch	0.44	6.83	4.22	8.50	10.39	1.97	13.11	13.46	11.97	14.98	7.14	7.49	6	9.02	5.91	3.07	0.22	UNF	0.28	1.42	M5X8	8	8.6	
DN20	DN15	mm	13	188.6	120	229	273	60	338.1	355.6	304	386.6	186.5	204	152.4	235	187	98	7.5	7/16"	7.2	F04	42	M5X7	10	6.8
3/4"	1/2"	inch	0.51	7.43	4.72	9.02	10.75	2.36	13.31	14	11.97	15.22	7.34	8.03	6	9.25	7.36	3.86	0.3	UNF	0.28	1.65	M5X7	12	15	
DN25	DN20	mm	20.65	208.6	144.2	254	308	68	347.75	377.25	304	401.6	196.15	225.65	152.4	250	237	114	8.65	9/16"	7.2	F05	50	M6X8	28	10.6
1"	3/4"	inch	0.81	8.21	5.68	10	12.13	2.68	13.69	14.85	11.97	15.81	7.72	8.88	6	9.84	9.33	4.49	0.34	UNF	0.28	1.97	M6X8	32	23.3	
DN32	DN25	mm	25.5	211.6	152	279	349	68	355.5	385	304	410	203.9	233.4	152.4	258.4	237	124	8.65	9/16"	8	F05	50	M6X8	49	12.5
1 1/4"	1"	inch	1	8.33	5.98	10.98	13.74	2.68	14	15.16	11.97	16.14	8.03	9.19	6	10.17	9.33	4.88	0.34	UNF	0.31	1.97	M6X8		27.5	



Cryogenic High Pressure Floating Ball 3 Piece

Components & materials



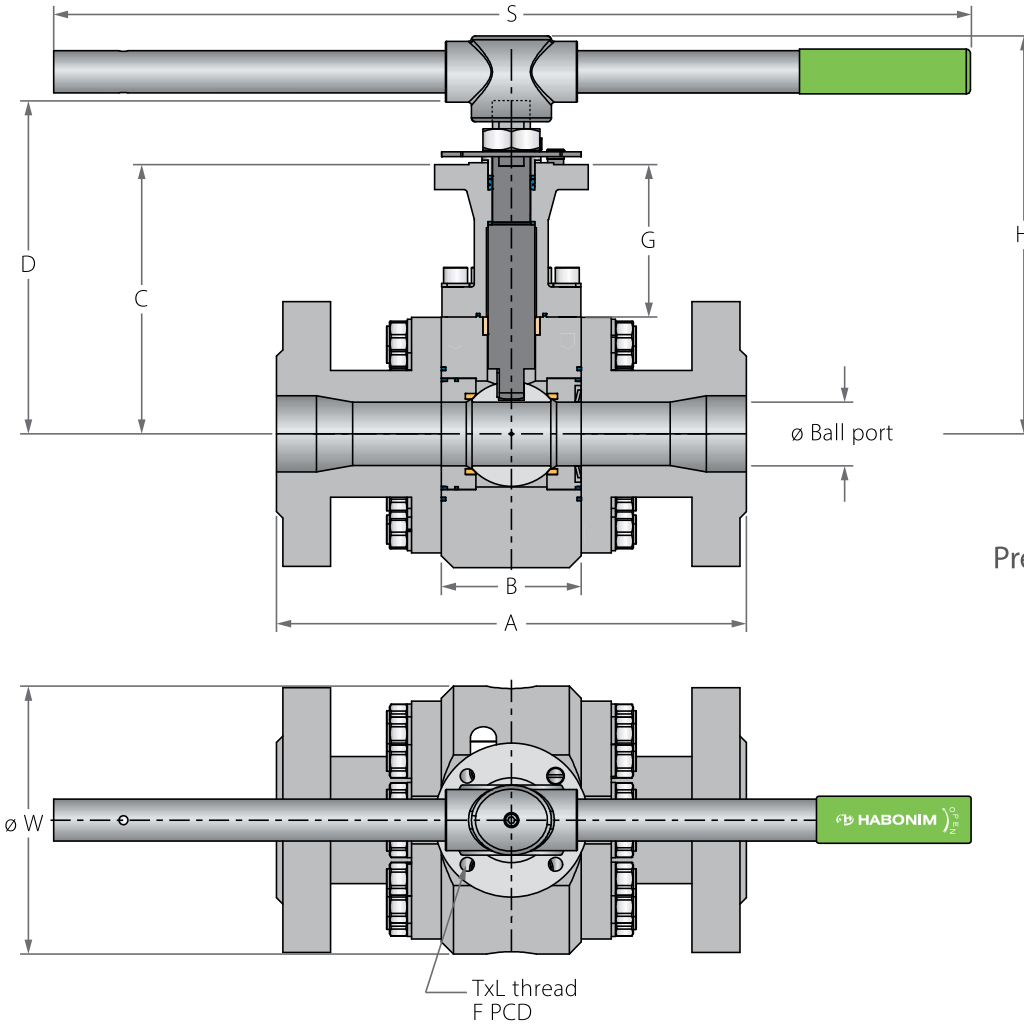
Item	Description	Material specifications	Qty.
1	Body	Acc. Ordering Code	1
2	End	Acc. Ordering Code	2
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	2
5A*	Seat housing	S. Steel	2
5B	Upstream seat spring	Inconel 718	1
6*	Inner seal	TFM	2
6A*	Outer seal	Acc. Ordering Code	2
6B*	Graphite string	Graphite	1
7*	Stem thrust seal	PCTFE	1
7a*	Anti-abrasion ring	PCTFE	1
8	Stop pin	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	2

Item	Description	Material specifications	Qty.
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	8-16
20	Anti-static spring	S. Steel	2
21	Anti-static plunger	S. Steel	2
22	Arrow flow	S. Steel	2
23	Tag (not shown)	S. Steel	1
24*	Bonnet inner seal	TFM	1
24A*	Bonnet outer seal	Acc. Ordering Code	1
25*	Stem bearing	PTFE	1
26	Bonnet	S. Steel	1
28	Bolt	S. Steel	4-6
30	Dog tag	S. Steel	1

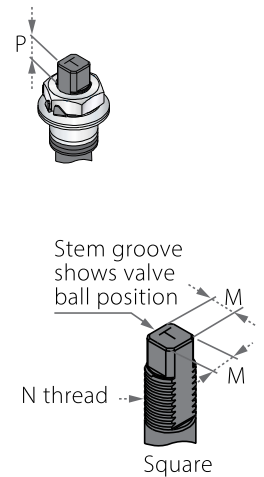
* Repair kit components

Cryogenic High Pressure Floating Ball 3 Piece

Valve dimensions



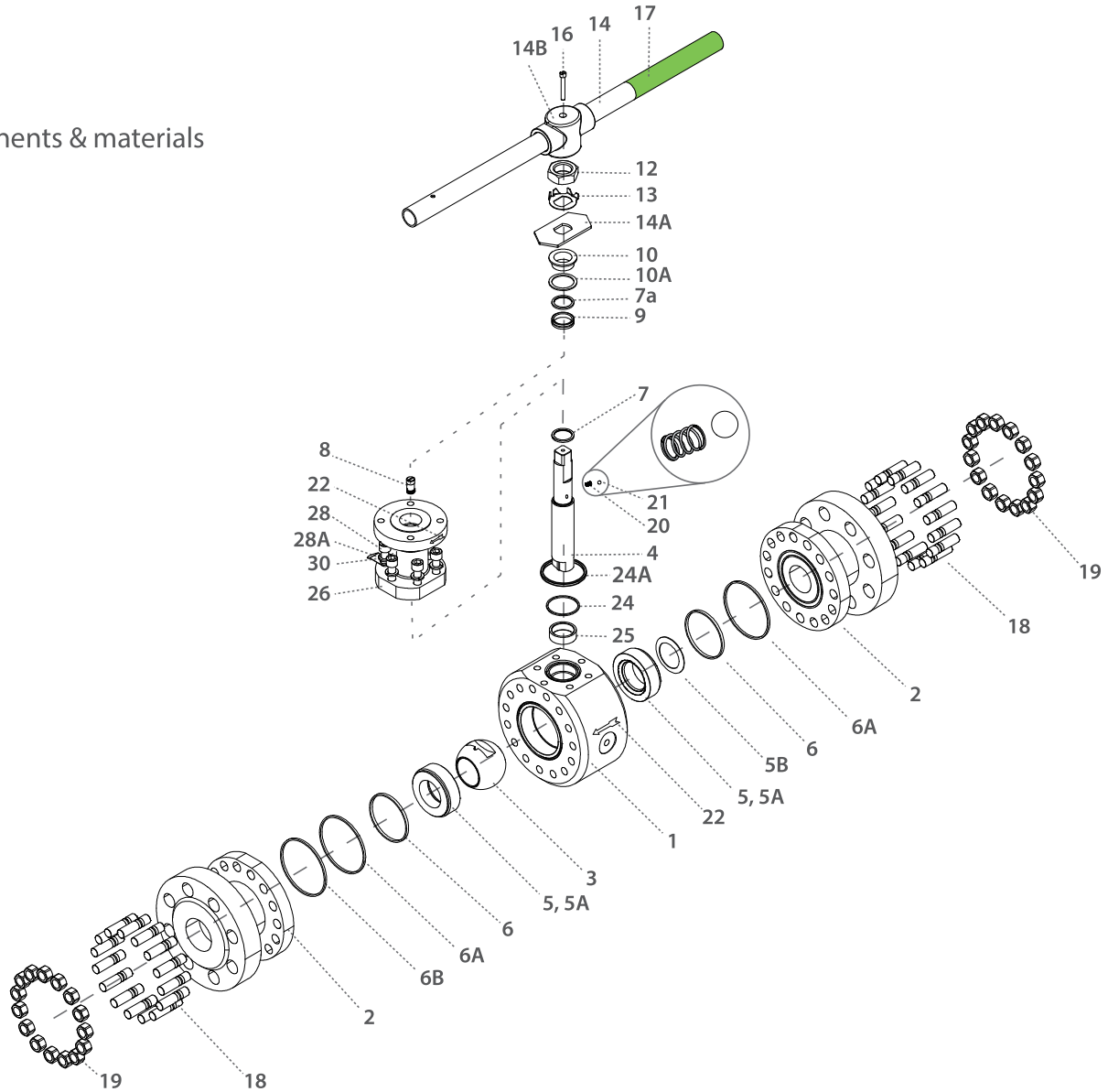
Preparation for actuation



Std. port	Full port	Unit	Ball port	A				B	Standard design				6.0" bonnet				S	W	M	MDD	N	P	F	TxL	Kv	Weight
				Welded	Threaded	#1500	#2500		C	D	G	H	C	D	G	H										
DN40	DN32	mm	31.8	262	179	305	384	95	357	398.6	304	425	205.4	247	152.4	273.4	400	140	13.9	13.9	M20X2.5	8 (F07)	70	M8X7	69	21
1½"	1¼"	inch	1.25	10.31	7.05	12.01	15.12	3.74	14.06	15.69	11.97	16.73	8.09	9.72	6	10.76	15.75	5.51	0.55	0.55	M20X2.5	0.31	2.76	M8X7	80	46.2
DN50	DN40	mm	38.15	255.8	195	368	451	95	376.5	418.1	304	443.75	224.9	266.5	152.4	292.15	400	172	13.9	13.9	M20X2.5	15.75 (F07)	70	M8X10	102	30.8
2"	1½"	inch	1.5	10.07	7.68	14.49	17.76	3.74	14.82	16.46	11.97	17.47	8.85	10.49	6	11.5	15.75	6.77	0.55	0.55	M20X2.5	0.62	2.76	M8X10	118	67.8
DN65	DN50	mm	51	313	225	419	508	105	392.4	438.9	304.8	479.4	240	286.5	152.4	327	610	199	18.9	15.9	1"-14	16.7 (F10)	102	M10X15	208	43
2½"	2"	inch	2.01	12.32	8.86	16.5	20	4.13	15.45	17.28	12	18.87	9.45	11.28	6	12.87	24.02	7.83	0.74	0.63	UNS-2A	0.66	4.02	M10X15	241	94.6
DN80	DN65	mm	63.75	343.2	-	470	578	140	421	490.1	304	-	269.4	338.5	152.4	-	-	268	28.45	23.75	1½"	26.2 (F12)	125	M16X25	300	94.7
3"	2½"	inch	2.51	13.51	-	18.5	22.76	5.51	16.57	19.3	11.97	-	10.61	13.33	6	-	-	10.55	1.12	0.94	UNF-2A	1.03	4.92	M16X25	348	208.4
DN100	DN80	mm	82.8	419.2	-	546	673	140	438	550.65	304	-	286.4	399.05	152.4	-	-	298	28.45	23.75	1½"	26.2 (F12)	125	M16X25	615	122.5
4"	3"	inch	3.26	16.5	-	21.5	26.5	5.51	17.24	21.68	11.97	-	11.28	15.71	6	-	-	11.73	1.12	0.94	UNF-2A	1.03	4.92	M16X25	713	269.5
DN150	DN100	mm	100	510	-	705	914	175	451	563.65	304	-	299.4	412.05	152.4	-	-	339	35.9	35.9	2"	40 (F16)	165	M20X25	872	266
6"	4"	inch	3.94	20.08	-	27.76	35.98	6.89	17.76	22.19	11.97	-	11.79	16.22	6	-	-	13.35	1.41	1.41	UNF-2A	1.57	6.5	M20X25	1012	585
DN200	DN150	mm	144.4	680	-	832	1022	210	496	637	304	-	344.4	485.4	152.4	-	-	423	45.9	45.9	2-¾"	40 (F16)	165	M20X25	1552	509
8"	6"	inch	5.69	26.77	-	32.76	40.24	8.27	19.53	25.08	11.97	-	13.56	19.11	6	-	-	16.65	1.81	1.81	UN-2A	1.57	6.5	M20X25	1800	1120



Components & materials



Item	Description	Material specifications	Qty.
1	Body	Acc. Ordering Code	1
2	End	Acc. Ordering Code	2
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	2
5A*	Seat housing	S. Steel	2
5B ⁽¹⁾	Upstream seat spring	Inconel 718	1
6*	Inner seal	Graphite, TFM	2
6A*	Outer seal	Acc. Ordering Code	2
6B*	Graphite string	Graphite	1
7*	Stem thrust seal	PCTFE	1
7a*	Anti-abrasion ring	PCTFE	1
8	Stop pin	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	Tab lock washer	S. Steel	1
14**	Handle	S. Steel	1

Item	Description	Material specifications	Qty.
14A	Stop plate	S. Steel	1
14B	Wrench head	S. Steel	1
16	Wrench bolt	S. Steel	1
17	Sleeve	PVC	1
18	Body bolt	S. Steel	8-16
18A	Spring washer	S. Steel	8-16
19	Body bolt	S. Steel	8-16
20	Anti-static spring	S. Steel	2
21	Anti-static plunger	S. Steel	2
22	Arrow flow	S. Steel	2
23	Tag (not shown)	S. Steel	1
24*	Bonnet inner seal	Graphite, TFM	1
24A*	Bonnet outer seal	Acc. Ordering Code	1
25*	Stem bearing	PTFE	1
26	Bonnet	S. Steel	1
28	Bolt	S. Steel	6-8
30	Dog tag	S. Steel	1

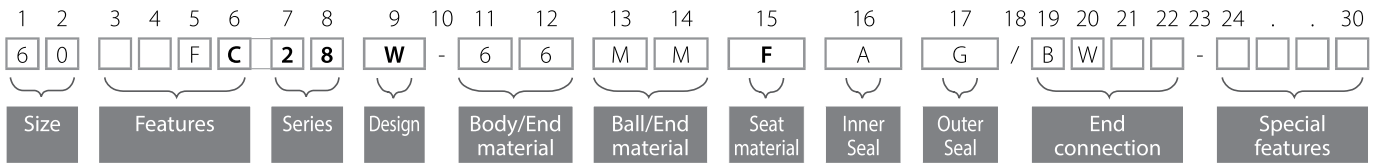
* Repair kit components

** Gear operator should be used for size 3" DN80 (handle components are not included)



Cryogenic High Pressure Floating Ball 3 Piece - Ordering Code System

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



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
80	8"	200

Features (3-6)	
F	Fire safe
C	Cryogenic
B	Full port
N	Control

Series (7-8)	
28	HP Float 3 piece.

Design (9)	
W	Total HermetiX Integrity package

Body material (11)	
6	S. Steel 316/316L

End material (12)	
6	S. Steel 316/316L

Ball material (13)	
M	High Strength S. Steel

Stem material (14)	
M	High Strength S. Steel

Seat material (15)	
F	Hybrid Seat (info in special features)

Inner Seal Material (16)	
A	TFM
G	Expanded graphite

Outer Seal Material (17)	
G	Expanded graphite
A	TFM

End connections (19-22)	
Welded	
XBW80	Extended butt weld schd. 80
XBW160*	Extended butt weld schd. 160
XBW	Extended butt weld schd. 40
XXS	Extended butt weld schd. XXS
XSW	Extended socket weld

* Std. port only

Threaded	
NPT	ASME B1.20.1 - National Pipe Taper thread
BSPT	EN 10226-2 - British Standard Pipe Taper thread
BSPP	ISO228-1, DIN3852 - Pipe parallel thread
DIN3852	DIN3852 EN 10226-1 - Pipe parallel thread
AS5202	SAE internal straight thread

Flanged	
600	ASME B16.5 #600 RF
900	ASME B16.5 #900 RF
1500	ASME B16.5 #1500 RF
2500	ASME B16.5 #2500 RF
PN100	EN1092 PN100 RF
PN160	EN1092 PN160 RF
PN250	EN 1092-1 PN250 RF
PN400	EN 1092-1 PN400 RF

Flanged RTJ	
600RTJ	ASME B16.5 #600 RTJ
900RTJ	ASME B16.5 #900 RTJ
1500RTJ	ASME B16.5 #1500 RTJ
2500RTJ	ASME B16.5 #2500 RTJ

Clamp	
GR	Grayloc® compatible hub (Grayloc® is a registered trademark of Grayloc Products, L.L.C.)

Special Features (24-30)	
Vxx	V port
VBxx	Characterized control ball
6.0	Short bonnet

Hybrid Seats (24-27)			
24	25	26	27
Insert material	"Upstream/Downstream"	Insert Shape	Seal Type
C	Hybrid seats on upstream and downstream, spring loaded	0	5 Seal 1: TFM; Seal 2: Expanded graphite
PCTFE		0	6 Seal 1: TFM
		Scrapper	