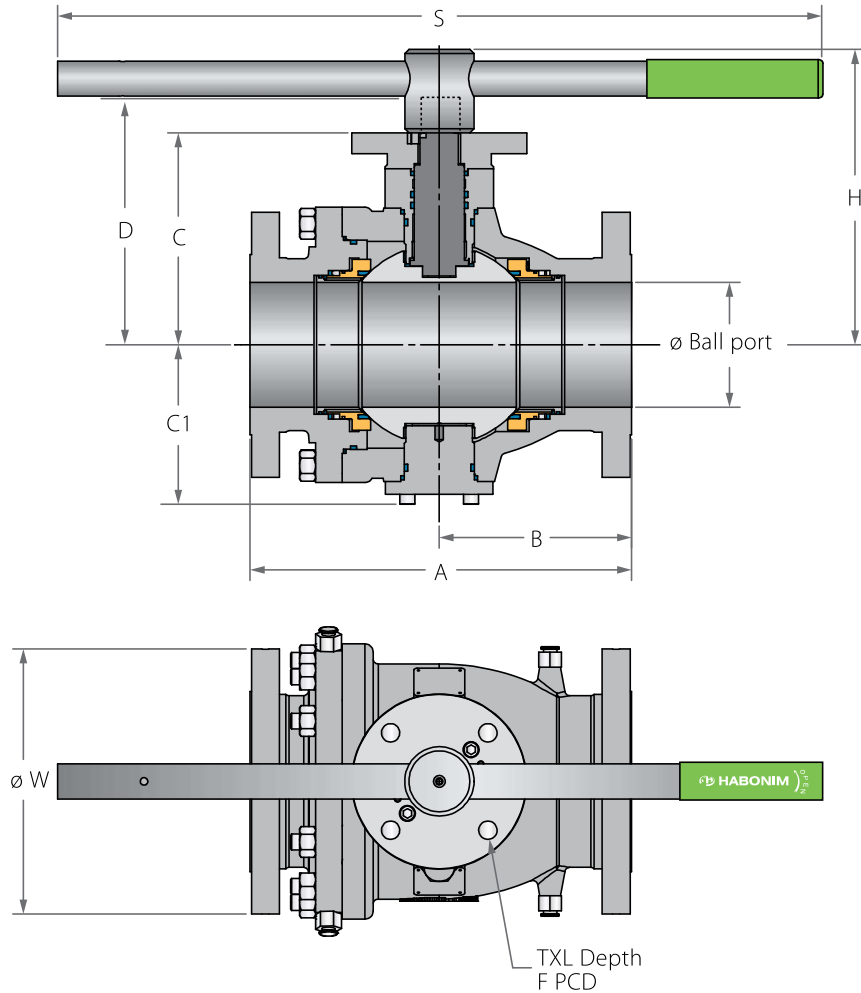
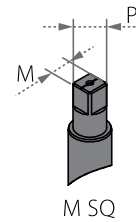


Trunnion Mounted Ball 2 Piece

Valve dimensions



Preparation for actuation

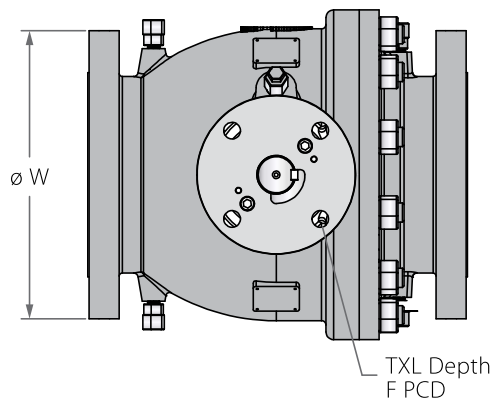
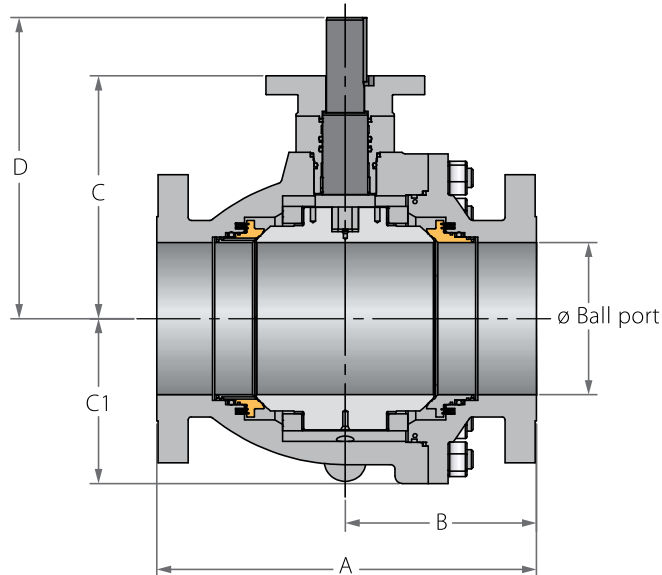


Std. port	Unit	Ball port	A		B		C	C1	D	W		M SQ	P SQ	H	S	F	TxL	Weight kg/lb		Kv / Cv		
			150	300	150	300				150	300							150	300	150	300	
DN50	mm	49.00	178.00	216.00	89.00	108.00	127.00	91.50	144.50	150.00	165.00	17.00	22.00	196.00	401.00	(F10)	102.00	11x15	19	23	400	363
2"	inch	1.93	7.01	8.50	3.50	4.25	5.00	3.60	5.69	5.91	6.50	0.67	0.87	7.72	15.79	4.02	(4 holes)	42	51	463	420	
DN80	mm	74.00	203.00	283.00	101.50	128.00	148.00	117.00	172.00	190.00	210.00	22.00	32.00	223.00	610.00	(F12)	125.00	13x15	33	44	1125	952
3"	inch	2.91	7.99	11.14	4.00	5.04	5.83	4.61	6.77	7.48	8.27	0.87	1.26	8.78	24.02	4.92	(4 holes)	73	97	1300	1100	
DN100	mm	100.00	229.00	305.00	114.50	140.50	171.00	139.00	198.50	230.00	255.00	27.00	35.00	247.50	610.00	(F14)	140.00	18x15	49	69	2154	1860
4"	inch	3.94	9.02	12.00	4.51	5.53	6.73	5.47	7.81	9.06	10.04	1.06	1.38	9.74	24.02	5.51	(4 holes)	108	152	2490	2150	
DN150	mm	150.00	394.00	403.00	185.00	230.40	254.00	191.00	290.50	280.00	320.00	36.00	46.20	356.50	916.00	(F16)	165.00	22x25	133	166	4723	4628
6"	inch	5.91	15.51	17.99	7.28	9.07	10.00	7.52	11.44	11.02	12.60	1.42	1.82	14.04	36.06	6.50	(4 holes)	293	366	5460	5350	

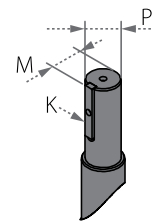


Trunnion Mounted Ball 2 Piece

Valve dimensions



Preparation for actuation



Std. port	Unit	Ball port	A		B		C	C1	D	W		P	M	K	F	TxL	Weight kg/lb		Kv / Cv		
			150	300	150	300				150	300						150	300	150	300	
DN200	mm	201.00	457.00	502.00	228.50	251.00	325.00	247.00	405.50	345.00	380.00	50.00	54.00	14.00	(F16)	165.00	22x25	222	262	9273	8737
8"	inch	7.91	17.99	19.76	9.00	9.88	12.80	9.72	15.96	13.58	14.96	1.97	2.13	0.55		6.50	(4 holes)	489	578	10720	10100
DN250	mm	252.00	533.00	568.00	270.00	287.50	353.00	297.00	430.00	405.00	445.00	50.00	54.00	14.00	(F25)	254.00	18x25	358	424	15224	14792
10"	inch	9.92	20.98	22.36	10.63	11.32	13.90	11.69	16.93	15.94	17.52	1.97	2.13	0.55		10.00	(8 holes)	789	935	17600	17100
DN300	mm	303.00	610.00	648.00	298.00	313.00	388.00	324.00	468.50	485.00	520.00	60.00	63.50	18.00	(F25)	254.00	18x25	527	613	23096	22404
12"	inch	11.93	24.02	25.51	11.73	12.32	15.28	12.76	18.44	19.09	20.47	2.36	2.50	0.71		10.00	(8 holes)	1162	1351	26700	25900
DN350	mm	334.00	686.00	762.00	343.00	381.00	425.00	372.00	555.00	535.00	585.00	72.00	78.00	20.00	(F30)	298.00	22x30	794	896	27940	26729
14"	inch	13.15	27.01	30.00	13.50	15.00	16.73	14.65	21.85	21.06	23.03	2.83	3.07	0.79		11.73	(8 holes)	1750	1975	32300	30900
DN400	mm	385.00	762.00	838.00	381.00	419.00	460.50	415.50	590.50	595.00	650.00	72.00	78.00	20.00	(F30)	298.00	22x30	1215	1344	38536	36763
16"	inch	15.16	30.00	32.99	15.00	16.50	18.13	16.36	23.25	23.43	25.59	2.83	3.07	0.79		11.73	(8 holes)	2679	2963	44550	42500

Trunnion Mounted Ball 2 Piece

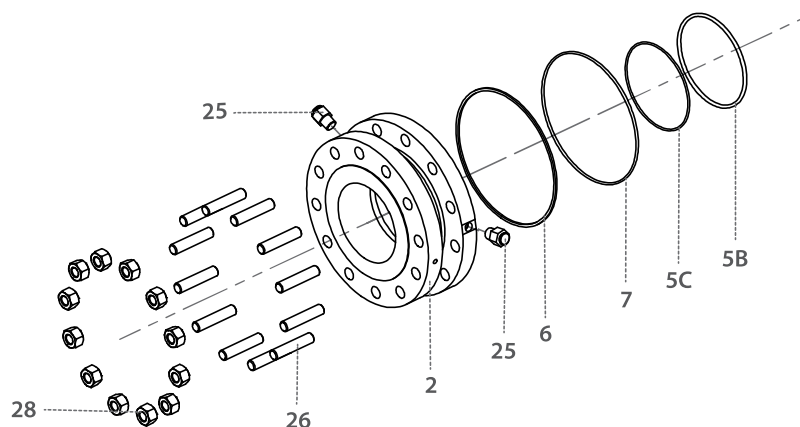
Components & materials

Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	End	Acc. Ordering Code	1
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	2
5A	Seat insert	Acc. Ordering Code	2
5B	Seat seal	HNBR, VITON	2-4
5C	Seat fire safe seal	Graphite	2
6*	Body fire safe seal	Graphite	1
7*	Body seal	HNBR, VITON	1
8	Ball bearing	316L+PTFE	2
9	External trunnion	A350 LF2+ENP, A479 316L, A182 F6A	1
10*	Gland plate & External trunnion fire safe seal	Graphite	2
11*	Gland plate & External trunnion seal	HNBR, VITON	2
12	Lower thrust washer	316L+PTFE	1
13	Seat spring	Inconel X750	10-26
14	Gland pin	C. Steel, S. Steel	4
15	Stem thrust seal	316L+PTFE	1
16	Gland plate bearing	316L+PTFE	1
17	Stem seal	HNBR, VITON	2
18	Gland plate	A350 LF2+ENP, A479 316L, A182 F6A	1
19	Stem grease fitting	S. Steel	1
20	Lower gland bolts	A320 L7, A193 B8M	2-6
21*	Stem gasket	Graphite	1
22	Iso plate	A350 LF2, A479 316L, A182 F6A	1
23	Upper gland bolts	A320 L7, A193 B8M	2-6
24	Plug drain valve	S. Steel	2
25**	Seat grease fitting + check valve	S. Steel	4

Item	Description	Material specification	Qty.
26	Body stud	A320 L7, A193 B8M	4-20
27	External trunnion bolts	A320 L7, A193 B8M	4-12
28	Body nut	A194 GR-7, A193 GR-8M	4-20
29	Anti-static spring	S. Steel	1
30	Wrench head	S. Steel	1
31	Wrench head bolt	A193 B8M, EN3506-1 A4-80	1
32	Pipe handle	C.St Zink plate, S.St	1
33	Sleeve	PVC	1

* Repair kit components

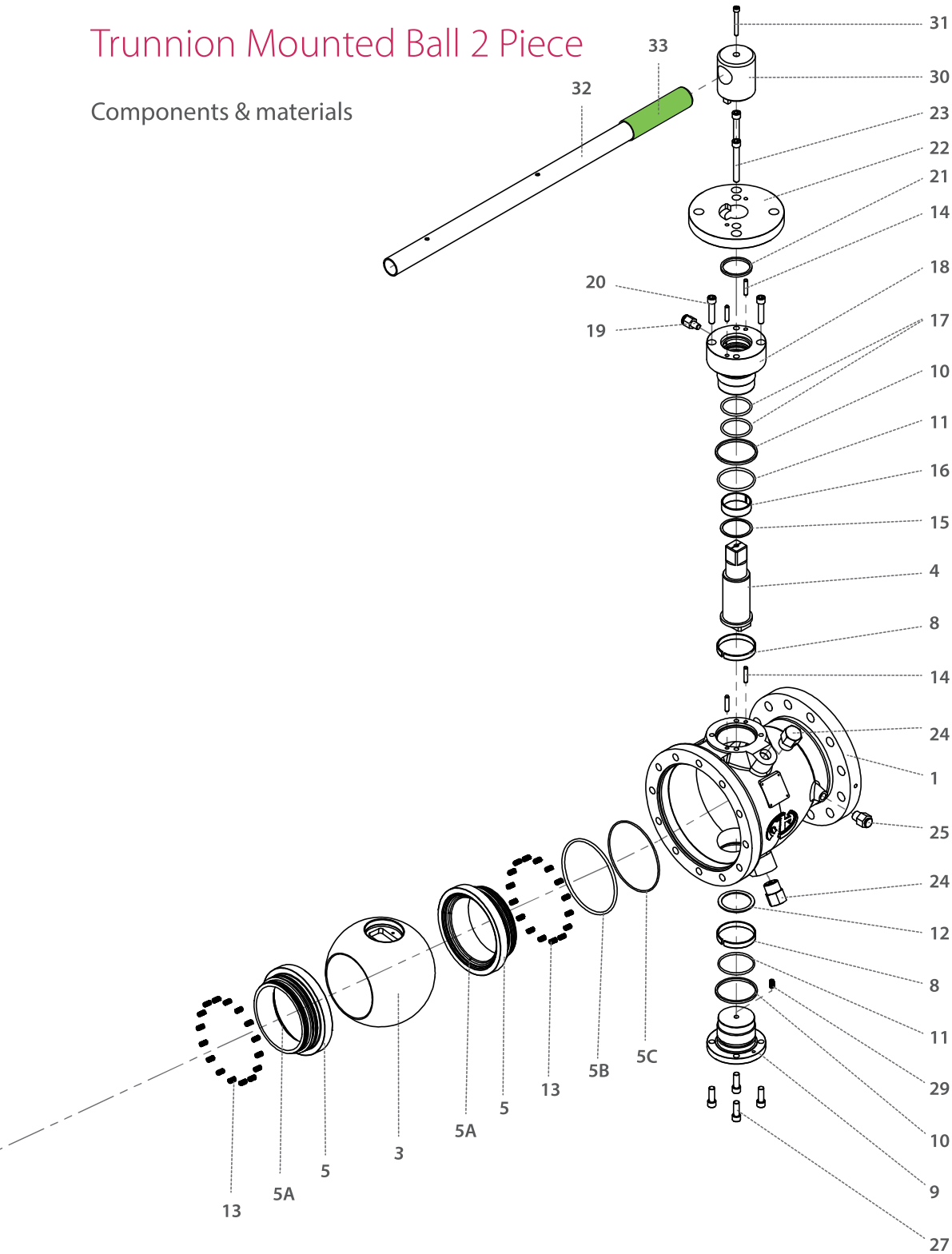
** Available from 6" size only





Trunnion Mounted Ball 2 Piece

Components & materials





Trunnion Mounted Ball 2 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	.	.	30
6	0			F	B	8	1		-	4	6	6	D	V	V	G	/	1	5	0					
Size		Features				Series		Design		Body & ends material		Stem material	Ball material	Seat feature	Seat insert	Inner Seal material	Outer Seal material	End connection				Special features			

Size (1-2)		
Code	inch	mm
20	2"	50
30	3"	80
40	4"	100
60	6"	150
80	8"	200
A0	10"	250
A2	12"	300
A4	14"	350

Features (3-6)	
F	Fire safe
B	Full port
H	Hydrogen Service
Series - 2 Piece Cast (7-8)	
81	ASME B16.5 #150 Flanged RF
82	ASME B16.5 #300 Flanged RF
83	ASME B16.5 #600 Flanged RF
Design (9)	
Blank	(Stands For future designs)
Body & ends material (11)	
4	C. Steel A216 WCB
6	S. Steel A351 CF8M
Stem material (12)	
6 *	S. Steel A479 316\316L
Q **	S. Steel A182 F6A
M	High Strength S. Steel
Z	Inconel 718 B637 N07718
W	Haselloy C-22
D	Duplex
K	Super Duplex
S	254SMO

* for 81, 82 not for 83

** for 83

Ball material (13)	
6	S. Steel A182 F316
4	C. Steel A350 LF2+ENP
F	C. Steel A105+ENP
Seat feature (14)	
D	Double Piston Effect (DPE) (API 6D DIB-1)
S	Single Piston Effect (SPE) (API 6D DBB)
C	DPE & SPE combination
Seat insert (15)	
V	Devlon
P	CF PTFE
K	CF PEEK
Inner Seal (16)	
V	Viton
H	HNBR
Outer Seal (17)	
G	Graphite

End Connection (19-22)		
Flanged		Series
150	ASME B16.5 #150	81
300	ASME B16.5 #300	82
600	ASME B16.5 #600	83
Special Features (23-30)		
L *	seat greasing point	
D	Drain & Vent	
Blank	Greasing point, Drain & vent is capped	
PT **	Basic paint system	
P1	Offshore, Temp Ambient up to 93°C (200°F)	
P2	Offshore, up to 537°C (1000°F)	

* for 6" and up

** colors RAL 1018 or 7036 (other colors upon request)

In some applications the available options above are limited to specific sizes please consult with Habonim for details