

# Flanged valves



# Floating Ball Valves

## Flanged valves

General

HermetiX™

HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

Ordering  
code system

Size ¼"- 2" | Class 900 | DN8-DN50 | Series C47C

### Introduction

### Valve dimensions

Habonim flanged valves provide high durability and exceptional performance even under the most extreme conditions. The Habonim line of flanged valves includes end connections that comply with ANSI B16.5 class 150 and class 300 (in both standard port and full port) and EN 1092 (DIN flanged valves) PN16 and PN40 in full port.

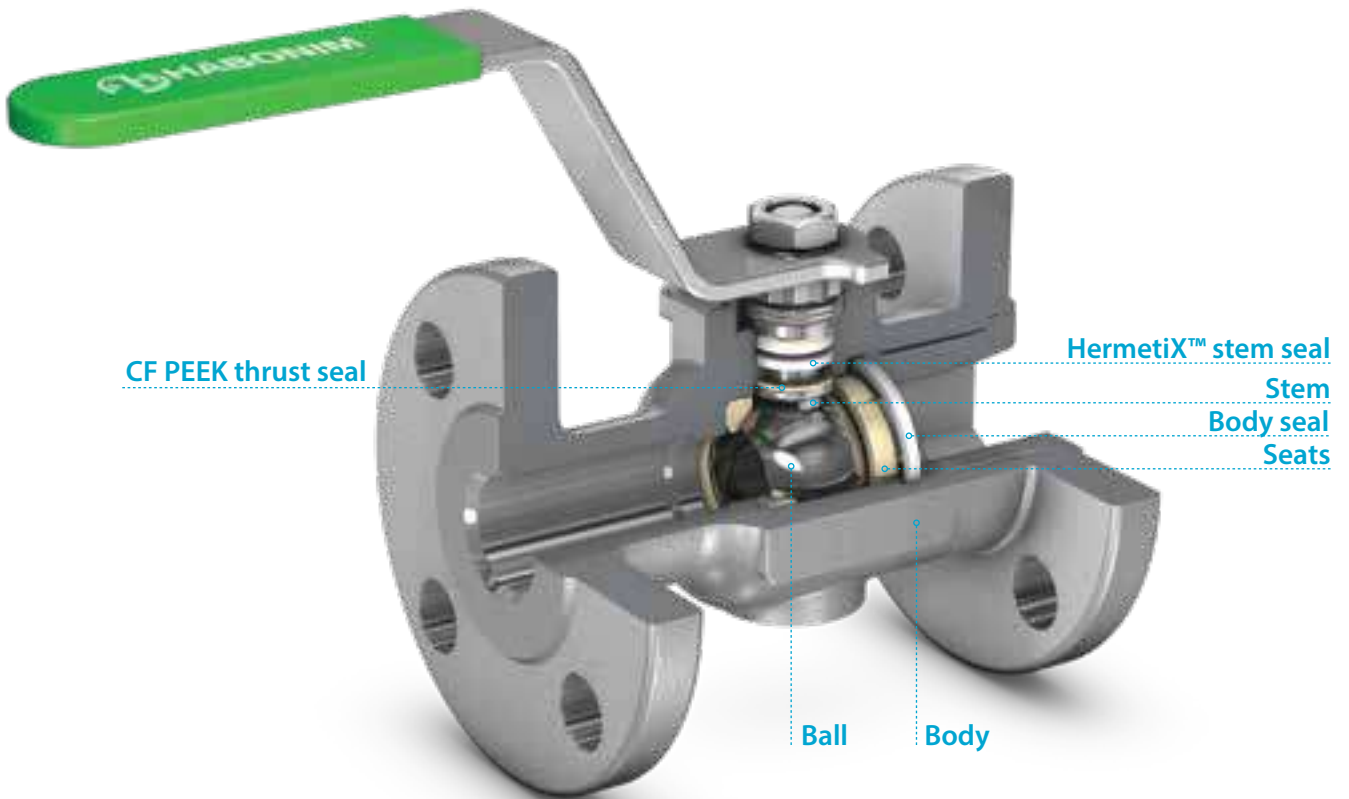
## Technical summary

<b>Size range</b>	½"- 8" (DN15 - DN200)
<b>Flange connection</b>	31 series - ANSI 150 Standard port 32 series - ANSI 300 Standard port 73 series - ANSI 150 full port 74 series - ANSI 300 full port 77 series - DIN PN16 full port 78 series - DIN PN40 full port
<b>Pressure range</b>	Vacuum 10 <sup>-6</sup> Tor to 50 bar (750 psi)
<b>Temperature range</b>	-60 °C to +260 °C (-76 °F to +500 °F)
<b>Materials</b>	Stainless steel A351 CF8M, carbon steel A216 WCB, bronze, alloy C22, alloy C276, duplex, super duplex, 254SMO, inconel 625, monel 400 and more
<b>End connections</b>	Flanged
<b>Operation</b>	Lever or gear operated, pneumatic or electric actuated
<b>Service</b>	Chemical, petrochemical, oil and gas, energy, pulp & paper and others

## Standards of compliance

<b>Factory certification</b>	ISO 9001:2015	Quality management system
<b>Valve design and tests</b>	ASME B16.34:2013 API 6D / ISO14313:2007 ISO17292 :2004 ASME B16.5:2017, EN 1092 -1:1997 ASME B16.10:2017, EN 558:2017 NACE MR-0175:2015/ISO 15156 -1:2015  NACE MR0103/ISO 17945:2015  EN 12266-1:2012, API 598:2016  API 607:2016, ISO 10497:2010 ISO 15848-1:2015	Valve design  Flange dimensions Face-to-Face dimensions Materials for use in H2S-containing environments in oil and gas production  Metallic materials resistant to sulfide stress cracking in corrosive petroleum refining environments Testing of metallic valves - pressure tests, test procedures and acceptance criteria  Testing of valves - fire type-testing requirements Industrial valves - measurement, test and qualification procedures for fugitive emissions
<b>Certifications</b>	PED 2014/68/EU Module H ATEX 2014/34/EU  IEC 61508-2/3:2010 SIL2/3	Pressure equipment directive Equipment and protective systems intended for use in potentially explosive atmospheres (optional for actuated unit only)  Safety integrity level - Functional safety of electrical/ electronic/programmable electronic safety-related systems (optional for actuated unit only)
<b>Documentation</b>	EN 10204:2004 2.2/3.1/3.2	Metallic materials - types of inspection documents

## Design features



### Body

- One-and two-piece valve design
- Cast body-flange connection
- Full compliance with ASME B16.34 and API 6D
- Spiral groove flange face to 3.2-6.3 Ra
- Tongue and groove design for DIN flanges as per EN1092 Pt. 1&2 or Russian GOST standard GOST 12815-80
- Top mounting platform compliant with ISO 5211 for easy mounting of actuator and other accessories
- Carbon steel valves are phosphate to MIL-DTL-13924D standard or available in epoxy paint finish upon request
- Stainless steel and high alloy valves provided with natural finish
- Steam jacket - upon request

### Ball

- Mirror polished solid ball
- Pressure equalizing hole in the stem slot
- Variety of materials and designs

### Stem

- One-piece solid stem
- Blowout-proof design
- Antistatic device
- Fire-lip

### HermetiX™ stem seal

- ISO 15848-1 certified
- High endurance up to 500 cycles
- Graphite-free fire-safe certified stem seal
- Anti-abrasion mechanism
- Live loaded

### Seats and seals

- Flexible seat design
- Reduced wear
- Low torque
- Rate A leakage tightness
- Self-relief seat (SRS) - upon request
- Variety of materials and designs

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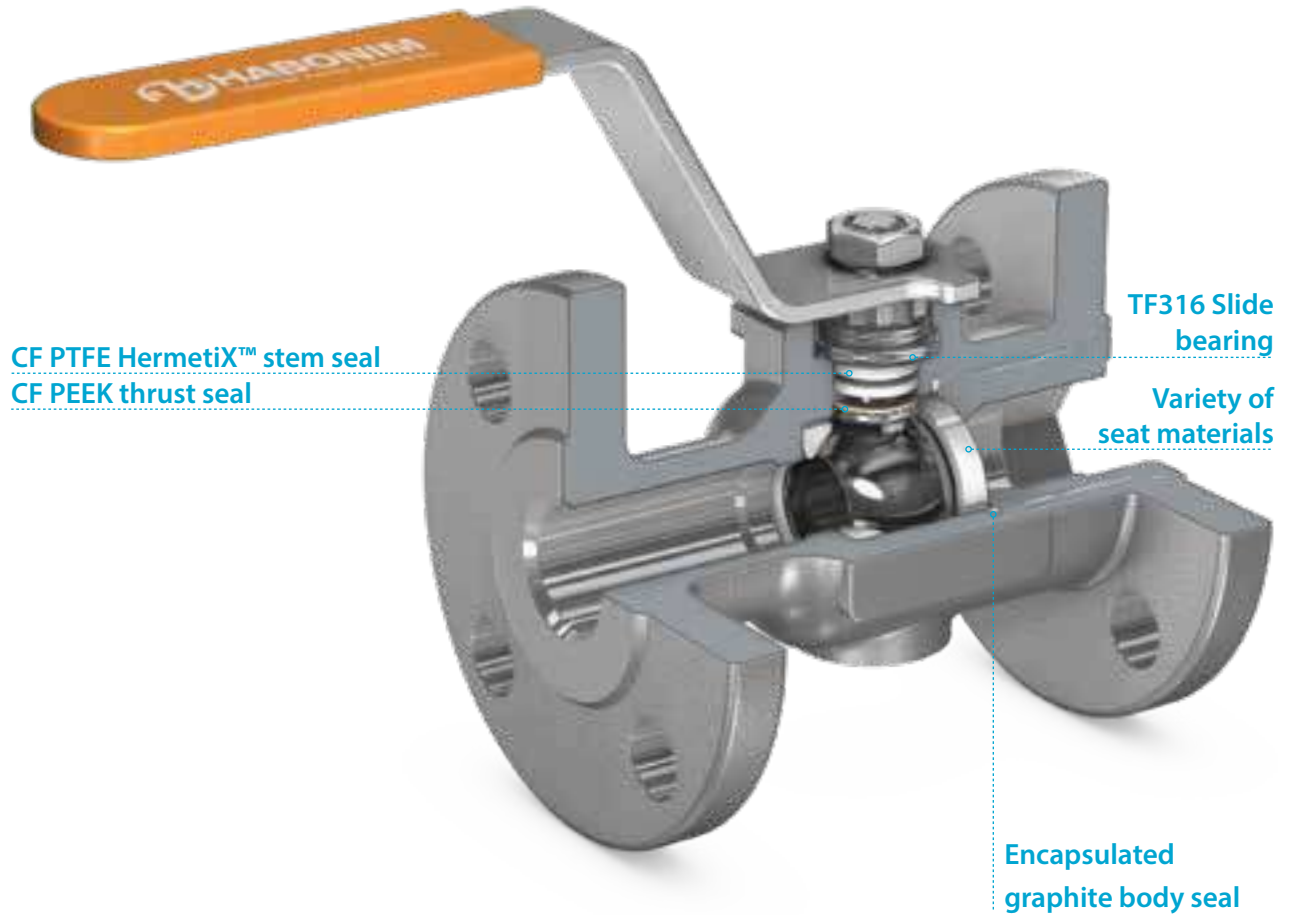
HermetiX™

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Graphite-free fire-safe

Ordering  
code system

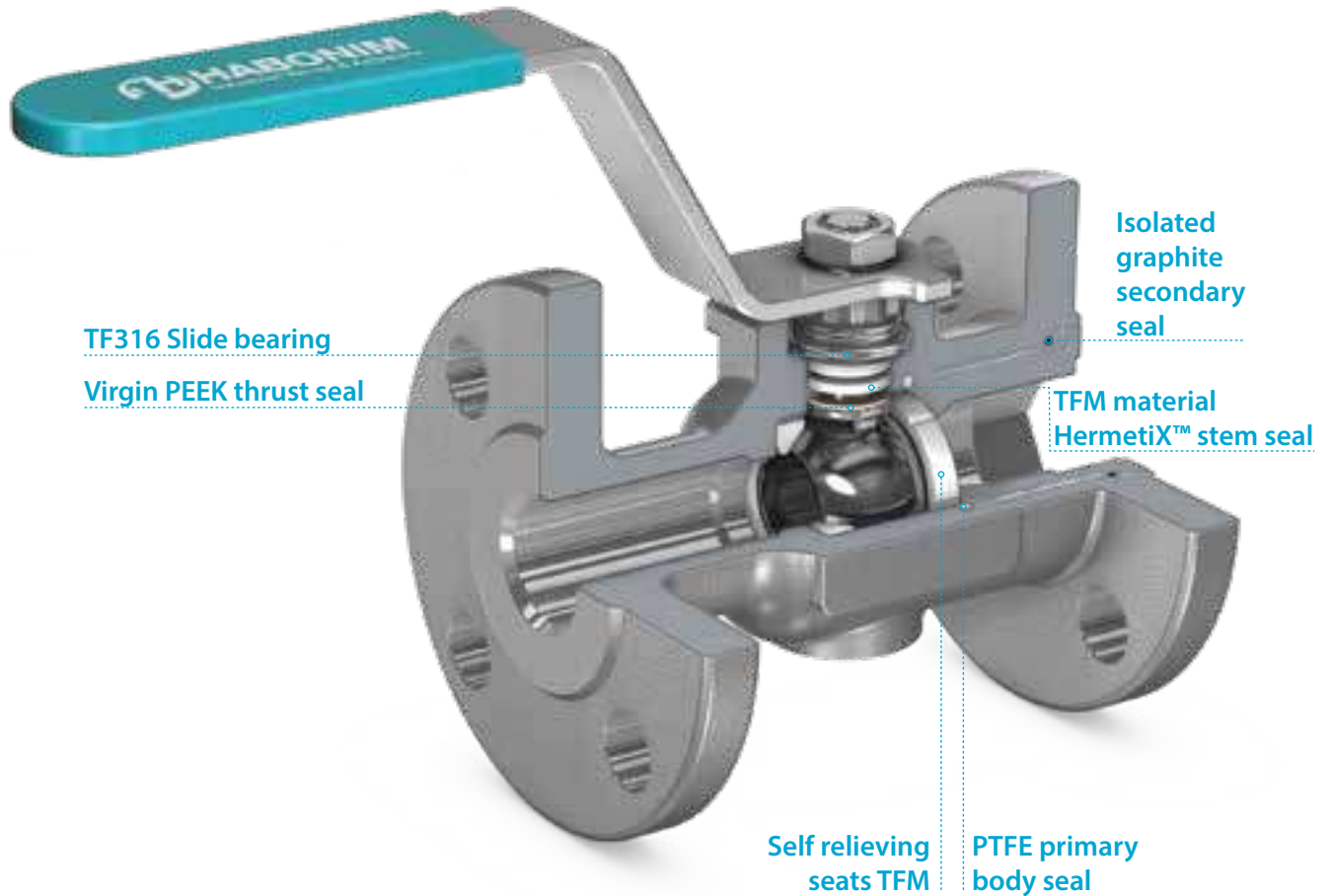
## HermetiX™ Fire-safe stem seal



### Unique design features

- Graphite-free fire-safe stem seal
- Ensures uninterrupted production
- Fugitive emission certified to ISO 15848-1
- Fire safe design to API 607 and ISO 10497
- Designed to operate for 500,000 cycles without refurbishment
- Increases site safety
- Habonim design Patent No. D598, 988

## HermetiX™ Fire-safe graphite free valve



### Unique design features

- Prevents media contamination from graphite particles
- FDA approved polymer materials
- Ensures uninterrupted production
- Fugitive emission designed to ISO 15848-1
- Fire-safe design to API 607 and ISO 10497
- Cleaned, assembled and packed for Biopharma / API service
- Designed to operate for 500,000 cycles without refurbishment
- Increases site safety
- Self-relieving seats (SRS) as standard
- Habonim design Patent No. D598,988

# Floating Ball Valves

## Flanged valves

General

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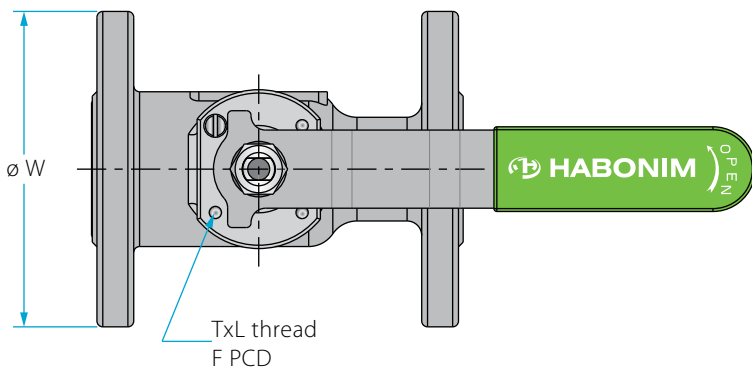
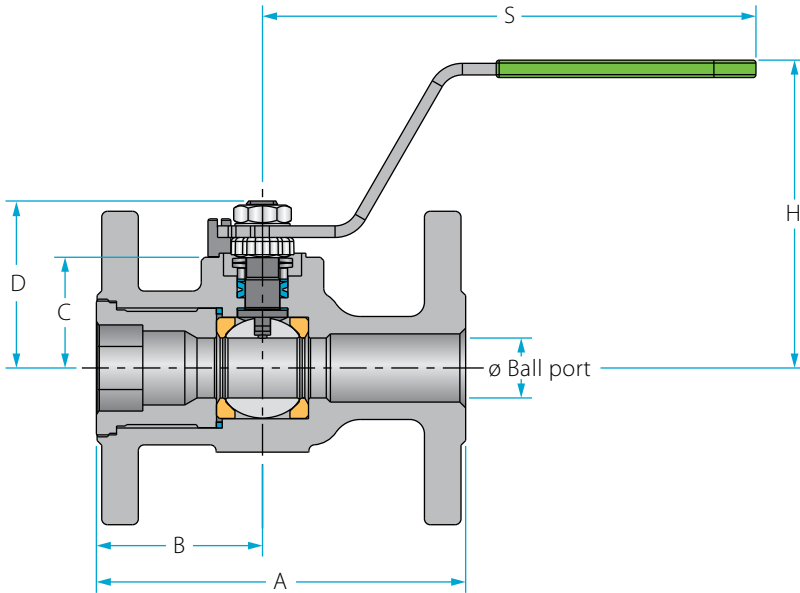
HermetiX™  
Fire-safe

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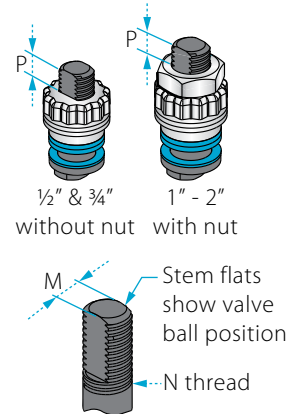
Ordering  
code system

Size ½"-2" | DN15-DN50 | ANSI Class 150/300 | 31X/32X, 31P<sup>(1)</sup>/32P<sup>(1)</sup> Series

### Valve dimensions

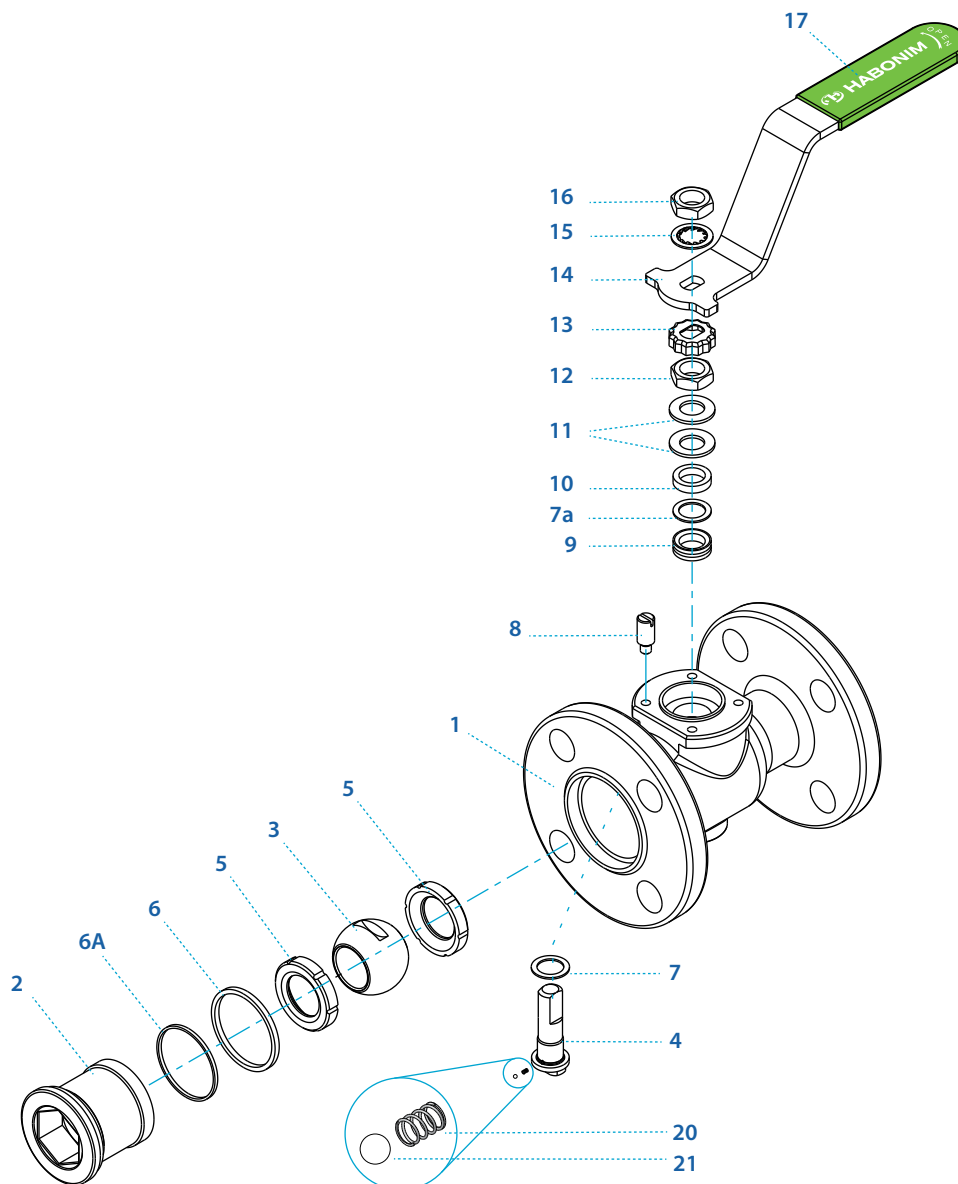


### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	W		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300						150	300						150	300	
DN15	mm	11.15	108.00	140.00	46.00	29.00	38.00	92.00	151.00	88.90	95.25	5.54	3/8 - UNF	6.65 (F03)	36.00	M5x10	1.70	2.40	6.9
½"	inch	0.44	4.25	5.50	1.81	1.14	1.50	3.62	5.94	3.50	3.75	0.22	UNF	0.26	1.42	M5x10	3.80	5.30	8.0
DN20	mm	14.30	117.00	152.00	49.00	31.40	40.30	94.00	151.00	98.55	163.07	5.54	3/8 - UNF	6.65 (F03)	36.00	M5x10	2.30	3.30	10
¾"	inch	0.56	4.61	6.00	1.93	1.24	1.59	3.70	5.94	3.88	6.42	0.22	UNF	0.26	1.42	M5x10	5.10	7.30	12
DN25	mm	20.60	127.00	165.00	57.00	38.20	55.60	103.50	170.00	107.95	123.95	7.54	7/16 - UNF	7.40 (F04)	42.00	M5x10	3.10	4.60	28
1"	inch	0.81	5.00	6.50	2.25	1.50	2.19	4.07	6.69	4.25	4.88	0.30	UNF	0.29	1.65	M5x10	7.30	10.20	32
DN40	mm	31.80	165.00	190.00	62.00	43.60	73.10	119.20	220.50	127.00	155.52	8.71	9/16 - UNF	8.50 (F05)	50.00	M6x12	5.50	8.70	69
1½"	inch	1.25	6.50	7.50	2.44	1.72	2.88	4.70	8.68	5.00	6.10	0.34	UNF	0.33	1.97	M6x12	12.20	19.30	80
DN50	mm	38.20	178.00	216.00	68.00	48.30	77.80	123.90	220.50	152.40	165.10	8.71	9/16 - UNF	8.50 (F05)	50.00	M6x12	8.10	10.80	102
2"	inch	1.50	7.00	8.50	2.67	1.90	3.06	4.88	8.68	6.00	6.50	0.34	UNF	0.33	1.97	M6x12	18.00	24.00	118

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Plug	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, CF PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
6A***	Support ring	A479 316L, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1

Item	Description	Material specification	Qty.
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

<sup>(1)</sup> 31P/32P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 31P/32P design.

\* Repair kit components

\*\* Only with HermetiX™ stem seal

\*\*\* Only with graphite body seal

# Floating Ball Valves

## Flanged valves

General

HermetiX™

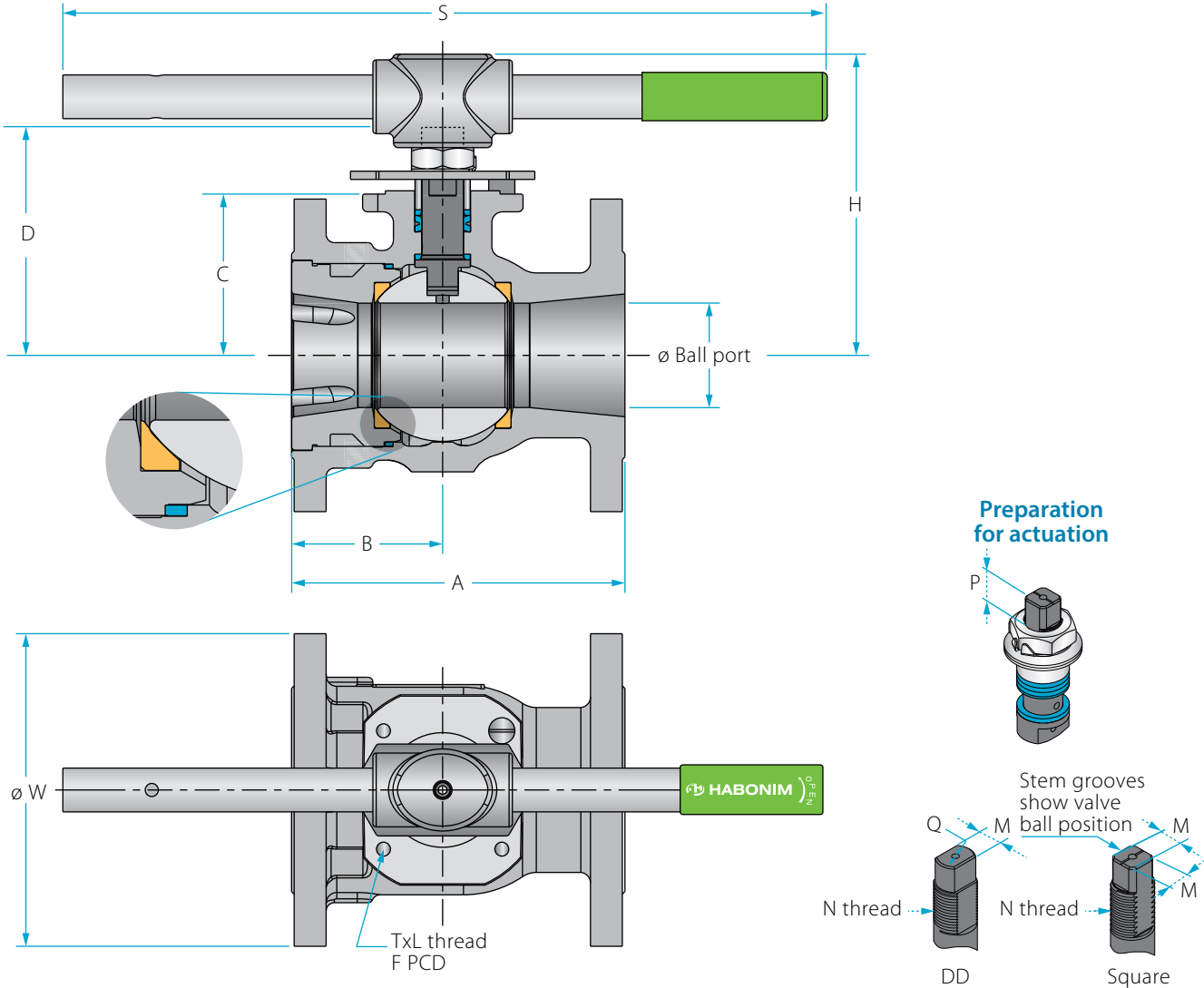
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

Ordering  
code system

Size 3"-8" | DN80-DN200 | ANSI Class 150/300 | 31X/32X, 31P<sup>(1)</sup>/32P<sup>(1)</sup> Series

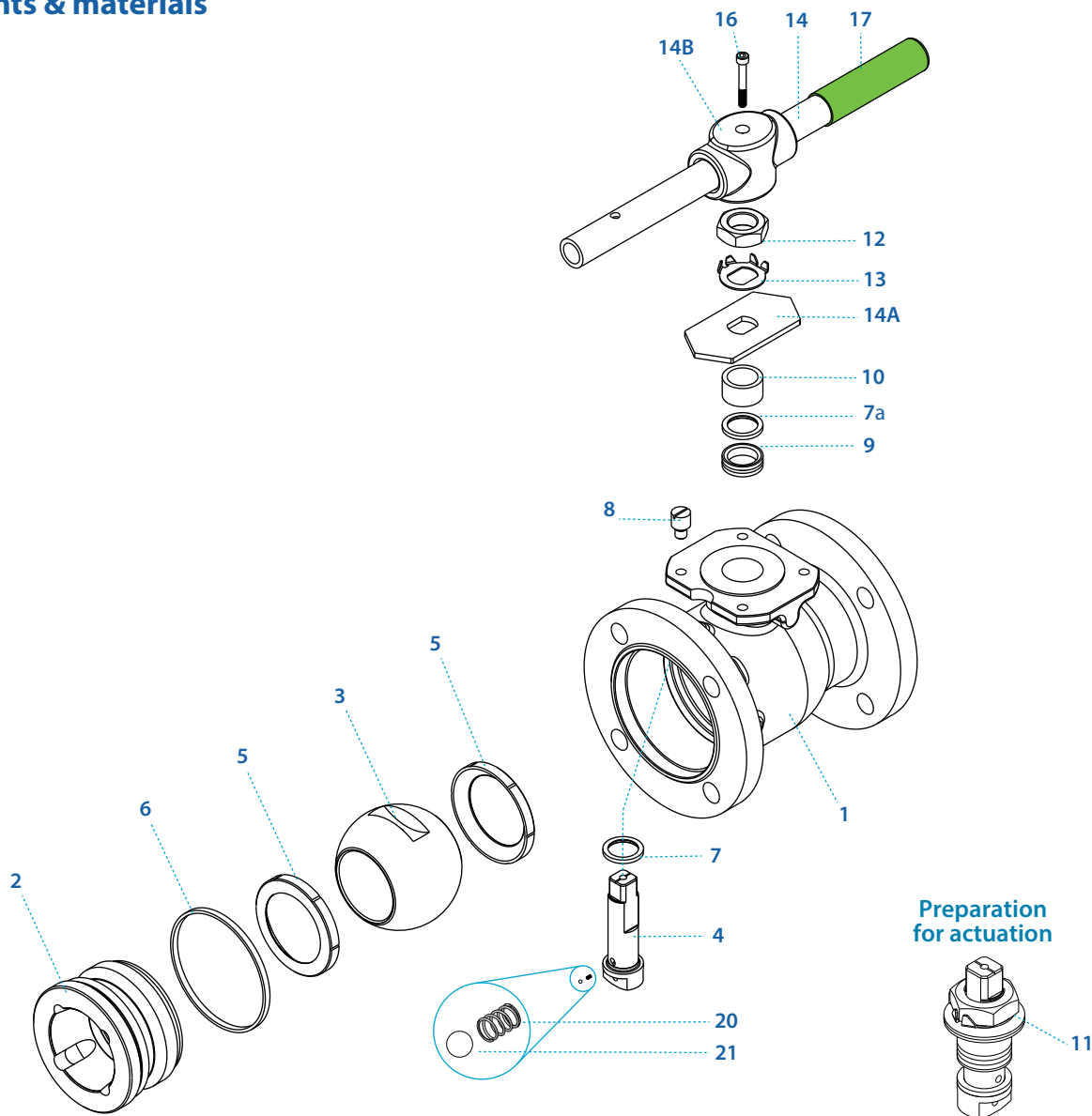
### Valve dimensions



Std. port	Unit	Ball port	A		B	C	D	H	S	W		M	M-DD	N	P	Q	F	TxL	Weight kg/lb		Kv	
			150	300						150	300								150	300		
DN80	mm	63.50	203.00	284.00	92.00	98.40	145.00	185.10	400.00	190.50	209.55	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10x20	18.00	22.70	300
3"	inch	2.50	8.00	11.18	3.62	3.88	5.72	7.28	15.75	7.50	8.25	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10x20	40.00	50.40	348
DN100	mm	82.60	229.00	305.00	102.00	114.10	161.00	201.00	610.00	228.60	254.00	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10x20	28.20	36.30	615
4"	inch	3.25	9.00	12.00	4.00	4.49	6.34	7.91	24.01	9.00	10.00	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10x20	62.80	80.60	713
DN150	mm	111.10	267.00	403.20	108.00	157.40	226.00	285.90	916.00	279.40	317.50	28.45	23.75	1½"-12	26.20	35.20	(F12)	125.00	M12x20	41.00	69.00	872
6"	inch	4.38	10.50	15.88	4.25	6.20	8.91	11.25	36.08	11.00	12.50	1.12	0.94	UNF-2A	1.03	1.39		4.92	M12x20	91.00	153.00	1012
DN200	mm	144.40	292.00	419.00	163.50	185.20	254.00	313.60	916.00	342.90	381.00	28.45	23.75	1½"-12	26.20	35.20	(F12)	125.00	M12x20	82.00	105.00	1552
8"	inch	5.68	11.50	16.50	5.37	7.30	10.00	12.34	36.08	13.50	15.00	1.12	0.94	UNF-2A	1.03	1.39		4.92	M12x20	182.00	233.00	1800



Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Plug	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, CF PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
8	Stop pin	A582 303	1

Item	Description	Material specification	Qty.
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	C.st B18 ZP	1
13	Tab lock washer	A240 304	1
14	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

\* Repair kit components

\*\* Only with HermetiX™ stem seal

<sup>(1)</sup> 31P/32P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 31P/32P design.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

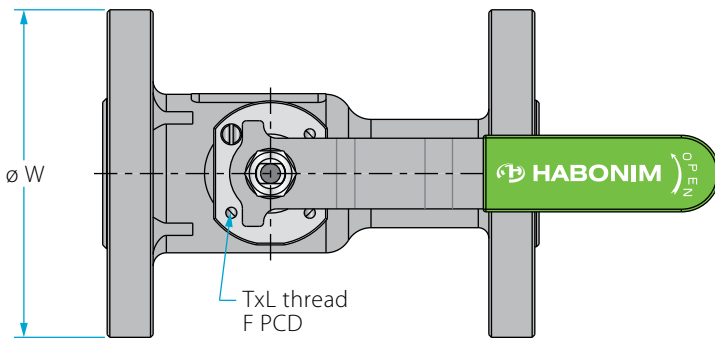
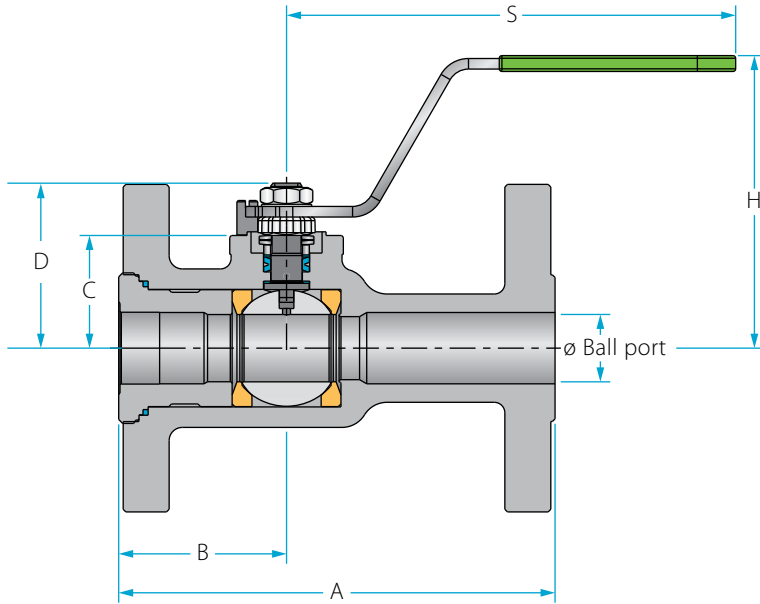
HermetiX™  
Fire-safe

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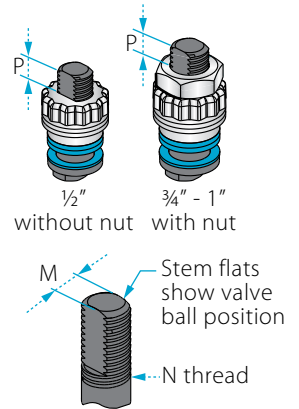
Ordering  
code system

Size ½"-1" | DN15-DN25 | ANSI Class 150/300 | 73X/74X, 73P<sup>(1)</sup>/74P<sup>(1)</sup> Series

### Valve dimensions

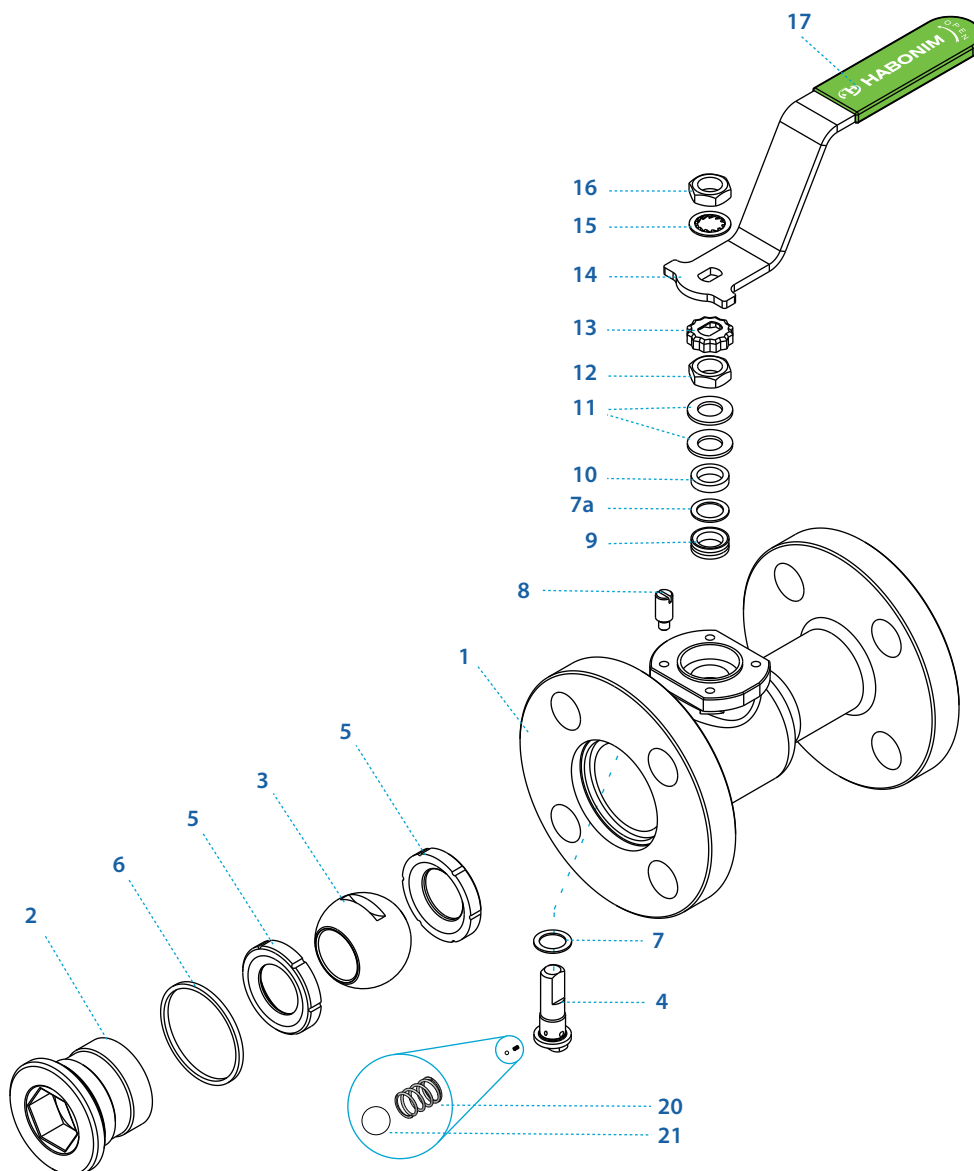


### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	ØW		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300						150	300						150	300	
DN15	mm	14.30	108.00	140.00	47.00	31.40	40.50	94.00	151.00	89.00	95.00	5.54	¾" UNF	6.65 (F03)	36.00	M5x10	1.80	2.30	28
½"	inch	0.56	4.25	5.51	1.85	1.24	1.59	3.70	5.95	3.50	3.74	0.22		0.26	1.42		4.00	5.10	32
DN20	mm	20.60	117.00	152.00	57.00	38.20	55.60	103.50	170.00	98.00	117.00	7.54	7/16" UNF	7.40 (F04)	42.00	M5x10	2.20	3.30	46
¾"	inch	0.81	4.61	5.98	2.24	1.50	2.19	4.08	6.69	3.86	4.61	0.30		0.29	1.65		4.80	7.30	53
DN25	mm	25.40	127.00	165.00	62.00	42.70	60.30	108.00	170.00	108.00	124.00	7.54	7/16" UNF	7.40 (F04)	42.00	M5x10	3.20	4.60	80
1"	inch	1.00	5.00	6.50	2.44	1.68	2.37	4.25	6.69	4.25	4.88	0.30		0.29	1.65		7.00	10.10	93

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Insert	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1

Item	Description	Material specification	Qty.
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

\*\* Only with HermetiX™ stem seal

<sup>(1)</sup> 73P/74P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 73P/74P design.

# Floating Ball Valves

## Flanged valves

General

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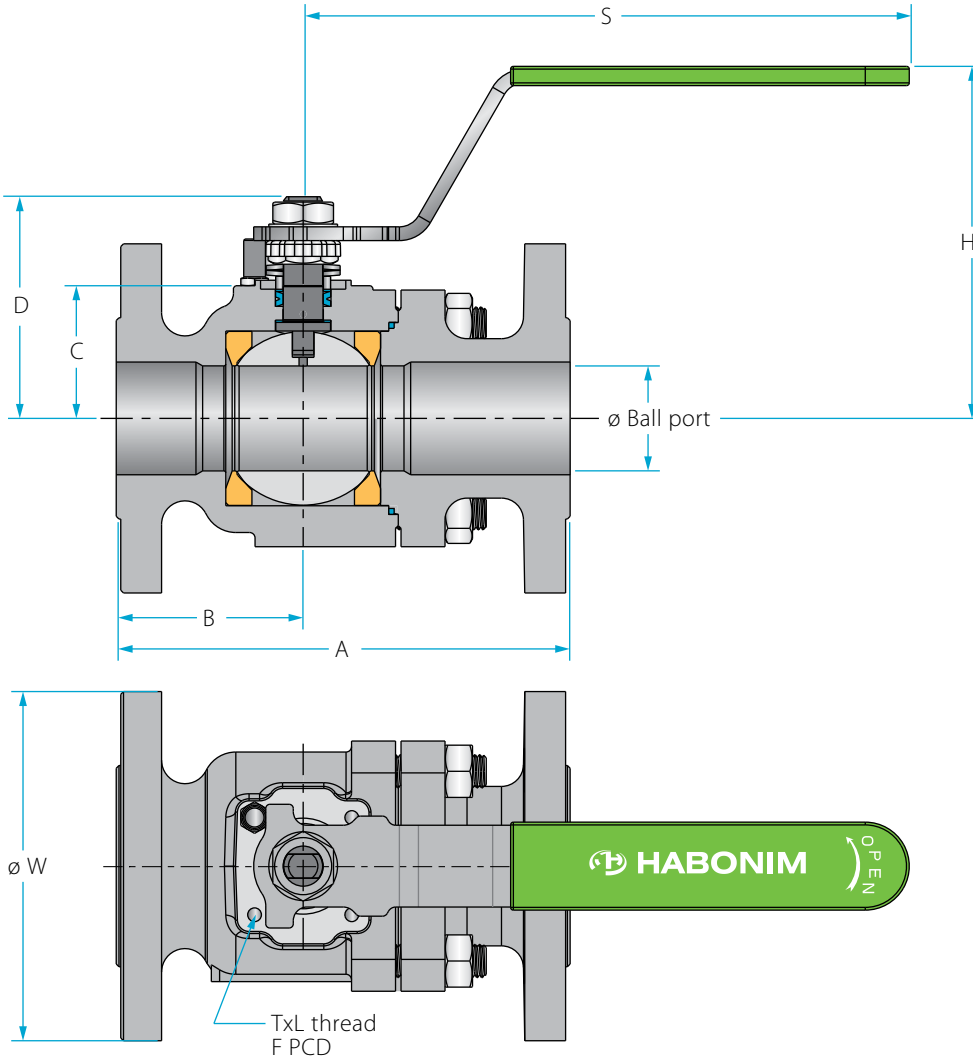
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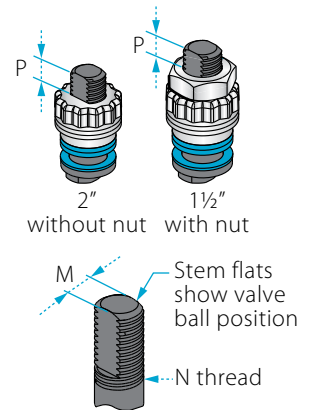
Ordering  
code system

Size 1½"-2" | DN40-DN50 | ANSI Class 150/300 | 73X/74X, 73P<sup>(1)</sup>/74P<sup>(1)</sup> Series

### Valve dimensions

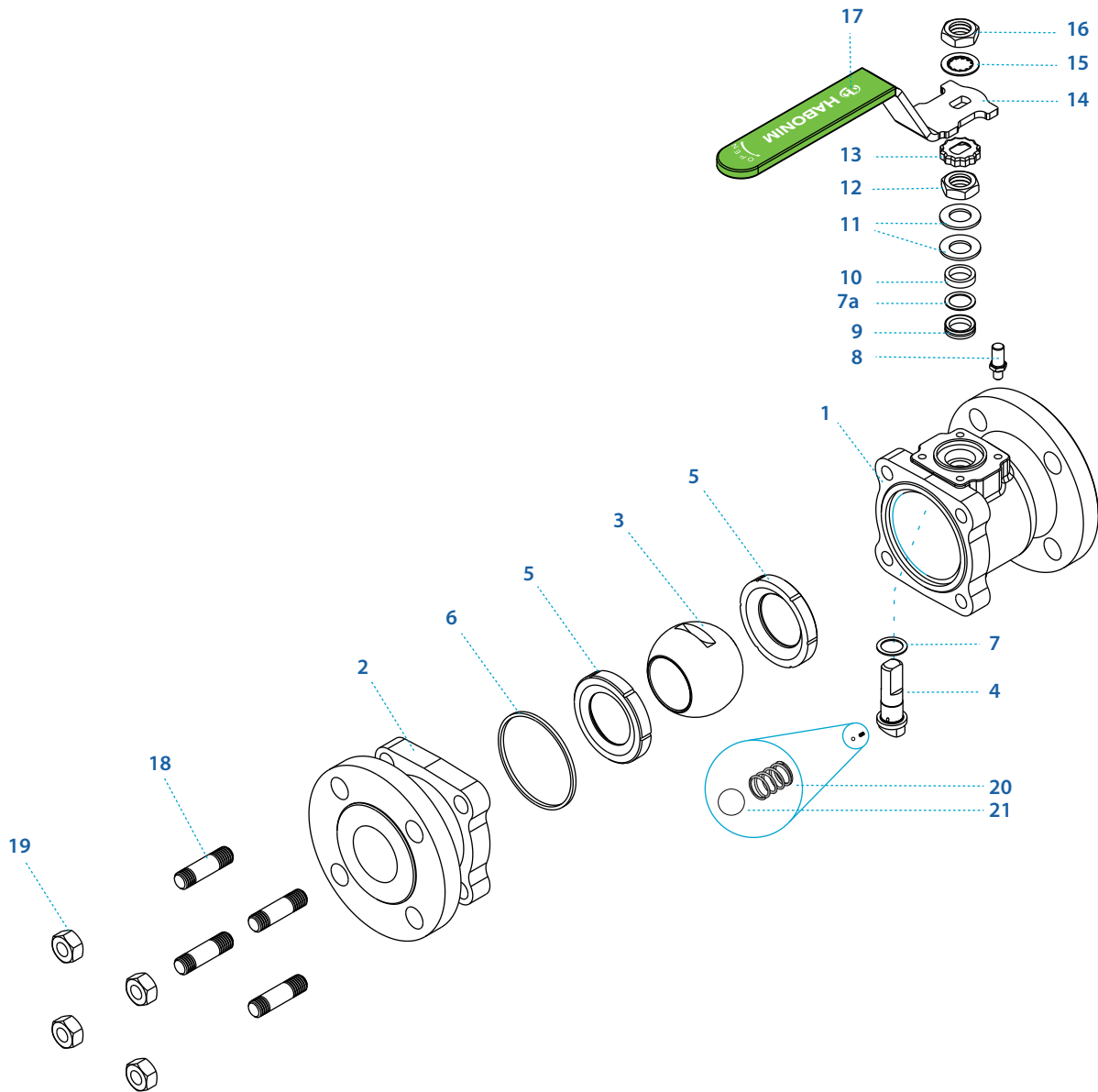


#### Preparation for actuation



Std. port	Unit	Ball port	A		B		C	D	H	S	ØW		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300	150	300					150	300								
DN40	mm	38.10	165.00	190.00	97.00	110.00	48.30	77.80	124.00	220.50	127.00	156.00	8.71	9/16" UNF	8.50 (F05)	50.00	M6x12	6.60	9.80	220
1½"	inch	1.50	6.50	7.50	3.82	4.33	1.90	3.06	4.88	6.68	5.00	6.14	0.34		0.33	1.97		14.50	21.50	255
DN50	mm	50.00	178.00	216.00	109.00	141.00	70.00	88.00	134.20	220.50	152.00	165.00	8.71	9/16" UNF	13.50 (F07)	70.00	M8x12	13.00	15.00	430
2"	inch	2.00	7.00	8.50	4.29	5.55	2.75	3.46	5.28	6.68	5.98	6.50	0.34		0.53	2.76		28.60	33.00	499

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	End	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A193 B8, B8A	1
17	Sleeve	PVC	1
18	Body bolts	A193 B8, EN3506-1 A2-70	4
19	Body nuts	A194 8M, EN3506-2 A4-80	4
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

\*\* Only with HermetiX™ stem seal

<sup>(1)</sup> 73P/74P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 73P/74P design.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

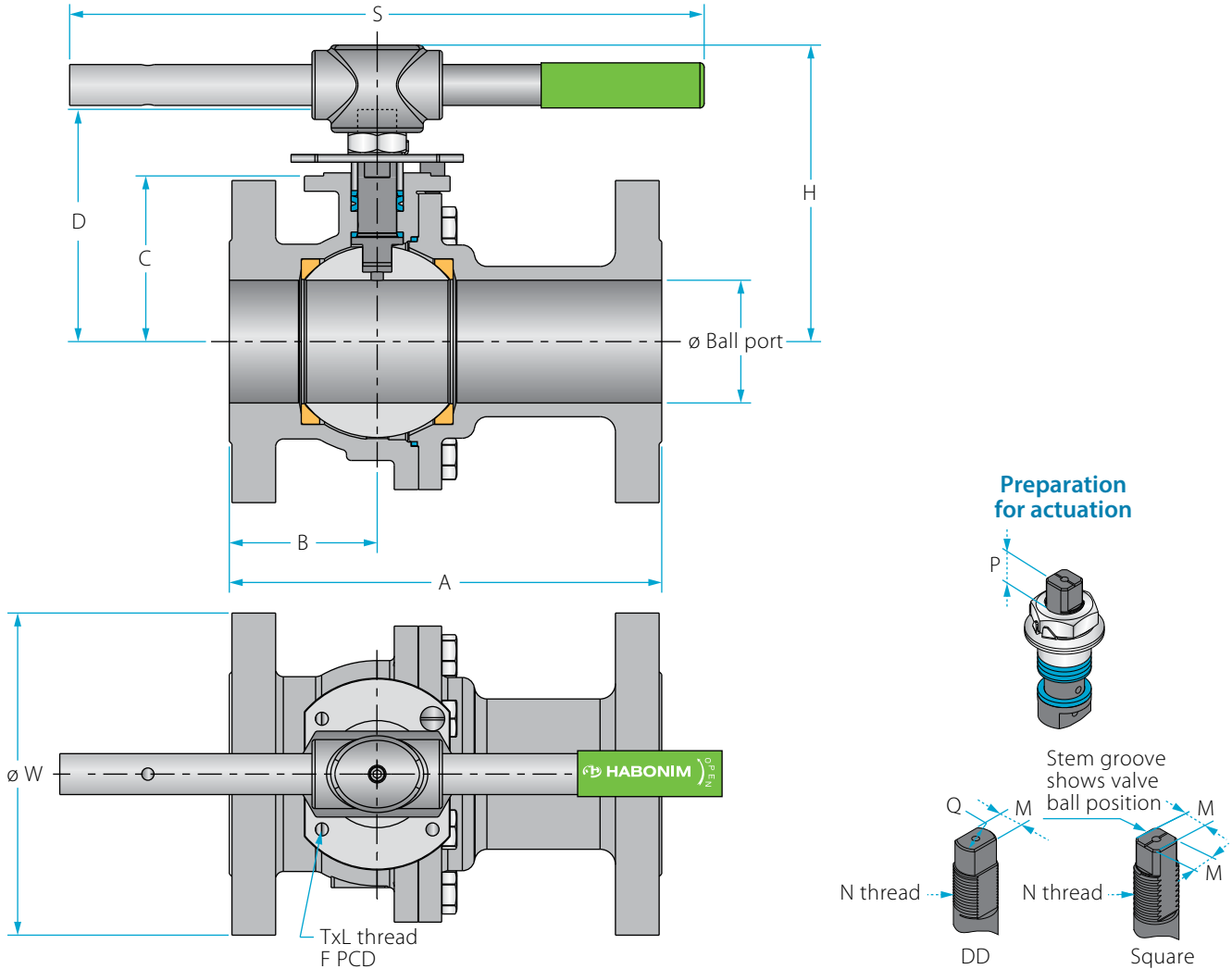
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

Ordering  
code system

Size 3"-8" | DN80-DN200 | ANSI Class 150/300 | 73X/74X, 73P<sup>(1)</sup>/74P<sup>(1)</sup> Series

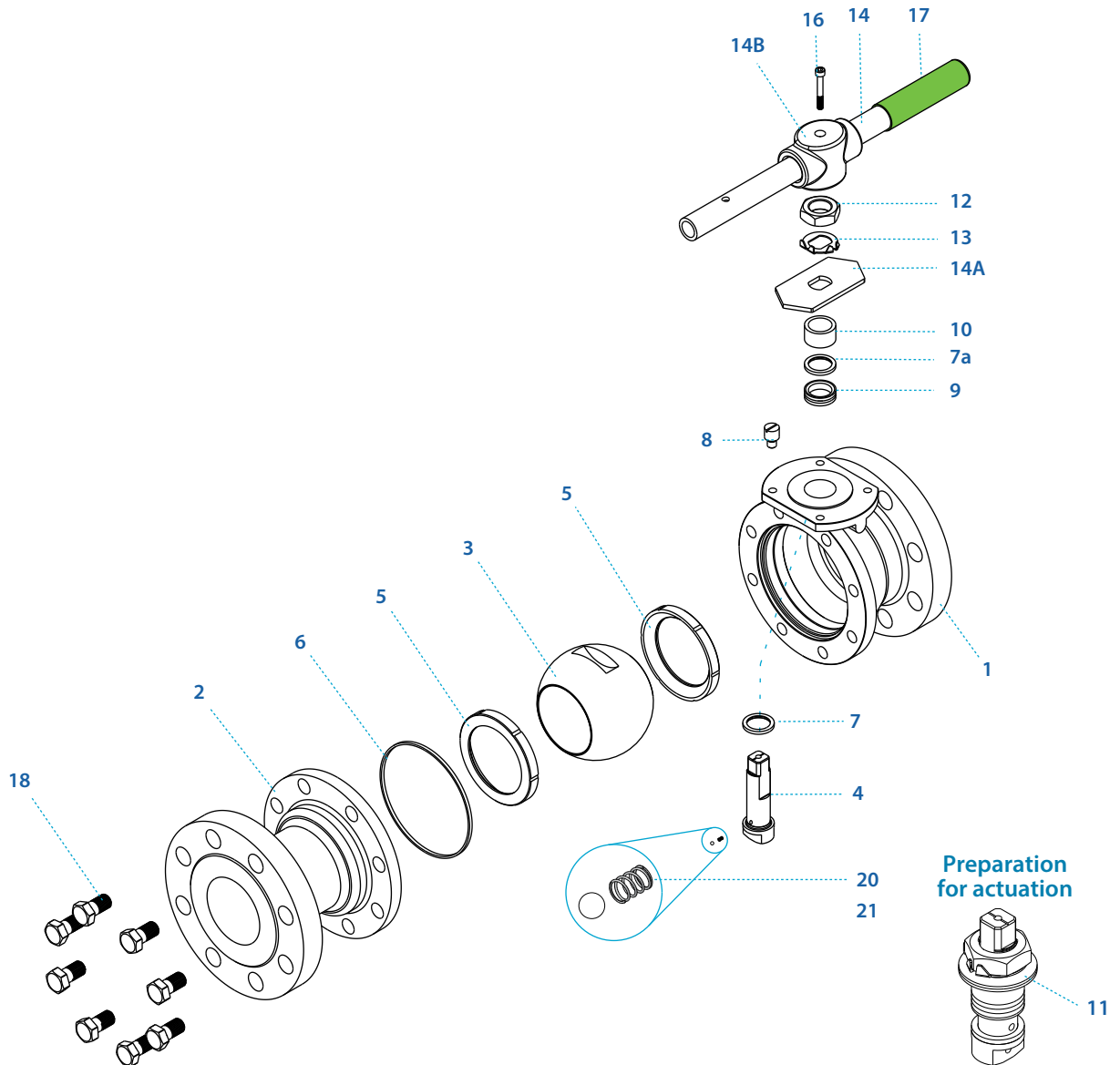
### Valve dimensions



Std. port	Unit	Ball port	A		B		C	D	H	S	ØW		M	M-DD	N	P	Q	F	TxL	Weight kg/lb		Kv	Cv	
			150	300	150	300					150	300												
DN80	mm	80.00	203.00	282.50	77.50	96.40	108.00	154.60	194.80	400.00	191.00	210.00	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10X20	22.00	28.20	1111	
3"	inch	3.15	7.99	11.12	3.05	3.80	4.25	6.09	7.67	15.75	7.52	8.27	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10X20	48.50	62.20	1300	
DN100	mm	100.00	228.50	304.80	84.50	104.50	124.00	210.80	211.00	610.00	230.00	254.00	18.90	15.90	1"-14	16.70	23.00	(F10)	102.00	M10X20	39.00	44.50	2051	
4"	inch	3.94	9.00	12.00	3.33	4.11	4.88	8.30	8.31	24.02	9.06	10.00	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10X20	86.00	98.10	2400	
DN150	mm	150.00	394.00	403.50	163.50	174.50	179.00	248.50	308.00	916.00	279.40	328.00	28.45	23.75	1½"-12	26.20	23.00	(F12)	125.00	M12X20	82.00	100.00	4615	
6"	inch	5.91	15.51	15.89	6.44	6.87	7.05	9.78	12.13	36.06	11.00	12.91	1.12	0.94	UNF-2A	1.03	0.91		4.92	M12X20	180.80	220.50	5400	
DN200	mm	200.00	457.20	502.00	242.50	241.00	241.00	353.70	-	-	460.00	460.00	35.92	35.92	2"-8	37.50	32.00	(F14)	140.00	M16X24	190.00	225.00	7949	
8"	inch	7.87	18.00	19.76	9.55	9.49	9.49	13.93	-	-	18.11	18.11	1.41	1.41	UN-2A	1.48	1.26		5.51	M16X24	418.90	496.00	9300	

<sup>(1)</sup> Due to high valve torque, pipe handle cannot be used. A manual gear or automation means should be used to operate the valve.

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	End	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, B574 N06022, A479 S31254, A479 S31600, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	C.St B18 ZP	1
13	Tab lock washer	A240 304	1
14***	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
18	Body bolts	C.St. 8.8 ZP, S.St. A2-70	8-12
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

<sup>(1)</sup> 73P/74P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 73P/74P design.

\* Repair kit components

\*\* Only with HermetiX™ stem seal

\*\*\* Gear operator should be used for size 8" DN200 (handle components are not included)

# Floating Ball Valves

## Flanged valves

General

HermetiX™

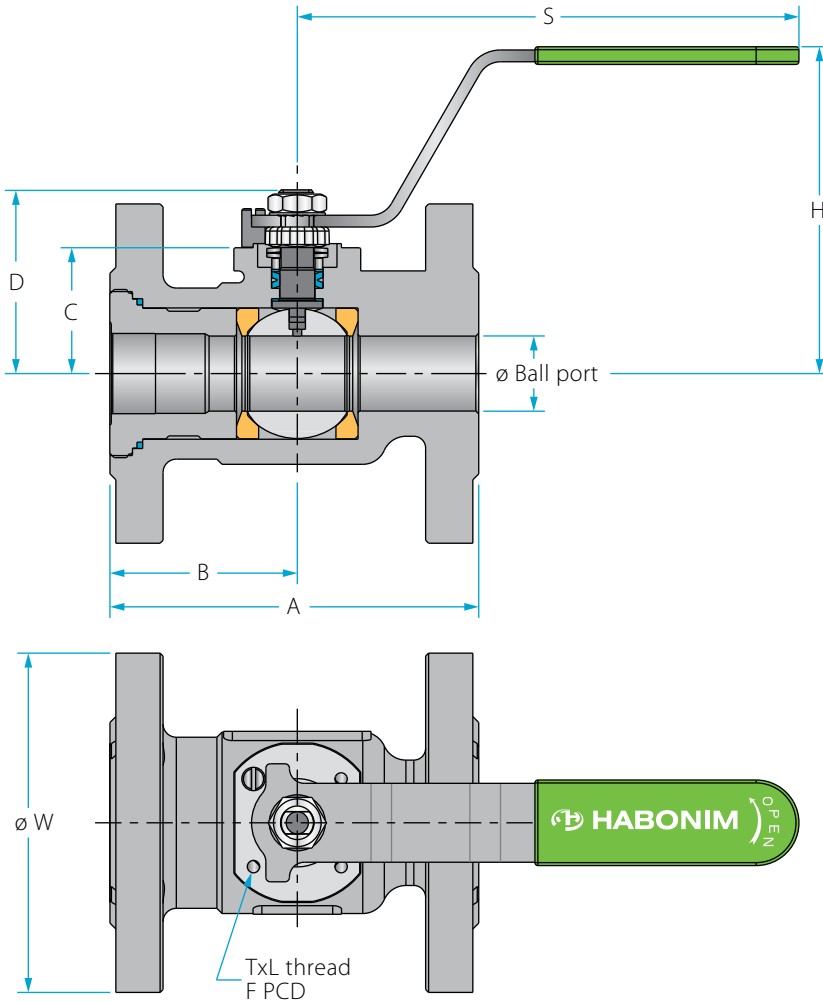
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

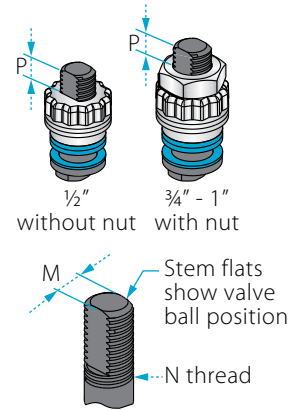
Ordering  
code system

Size ½"-1" | Class DN15-DN25 | DIN PN40 | 78X, 78P<sup>(1)</sup> Series

### Valve dimensions



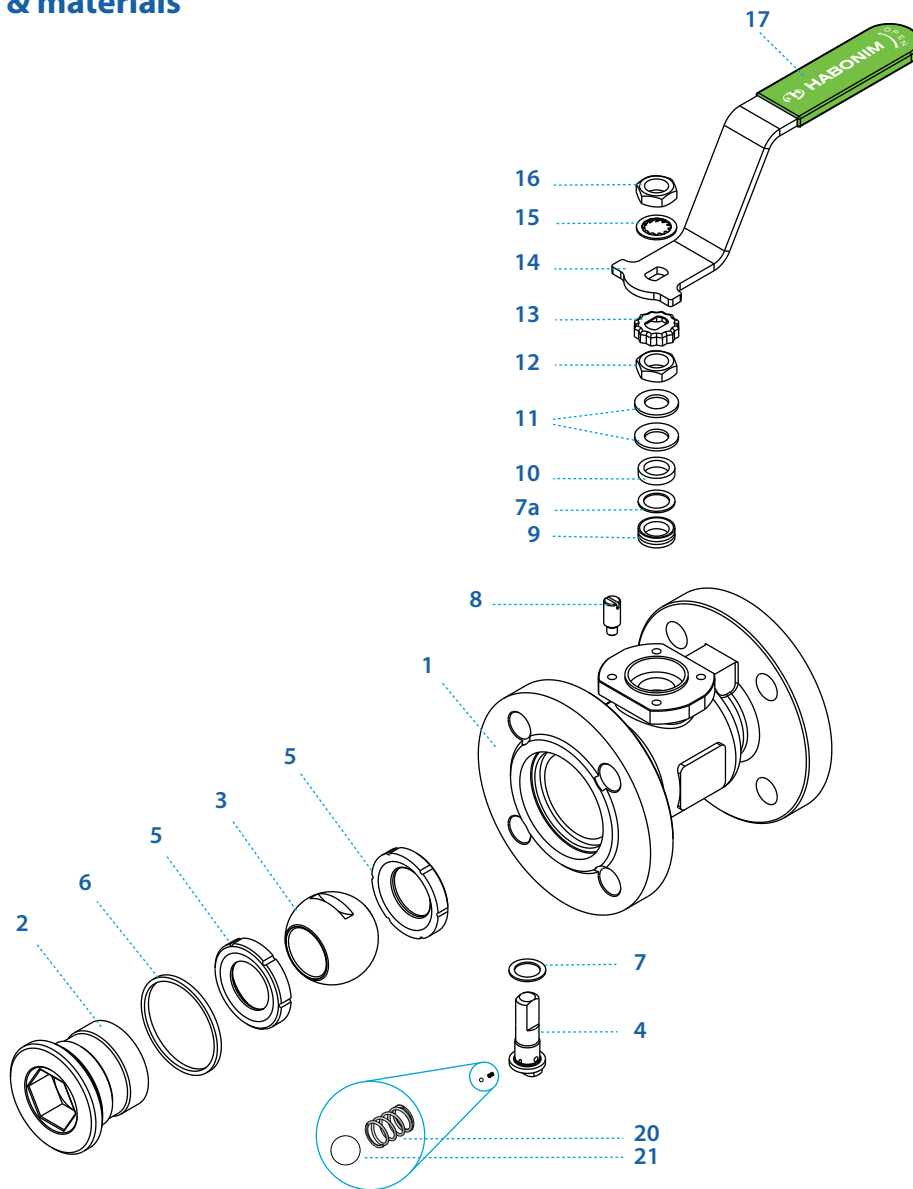
#### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	M	N	P	S	ØW	F	TxL	Weight kg/lb		Kv
			F1	F4												F1	F4	
DN15	mm	14.30	130.00	115.00	48.00	31.50	40.50	98.60	5.54	¾" UNF	6.65	160.00	95.00	(F03)36.00	M5x10	2.20	2.10	28
½"	inch	0.56	5.12	4.53	1.89	1.24	1.59	3.88	0.22		0.26	6.30	3.74	1.42		4.80	4.60	32
DN20	mm	20.60	150.00	120.00	58.00	38.30	56.50	105.00	7.54	7/16" UNF	7.40	170.00	105.00	(F04)42.00	M5x10	3.20	3.00	46
¾"	inch	0.81	5.91	4.72	2.28	1.51	2.22	4.13	0.30		0.29	6.69	4.13	1.65		7.00	6.60	53
DN25	mm	25.40	160.00	125.00	63.50	41.80	61.00	108.00	7.54	7/16" UNF	7.40	170.00	115.00	(F04)42.00	M5x10	4.20	4.00	80
1"	inch	1.00	6.30	4.92	2.50	1.65	2.40	4.25	0.30		0.29	6.69	4.53	1.65		9.20	8.80	93



Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	Plug	A351 CF8M	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr.630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
8	Stop pin	NiCr19NbMo (2.4668)	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1

Item	Description	Material specification	Qty.
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components  
 \*\* Only with HermetiX™ stem seal

<sup>(1)</sup> 78P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 78P design.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

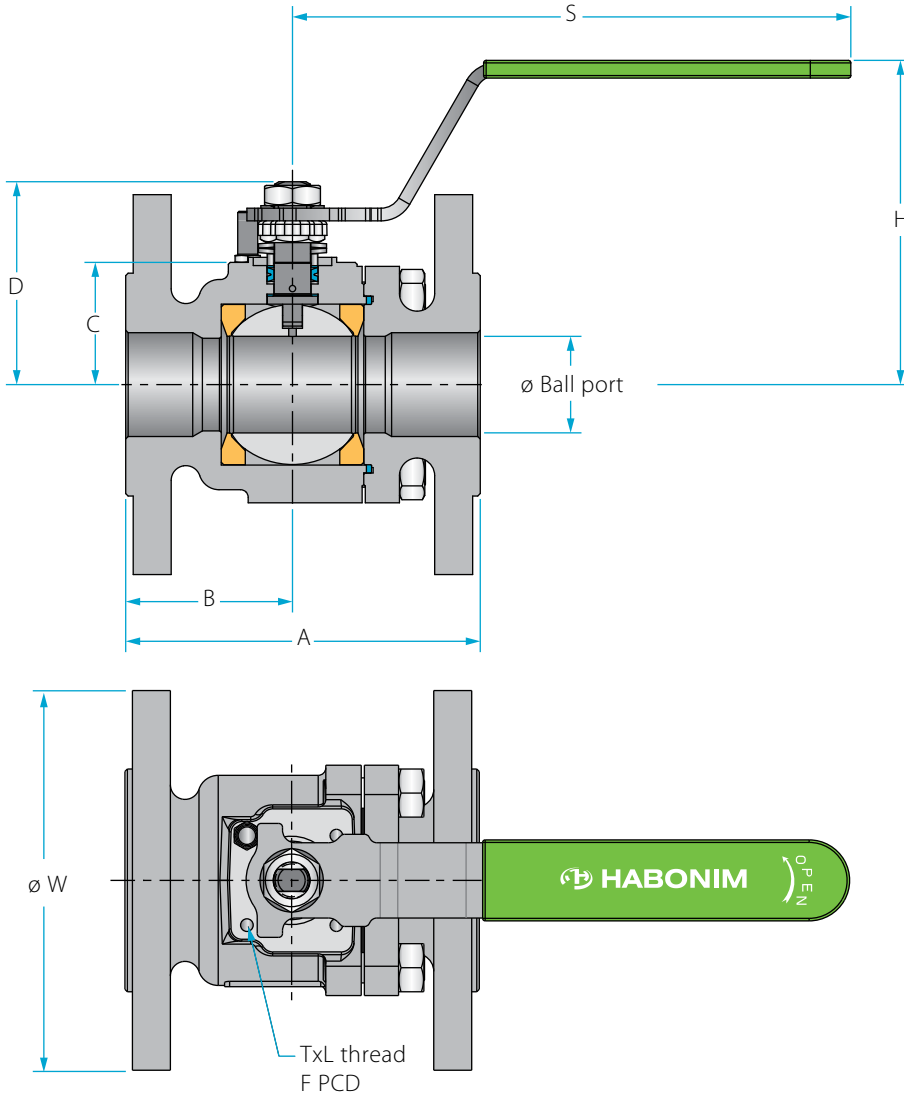
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

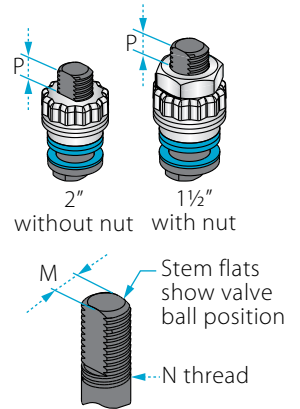
Ordering  
code system

Size 1½"-2" | DN40-DN50 | DIN PN40 | 78X, 78P<sup>(1)</sup> Series

### Valve dimensions

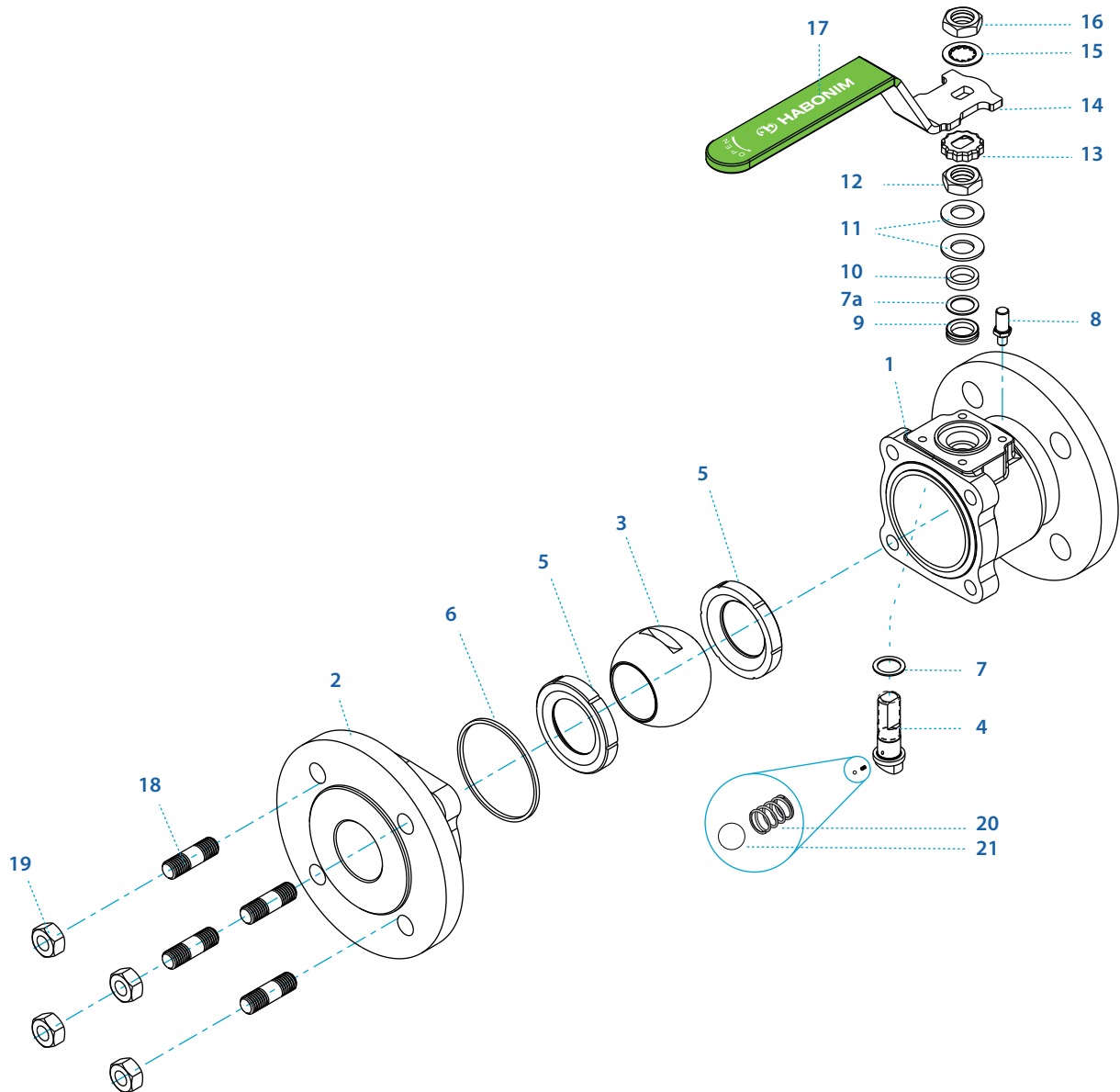


### Preparation for actuation



Std. port	Unit	Ball port	A		C	B	D	H	S	ØW	M	N	P	F	TxL	Weight kg/lb		Kv
			F1	F4												F1 PN40	F4 PN40	
DN40	mm	38.10	200.00	140.00	48.30	65.90	77.80	124.00	122.00	150.00	8.71	1/16" UNF	8.50 (F05)	50.00	M6x12	10.90	10.30	220
1½"	inch	1.50	7.87	5.51	1.90	2.59	3.06	4.88	4.81	5.91	0.34	1/16" UNF	0.33	1.97	M6x12	24.00	22.70	255
DN50	mm	50.00	230.00	150.00	78.00	60.70	119.00	137.30	240.00	165.00	8.71	1/16" UNF	13.50 (F07)	70.00	M8x12	15.00	13.00	430
2"	inch	2.00	9.06	5.91	3.07	2.39	4.69	5.41	9.45	6.50	0.34	1/16" UNF	0.53	2.76	M8x12	33.00	28.60	499

Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	End	A351 CF8M	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1

Item	Description	Material specification	Qty.
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A193 B8, B8A	1
17	Sleeve	PVC	1
18	Body bolts	A193 B8, EN3506-1 A2-70	4
19	Body nuts	A194 8M, EN3506-2 A4-80	4
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

\*\* Only with HermetiX™ stem seal

<sup>(1)</sup> 78P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 78P design.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

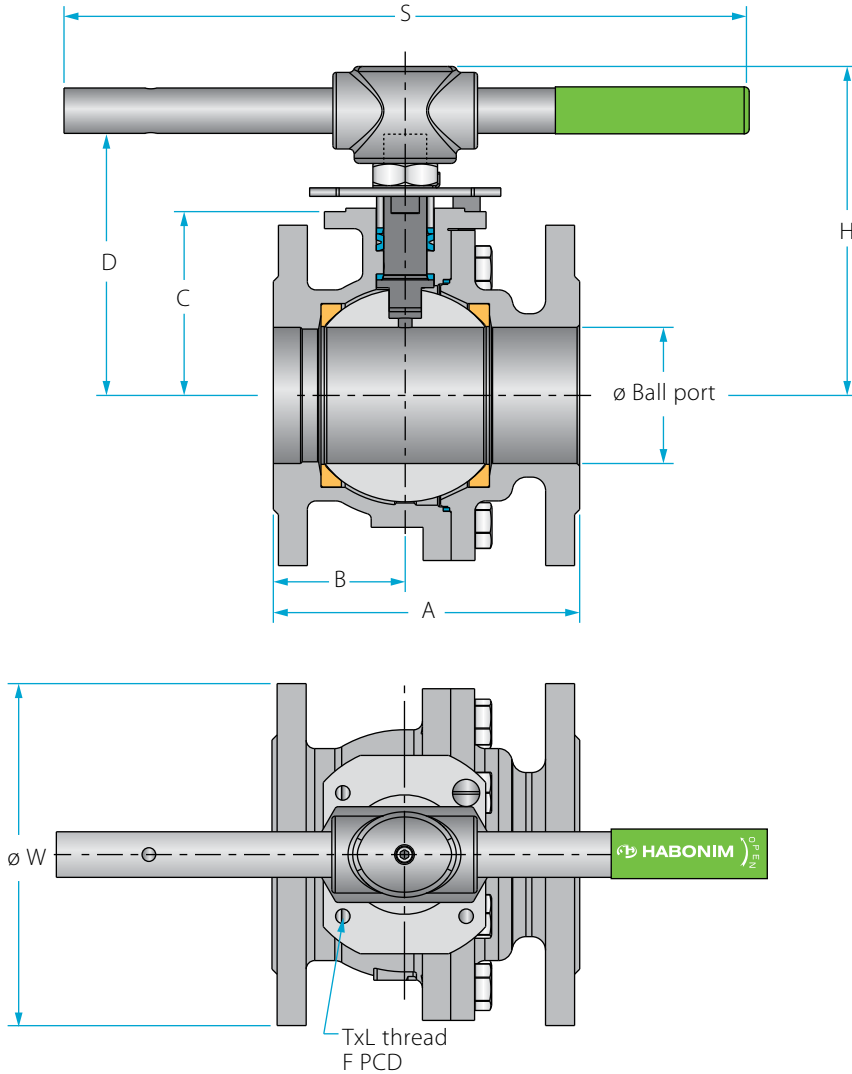
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

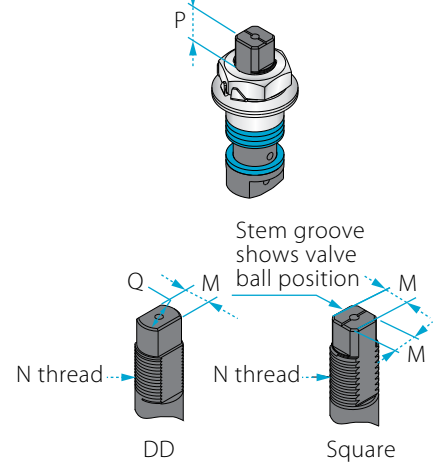
Ordering  
code system

Size 3"-8" | DN80-DN200 | DIN PN16 | 77X, 77P<sup>(1)</sup> Series

### Valve dimensions



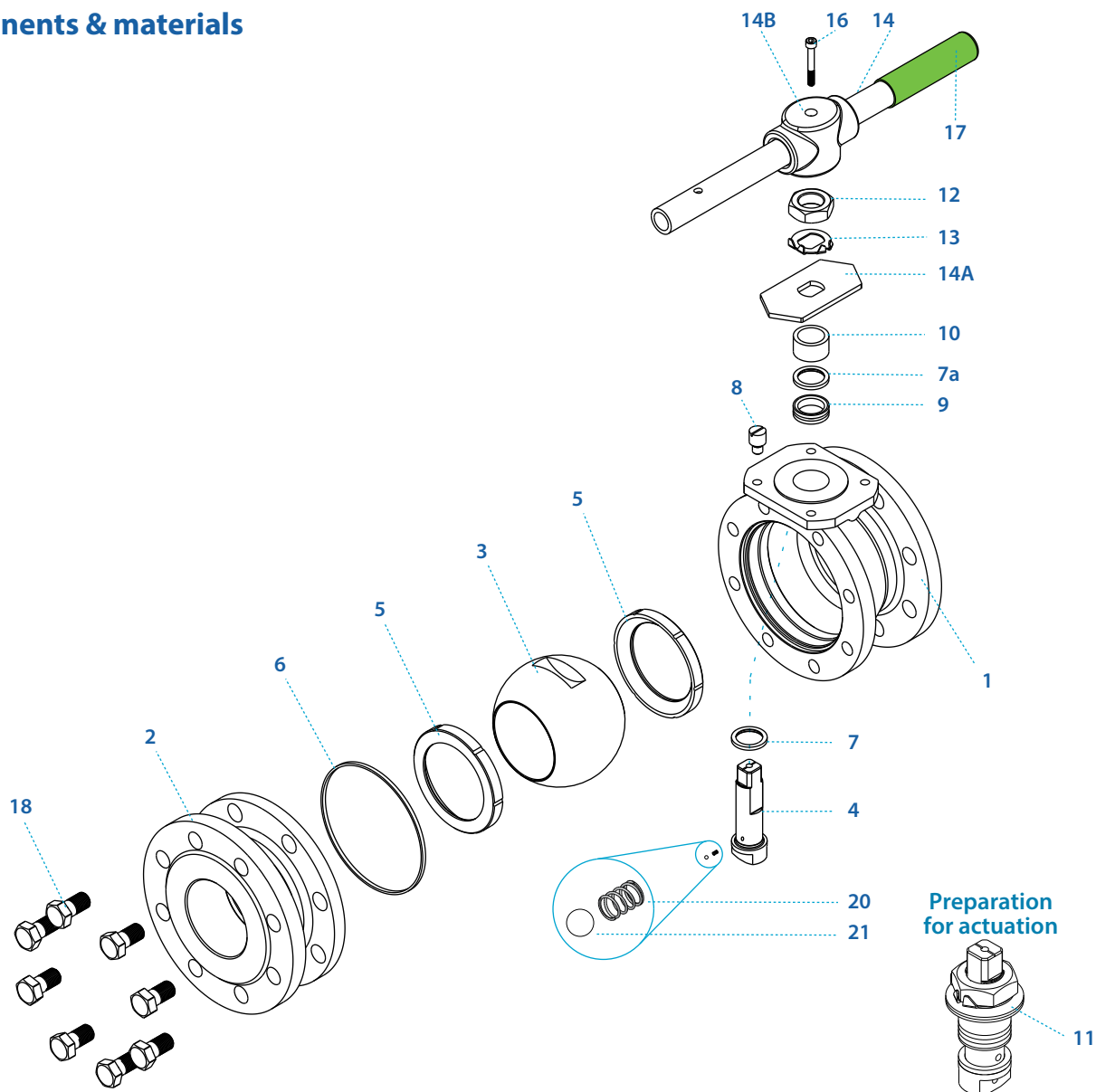
### Preparation for actuation



Std. port	Unit	Ball port	A		C	B	D	H	S	ØW	M	M DD	N	P	F	TxL	Weight kg/lb		Kv	
			F5	F4													F5 PN16	F4 PN16		Cv
DN80	mm	80.00	-	180.00	108.00	77.50	162.00	194.80	300.00	200.00	18.90	15.90	1"-14	16.70	(F10)	102.00	M10x20	-	24.00	1000
3"	inch	3.20	-	7.09	4.25	3.05	6.40	7.67	11.81	7.87	0.74	0.63	UNS-2A	0.66		4.02	M10x20	-	52.80	1160
DN100	mm	100.00	-	190.00	132.00	84.50	186.00	211.00	325.00	225.00	18.90	15.90	1"-14	16.70	(F10)	102.00	M10x20	-	30.00	1830
4"	inch	3.94	-	7.48	5.20	3.33	7.32	8.31	12.80	8.86	0.74	0.63	UNS-2A	0.66		4.02	M10x20	-	66.00	2123
DN150	mm	150.00	350.00	-	178.00	163.50	236.00	308.00	362.00	328.00	28.45	23.75	1½"-12	26.20	(F12)	125.00	M12x20	63.00	-	4380
6"	inch	5.91	13.78	-	7.01	6.44	9.29	12.13	14.25	12.91	1.12	0.94	UNF-2A	1.03		4.92	M12x20	139.00	-	5081
DN200	mm	200.00	400.00	-	226.00	243.00	286.00	-	-	395.00	35.92	35.92	2"-8	37.50	(F14)	140.00	M16x30	97.00	-	8070
8"	inch	7.87	15.75	-	8.91	9.55	11.26	-	-	15.55	1.41	1.41	UN-2A	1.48		5.51	M16x30	213.00	-	9361

<sup>(1)</sup> Due to high valve torque, pipe handle cannot be used. A manual gear or automation means should be used to operate the valve.

Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	End	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	PTFE, RPTFE, CF PTFE, PEEK, TFM, UHMWPE, VESPEL, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	PTFE, RPTFE, TFM, UHMWPE, Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(2)</sup> , CF PTFE <sup>(2)</sup>	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM, Graphite <sup>(2)</sup>	1

Item	Description	Material specification	Qty.
10	Follower	B783 316L, B164 N04400	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Tab lock washer	A240 304	1
14***	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench Head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
18	Body bolts	C.St. 8.8 ZP, S.St. A2-70	8-12
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

\* Standard items supplied in repair kits

\*\* Only with HermetiX™ stem seal

\*\*\* Gear operator should be used for size 8" DN200 (handle components are not included)

<sup>(1)</sup> 77P Series is Habonim's standard valve design without the HermetiX™ stem seal construction.

<sup>(2)</sup> This material can only be used as part of the 77P design.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

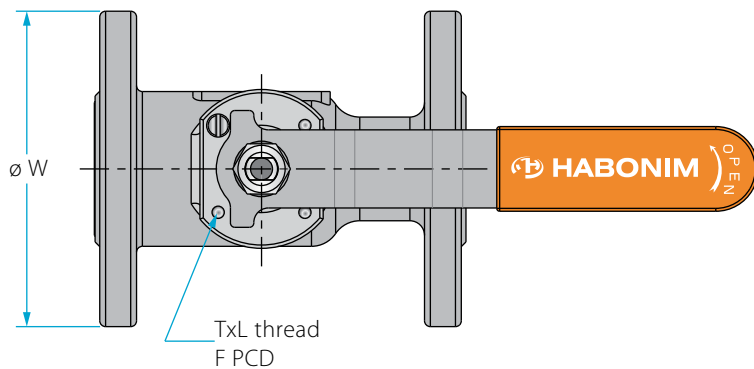
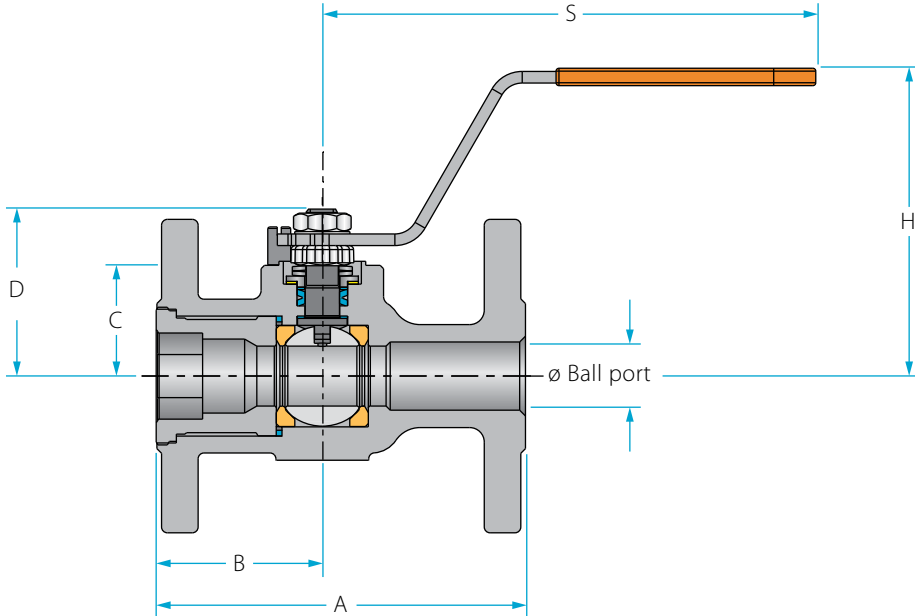
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

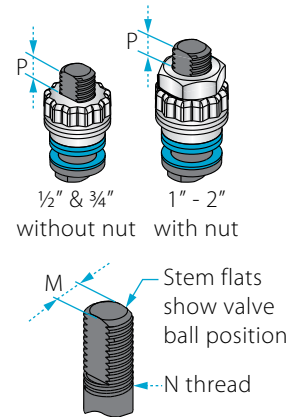
Ordering  
code system

Size ½"-2" | DN15-DN50 | ANSI Class 150/300 | 31W/32W, F31P/F32P<sup>(2)</sup> Series

### Valve dimensions

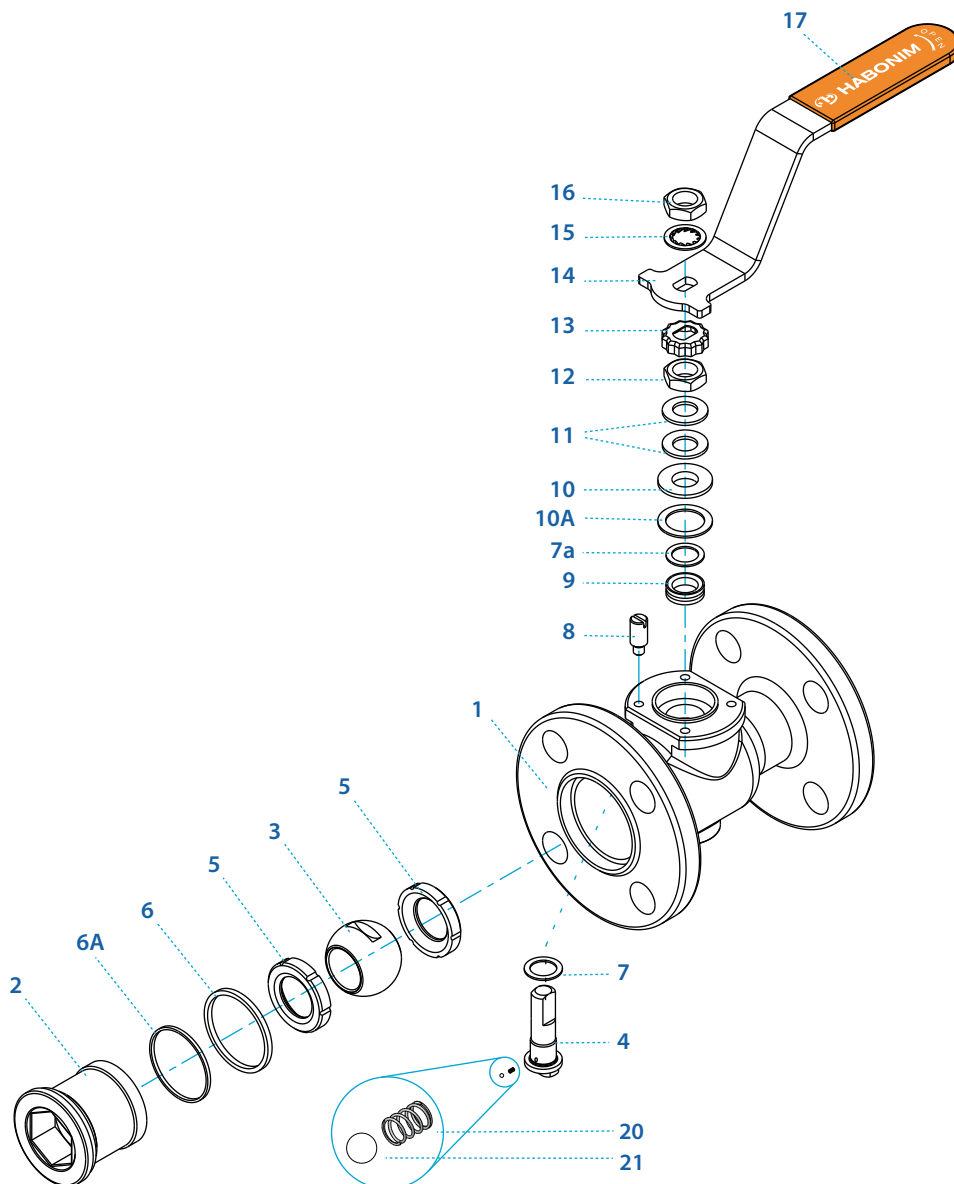


### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	W		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300						150	300						150	300	
DN15	mm	11.15	108.00	140.00	46.00	29.00	38.00	92.00	151.00	88.90	95.25	5.54	3/8 - UNF	6.65 (F03)	36.00	M5x10	1.70	2.40	6.9
½"	inch	0.44	4.25	5.50	1.81	1.14	1.50	3.62	5.94	3.50	3.75	0.22	UNF	0.26	1.42	M5x10	3.80	5.30	8.0
DN20	mm	14.30	117.00	152.00	49.00	31.40	40.30	94.00	151.00	98.55	163.07	5.54	3/8 - UNF	6.65 (F03)	36.00	M5x10	2.30	3.30	10
¾"	inch	0.56	4.61	6.00	1.93	1.24	1.59	3.70	5.94	3.88	6.42	0.22	UNF	0.26	1.42	M5x10	5.10	7.30	12
DN25	mm	20.60	127.00	165.00	57.00	38.20	55.60	103.50	170.00	107.95	123.95	7.54	7/16 - UNF	7.40 (F04)	42.00	M5x10	3.10	4.60	28
1"	inch	0.81	5.00	6.50	2.25	1.50	2.19	4.07	6.69	4.25	4.88	0.30	UNF	0.29	1.65	M5x10	7.30	10.20	32
DN40	mm	31.80	165.00	190.00	62.00	43.60	73.10	119.20	220.50	127.00	155.52	8.71	9/16 - UNF	8.50 (F05)	50.00	M6x12	5.50	8.70	69
1½"	inch	1.25	6.50	7.50	2.44	1.72	2.88	4.70	8.68	5.00	6.10	0.34	UNF	0.33	1.97	M6x12	12.20	19.30	80
DN50	mm	38.20	178.00	216.00	68.00	48.30	77.80	123.90	220.50	152.40	165.10	8.71	9/16 - UNF	8.50 (F05)	50.00	M6x12	8.10	10.80	102
2"	inch	1.50	7.00	8.50	2.67	1.90	3.06	4.88	8.68	6.00	6.50	0.34	UNF	0.33	1.97	M6x12	18.00	24.00	118

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Plug	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
6A	Support ring	A479 316L, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1

Item	Description	Material specification	Qty.
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM, CF PTFE	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

<sup>(1)</sup> This material can only be used as part of the 31P/32P design.

<sup>(2)</sup> F31P/F32P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

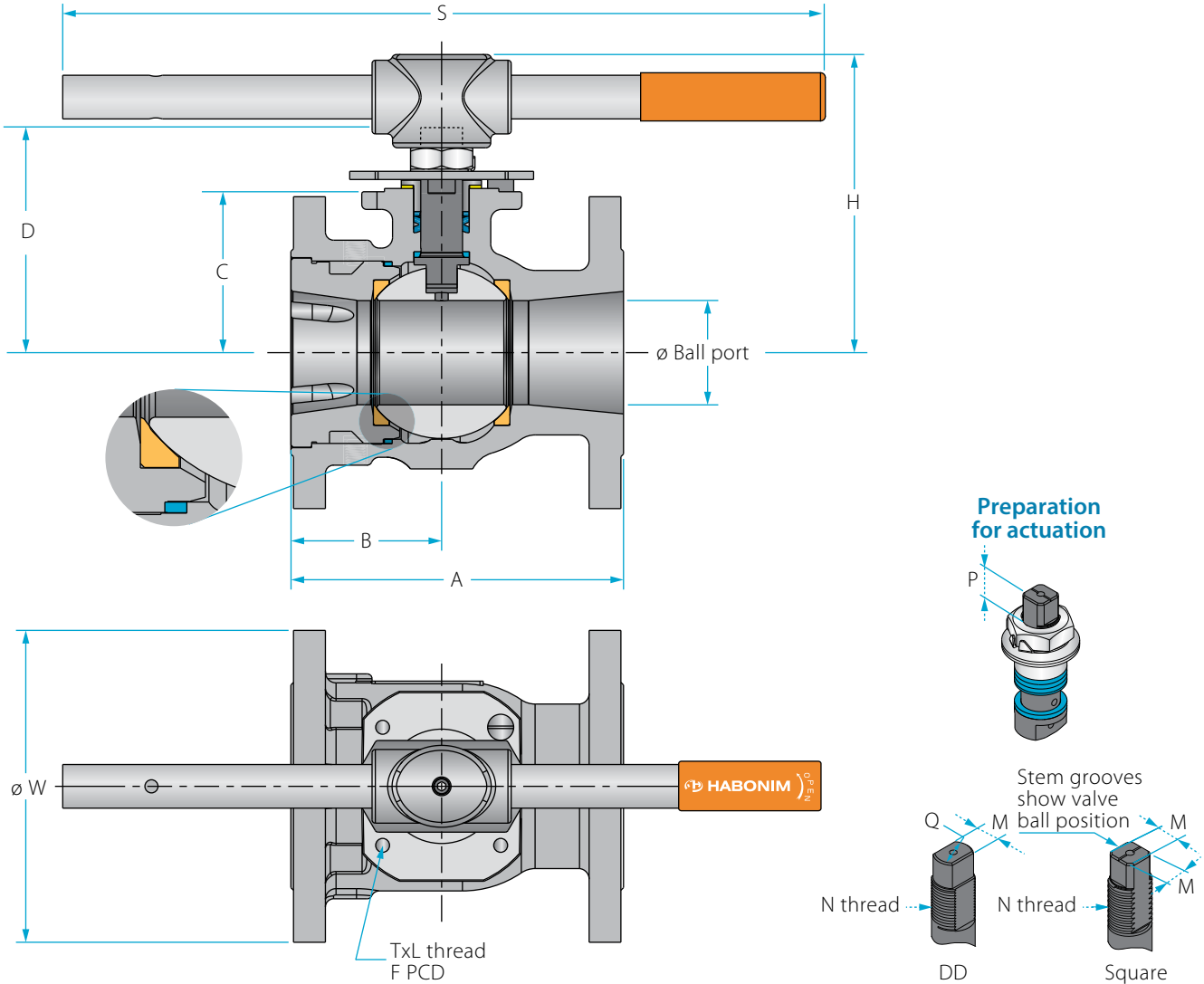
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

Ordering  
code system

Size 3"-8" | DN80-DN200 | ANSI Class 150/300 | 31W/32W F31P/F32P<sup>(2)</sup> Series

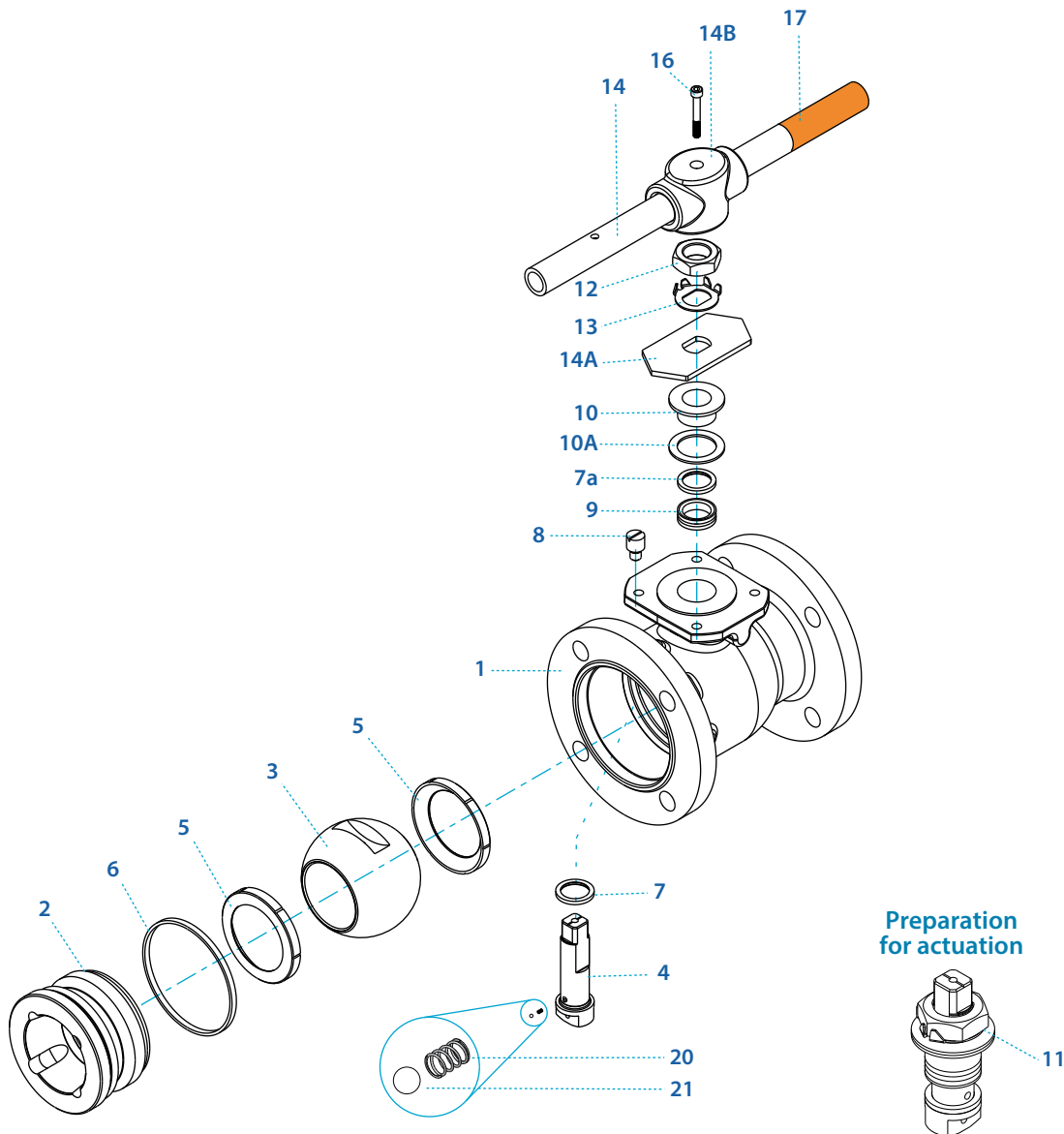
### Valve dimensions



Std. port	Unit	Ball port	A		B	C	D	H	S	W		M	M-DD	N	P	Q	F	TxL	Weight kg/lb		Kv	
			150	300						150	300								150	300		Cv
DN80	mm	63.50	203.00	284.00	92.00	98.40	145.00	185.10	400.00	190.50	209.55	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10x20	18.00	22.70	300
3"	inch	2.50	8.00	11.18	3.62	3.88	5.72	7.28	15.75	7.50	8.25	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10x20	40.00	50.40	348
DN100	mm	82.60	229.00	305.00	102.00	114.10	161.00	201.00	610.00	228.60	254.00	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10x20	28.20	36.30	615
4"	inch	3.25	9.00	12.00	4.00	4.49	6.34	7.91	24.01	9.00	10.00	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10x20	62.80	80.60	713
DN150	mm	111.10	267.00	403.20	108.00	157.40	226.00	285.90	916.00	279.40	317.50	28.45	23.75	1½"-12	26.20	35.20	(F12)	125.00	M12x20	41.00	69.00	872
6"	inch	4.38	10.50	15.88	4.25	6.20	8.91	11.25	36.08	11.00	12.50	1.12	0.94	UNF-2A	1.03	1.39		4.92	M12x20	91.00	153.00	1012
DN200	mm	144.40	292.00	419.00	163.50	185.20	254.00	313.60	916.00	342.90	381.00	28.45	23.75	1½"-12	26.20	35.20	(F12)	125.00	M12x20	82.00	105.00	1552
8"	inch	5.68	11.50	16.50	5.37	7.30	10.00	12.34	36.08	13.50	15.00	1.12	0.94	UNF-2A	1.03	1.39		4.92	M12x20	182.00	233.00	1800



Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Plug	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
8	Stop pin	A582 303	1

<sup>(1)</sup> This material can only be used as part of the 31P/32P design.

<sup>(2)</sup> F31P/F32P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

Item	Description	Material specification	Qty.
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	C.st B18 ZP	1
13	Tab lock washer	A240 304	1
14	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

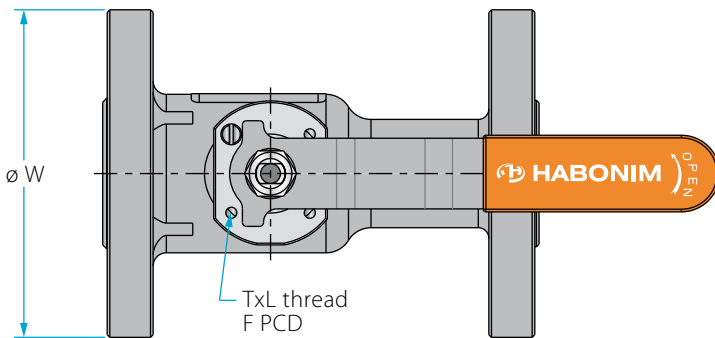
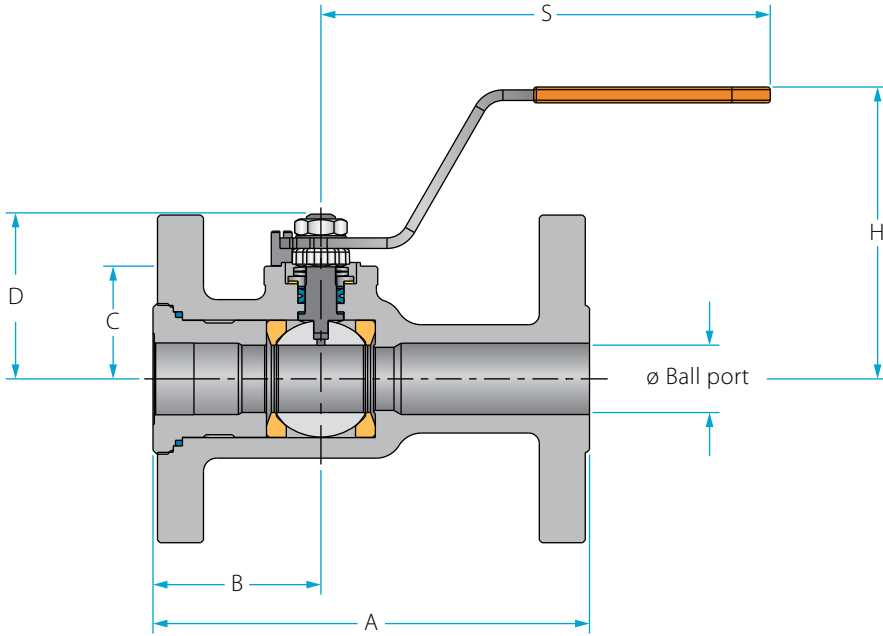
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

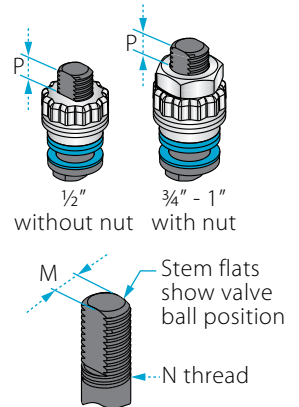
Ordering  
code system

Size ½"-1" | DN15-DN25 | ANSI Class 150/300 | 73W/74W, F73P/F74P<sup>(2)</sup> Series

### Valve dimensions

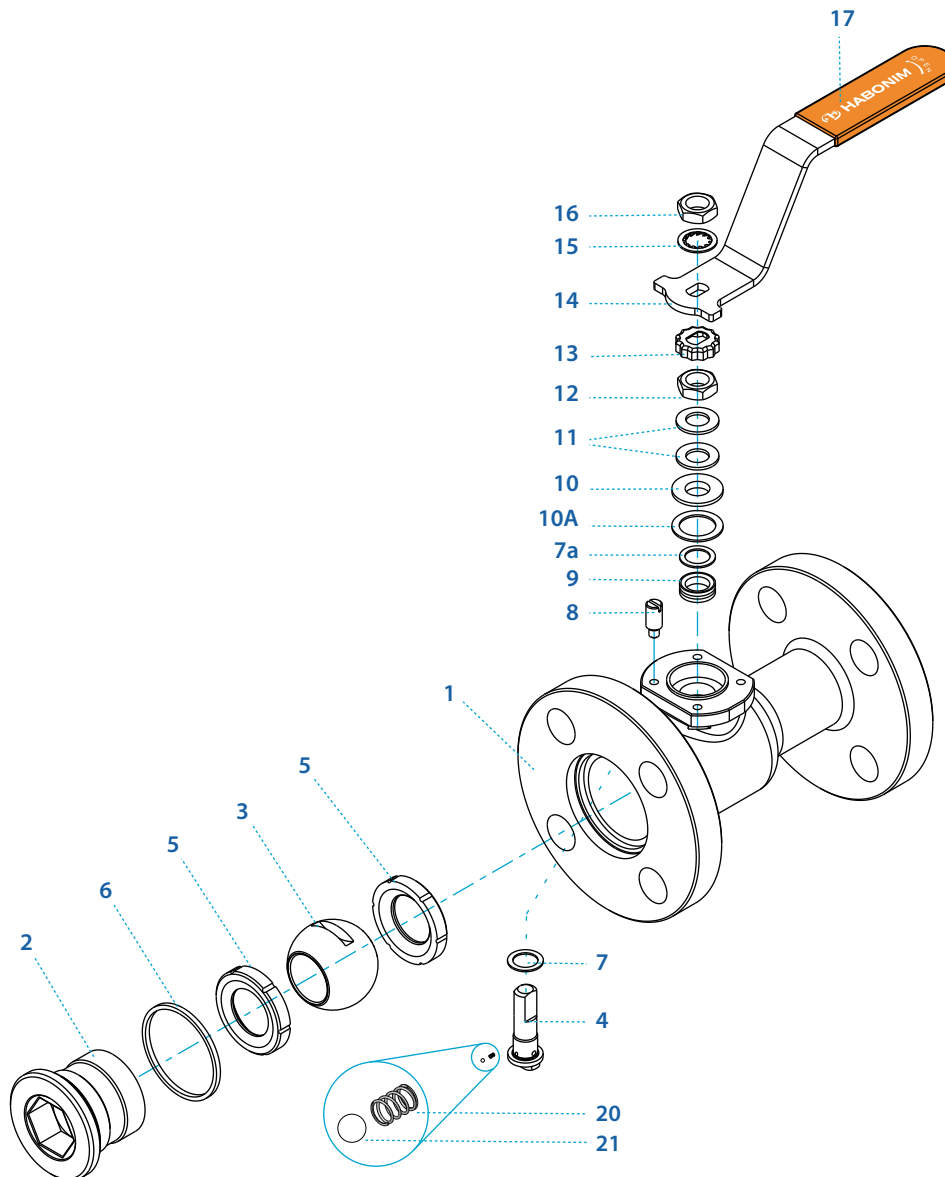


### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	ØW		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300						150	300						150	300	
DN15	mm	14.30	108.00	140.00	47.00	31.40	40.50	94.00	151.00	89.00	95.00	5.54	¾" UNF	6.65 (F03)	36.00	M5x10	1.80	2.30	28
½"	inch	0.56	4.25	5.51	1.85	1.24	1.59	3.70	5.95	3.50	3.74	0.22		0.26	1.42		4.00	5.10	32
DN20	mm	20.60	117.00	152.00	57.00	38.20	55.60	103.50	170.00	98.00	117.00	7.54	7/16" UNF	7.40 (F04)	42.00	M5x10	2.20	3.30	46
¾"	inch	0.81	4.61	5.98	2.24	1.50	2.19	4.08	6.69	3.86	4.61	0.30		0.29	1.65		4.80	7.30	53
DN25	mm	25.40	127.00	165.00	62.00	42.70	60.30	108.00	170.00	108.00	124.00	7.54	7/16" UNF	7.40 (F04)	42.00	M5x10	3.20	4.60	80
1"	inch	1.00	5.00	6.50	2.44	1.68	2.37	4.25	6.69	4.25	4.88	0.30		0.29	1.65		7.00	10.10	93

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Insert	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1

Item	Description	Material specification	Qty.
7a**	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

<sup>(1)</sup> This material can only be used as part of the 73P/76P design.

<sup>(2)</sup> F73P/F74P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

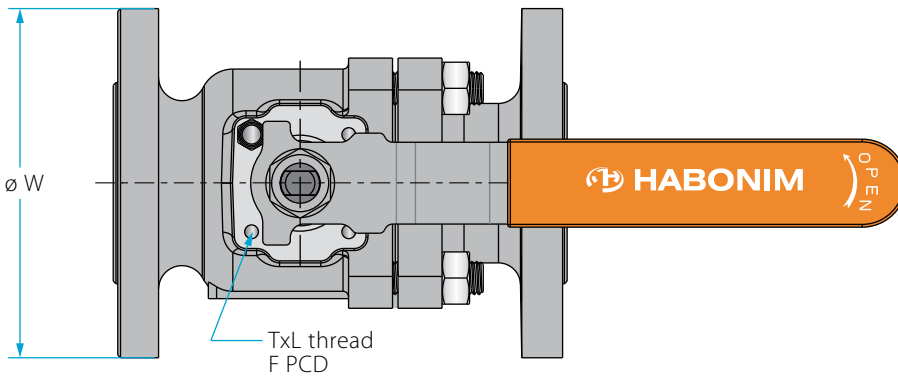
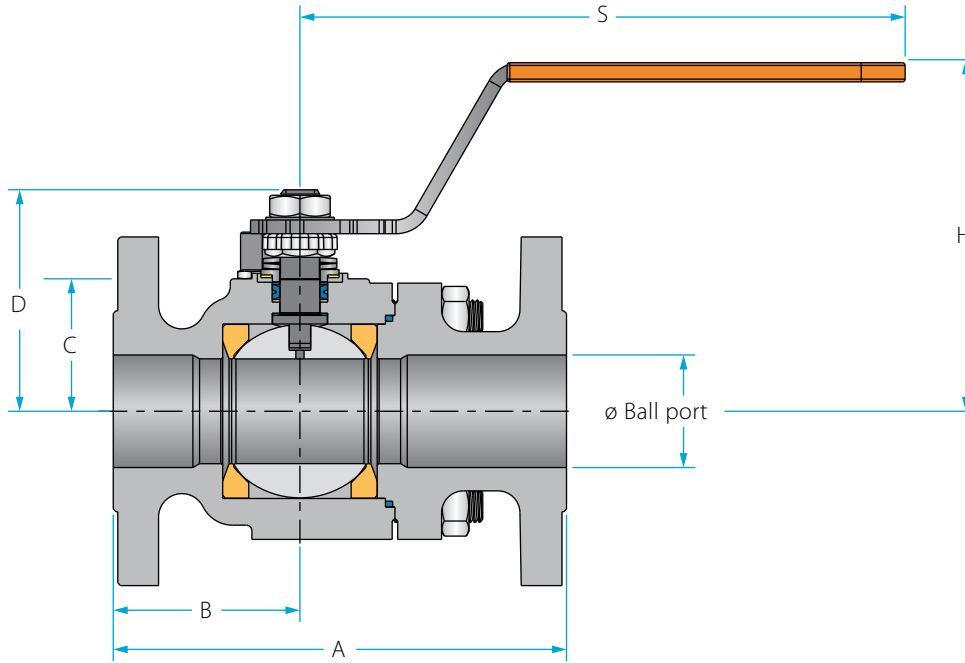
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

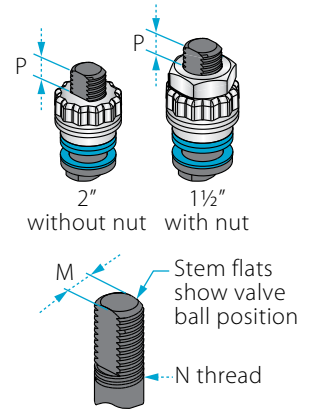
Ordering  
code system

Size 1½"-2" | DN40-DN50 | ANSI Class 150/300 | 73W/74W, F73P/F74P<sup>(2)</sup> Series

### Valve dimensions

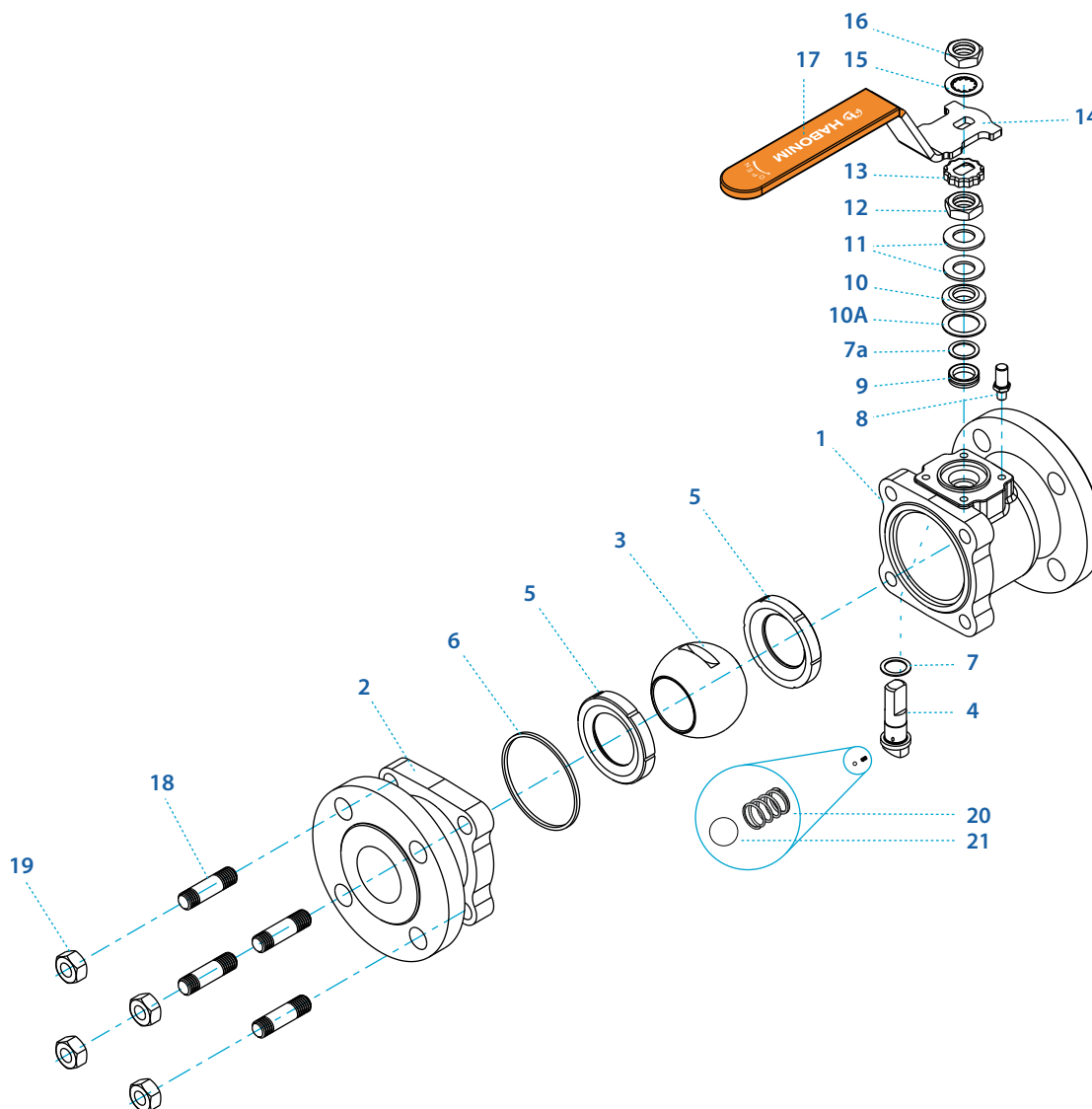


### Preparation for actuation



Std. port	Unit	Ball port	A		B		C	D	H	S	$\varnothing$ W		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300	150	300					150	300								
DN40	mm	38.10	165.00	190.00	97.00	110.00	48.30	77.80	124.00	220.50	127.00	156.00	8.71	9/16" UNF	19.6 (F05)	50.00	M6x12	6.60	9.80	220
1½"	inch	1.50	6.50	7.50	3.82	4.33	1.90	3.06	4.88	6.68	5.00	6.14	0.34	9/16" UNF	0.77	1.97	M6x12	14.50	21.50	255
DN50	mm	50.00	178.00	216.00	109.00	141.00	70.00	88.00	134.20	220.50	152.00	165.00	8.71	9/16" UNF	19.6 (F07)	70.00	M8x12	13.00	15.00	430
2"	inch	2.00	7.00	8.50	4.29	5.55	2.75	3.46	5.28	6.68	5.98	6.50	0.34	9/16" UNF	0.77	2.76	M8x12	28.60	33.00	499

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	End	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A193 B8, B8A	1
17	Sleeve	PVC	1
18	Body bolts	A193 B8, EN3506-1 A2-70	4
19	Body nuts	A194 8M, EN3506-2 A4-80	4
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

<sup>(1)</sup> This material can only be used as part of the 73P/74P design.

<sup>(2)</sup> F73P/F74P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

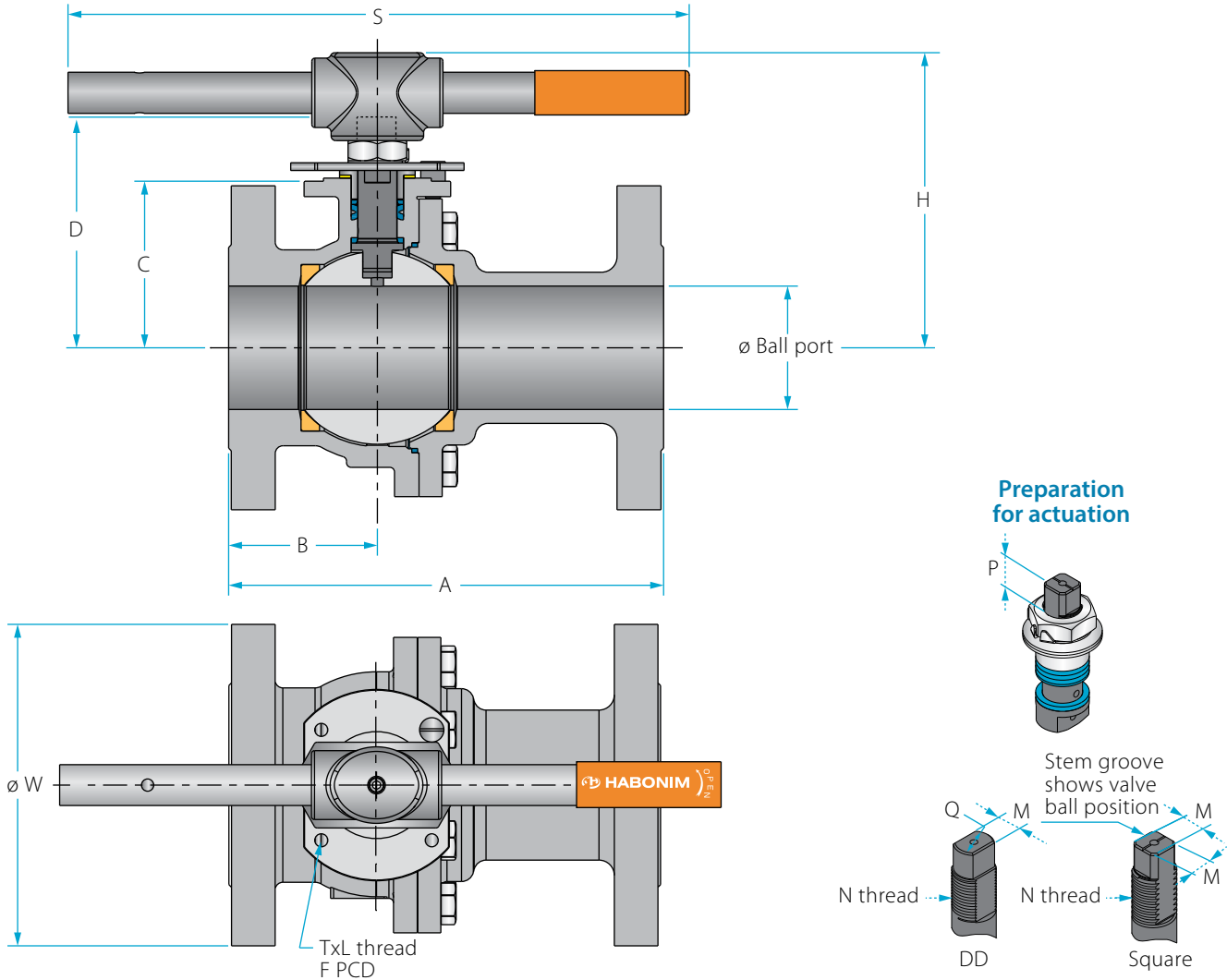
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

Ordering  
code system

Size 3"-8" | DN80-DN200 | ANSI Class 150/300 | 73W/74W, F73P/F74P<sup>(2)</sup> Series

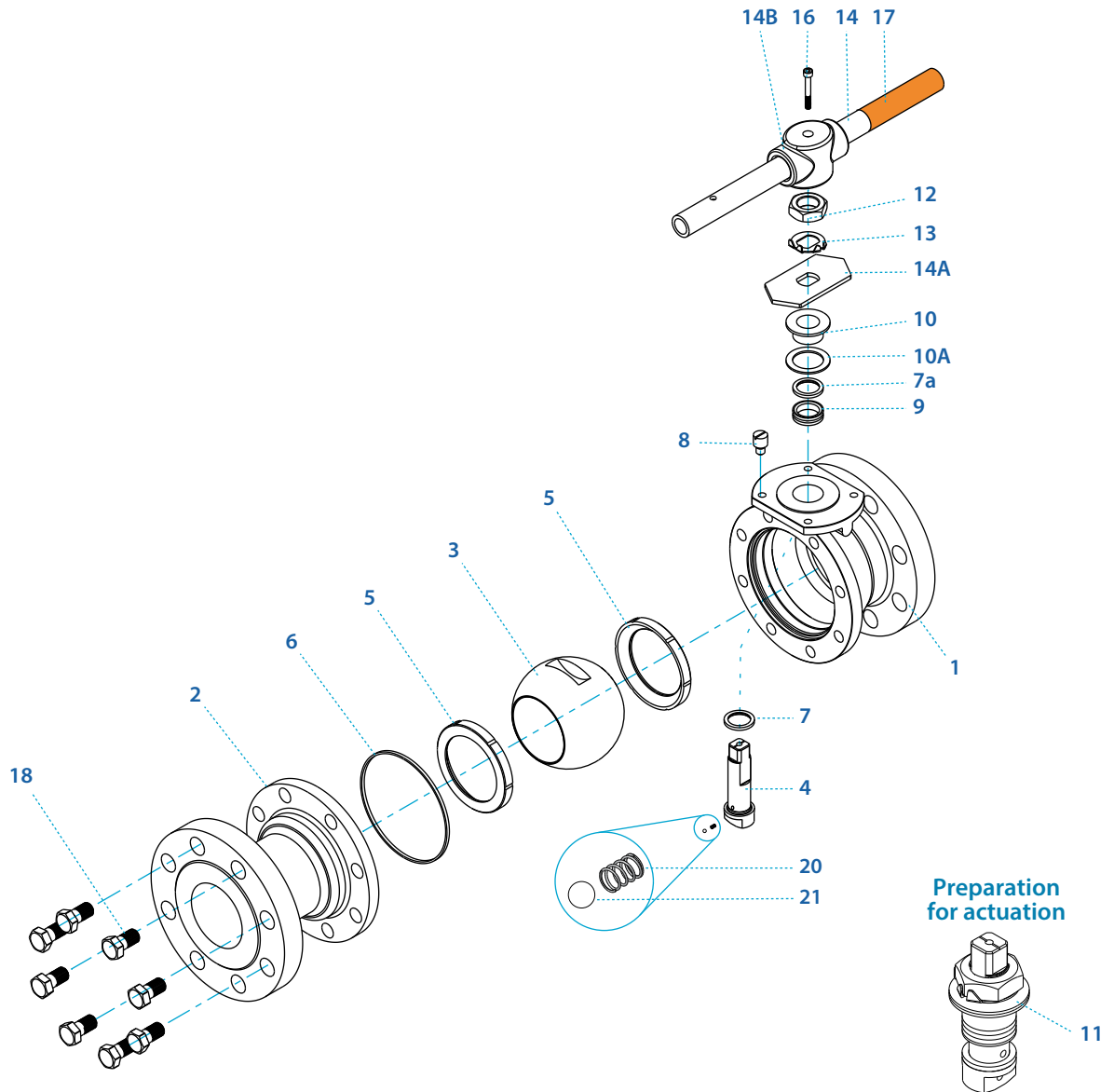
### Valve dimensions



Std. port	Unit	Ball port	A		B		C	D	H	S	ØW		M	M-DD	N	P	Q	F	TxL	Weight kg/lb		Kv	Cv	
			150	300	150	300					150	300												
DN80	mm	80.00	203.00	282.50	77.50	96.40	108.00	154.60	194.80	400.00	191.00	210.00	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10X20	22.00	28.20	1111	
3"	inch	3.15	7.99	11.12	3.05	3.80	4.25	6.09	7.67	15.75	7.52	8.27	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10X20	48.50	62.20	1300	
DN100	mm	100.00	228.50	304.80	84.50	104.50	124.00	210.80	211.00	610.00	230.00	254.00	18.90	15.90	1"-14	16.70	23.00	(F10)	102.00	M10X20	39.00	44.50	2051	
4"	inch	3.94	9.00	12.00	3.33	4.11	4.88	8.30	8.31	24.02	9.06	10.00	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10X20	86.00	98.10	2400	
DN150	mm	150.00	394.00	403.50	163.50	174.50	179.00	248.50	308.00	916.00	279.40	328.00	28.45	23.75	1½"-12	26.20	23.00	(F12)	125.00	M12X20	82.00	100.00	4615	
6"	inch	5.91	15.51	15.89	6.44	6.87	7.05	9.78	12.13	36.06	11.00	12.91	1.12	0.94	UNF-2A	1.03	0.91		4.92	M12X20	180.80	220.50	5400	
DN200	mm	200.00	457.20	502.00	242.50	241.00	241.00	353.70	-	-	460.00	460.00	35.92	35.92	2"-8	37.50	32.00	(F14)	140.00	M16X24	190.00	225.00	7949	
8"	inch	7.87	18.00	19.76	9.55	9.49	9.49	13.93	-	-	18.11	18.11	1.41	1.41	UN-2A	1.48	1.26		5.51	M16X24	418.90	496.00	9300	

<sup>(2)</sup> Due to high valve torque, pipe handle cannot be used. A manual gear or automation means should be used to operate the valve.

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	End	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, B574 N06022, A479 S31254, A479 S31600, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	C.st B18 ZP	1
13	Tab lock washer	A240 304	1
14**	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
18	Body bolts	C.St. 8.8 ZP, S.St. A2-70	8-12
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

<sup>(1)</sup> This material can only be used as part of the 73P/74P design.

<sup>(2)</sup> F73P/F74P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

\* Repair kit components

\*\* Gear operator should be used for size 8" DN200 (handle components are not included)

# Floating Ball Valves

## Flanged valves

General

HermetiX™

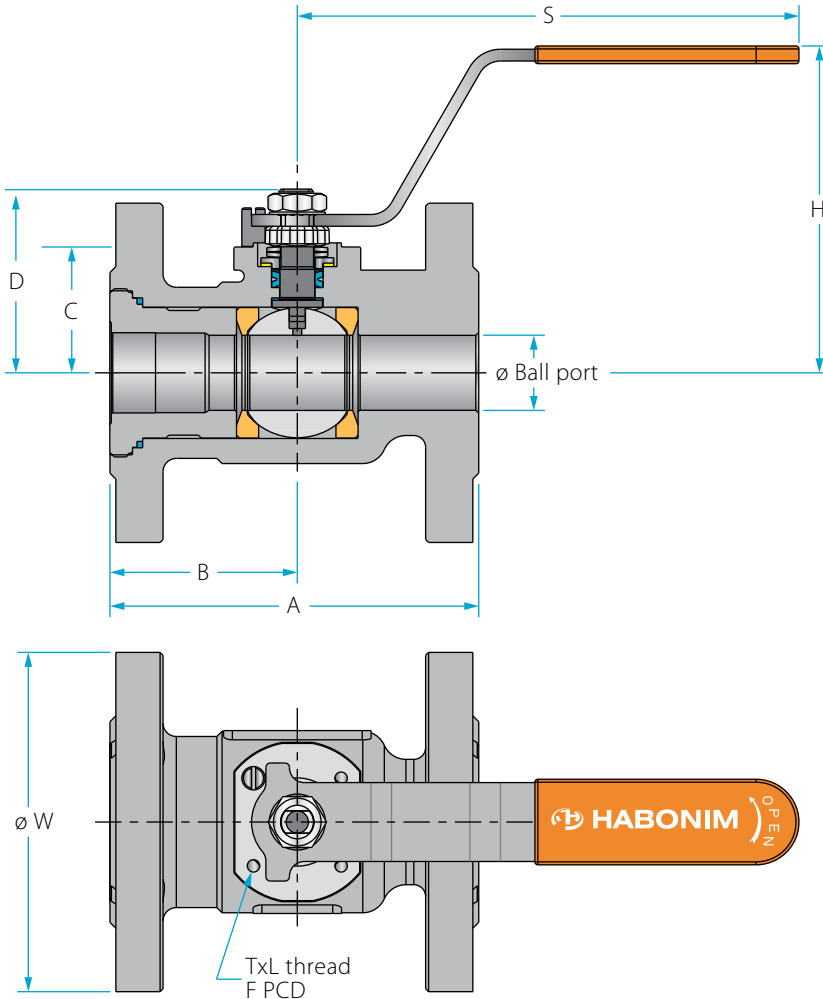
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

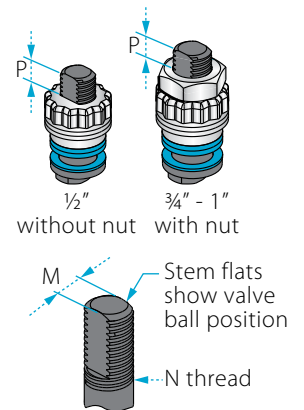
Ordering  
code system

Size ½"-1" | Class DN15-DN25 | DIN PN40 | 78W, F78P<sup>(2)</sup> Series

### Valve dimensions



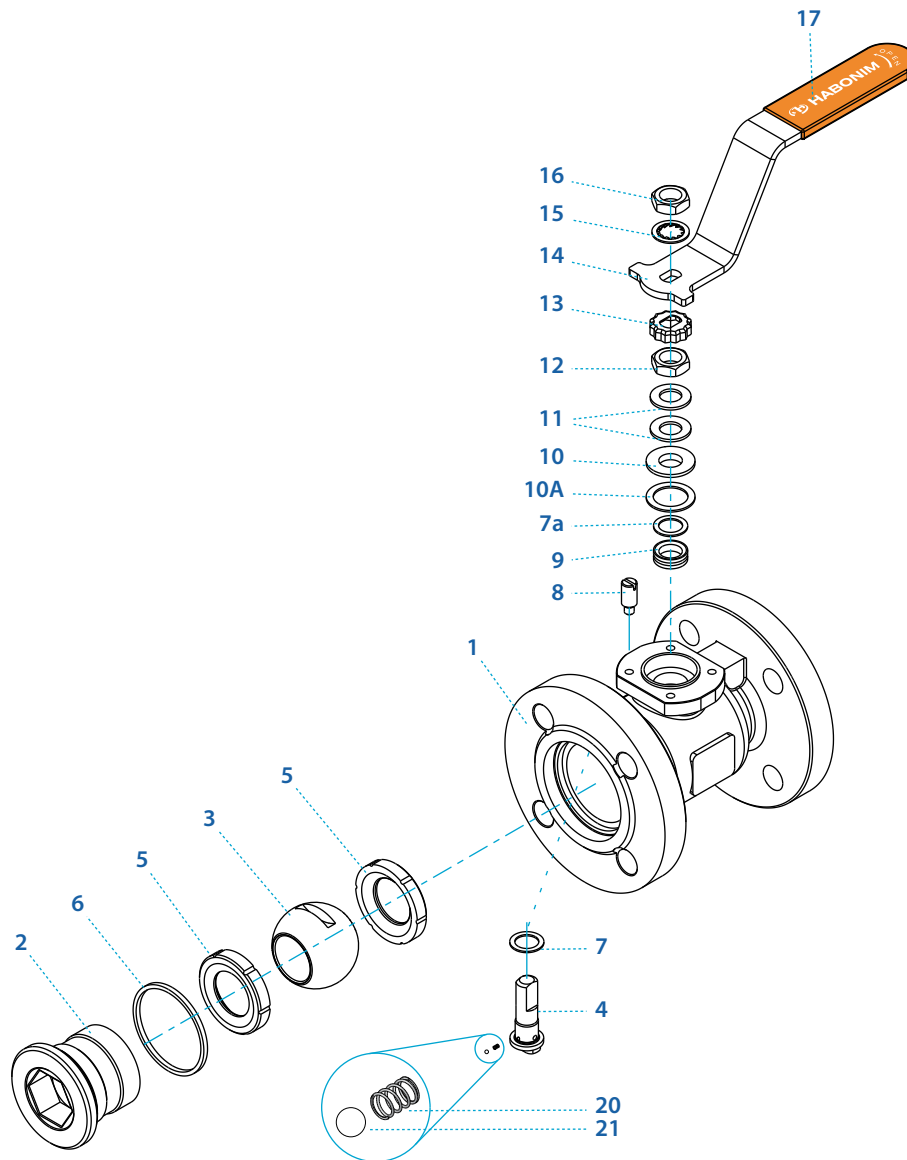
### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	M	N	P	S	ØW	F	TxL	Weight kg/lb		Kv
			F1	F4												F1	F4	
DN15	mm	14.30	130.00	115.00	48.00	31.50	40.50	98.60	5.54	⅜" UNF	6.65	160.00	95.00	(F03)36.00	M5x10	2.20	2.10	28
½"	inch	0.56	5.12	4.53	1.89	1.24	1.59	3.88	0.22	⅜" UNF	0.26	6.30	3.74	1.42	M5x10	4.80	4.60	32
DN20	mm	20.60	150.00	120.00	58.00	38.30	56.50	105.00	7.54	7/16" UNF	7.40	170.00	105.00	(F04)42.00	M5x10	3.20	3.00	46
¾"	inch	0.81	5.91	4.72	2.28	1.51	2.22	4.13	0.30	7/16" UNF	0.29	6.69	4.13	1.65	M5x10	7.00	6.60	53
DN25	mm	25.40	160.00	125.00	63.50	41.80	61.00	108.00	7.54	7/16" UNF	7.40	170.00	115.00	(F04)42.00	M5x10	4.20	4.00	80
1"	inch	1.00	6.30	4.92	2.50	1.65	2.40	4.25	0.30	7/16" UNF	0.29	6.69	4.53	1.65	M5x10	9.20	8.80	93



Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	Plug	A351 CF8M	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr.630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
8	Stop pin	NiCr19NbMo (2.4668)	1

Item	Description	Material specification	Qty.
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

<sup>(1)</sup> This material can only be used as part of the 78P design.

<sup>(2)</sup> F78P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

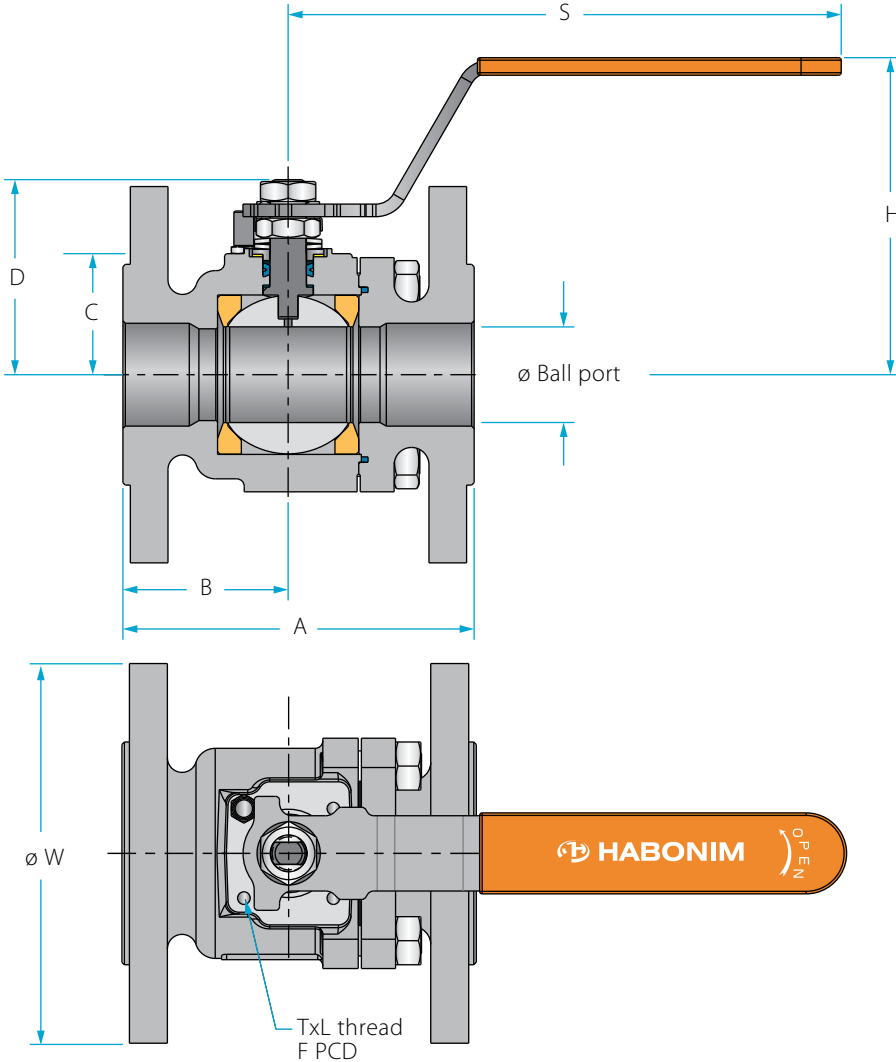
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

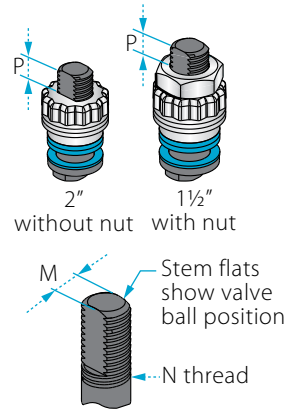
Ordering  
code system

Size 1½"-2" | DN40-DN50 | DIN PN40 | 78W, F78P<sup>(2)</sup> Series

### Valve dimensions

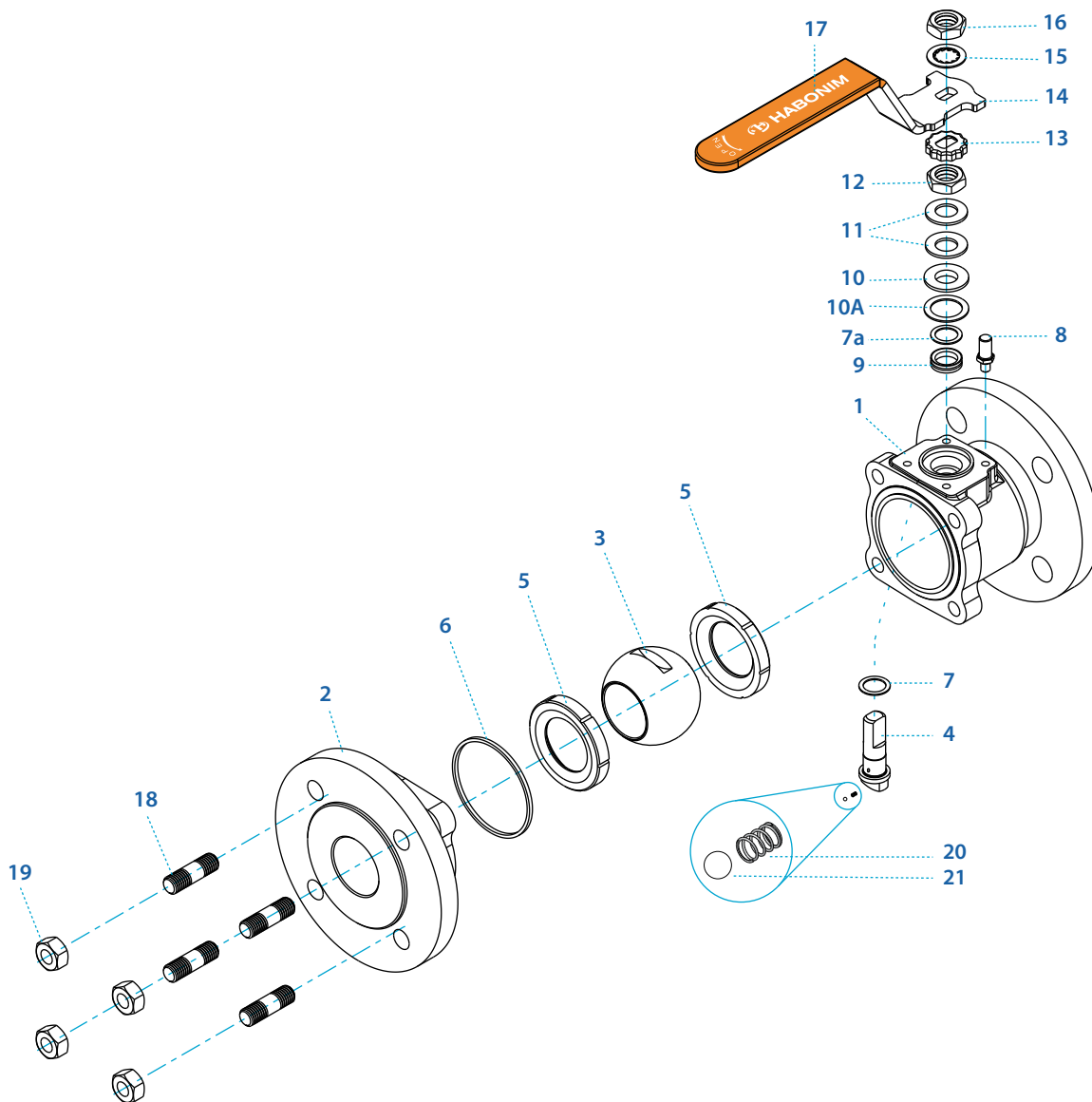


### Preparation for actuation



Std. port	Unit	Ball port	A		C	B	D	H	S	ØW	M	N	P	F	TxL	Weight kg/lb		Kv	
			F1	F4												F1 PN40	F4 PN40		Cv
DN40	mm	38.10	200.00	140.00	48.30	65.90	77.80	124.00	122.00	150.00	8.71	¾" UNF	8.50	(F05)	50.00	M6x12	10.90	10.30	220
1½"	inch	1.50	7.87	5.51	1.90	2.59	3.06	4.88	4.81	5.91	0.34		0.33		1.97			24.00	22.70
DN50	mm	50.00	230.00	150.00	78.00	60.70	119.00	137.30	240.00	165.00	8.71	¾" UNF	13.50	(F07)	70.00	M8x12	15.00	13.00	430
2"	inch	2.00	9.06	5.91	3.07	2.39	4.69	5.41	9.45	6.50	0.34		0.53		2.76			33.00	28.60

Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	End	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
8	Stop pin	A582 303	1

Item	Description	Material specification	Qty.
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A193 B8, B8A	1
17	Sleeve	PVC	1
18	Body bolts	A193 B8, EN3506-1 A2-70	4
19	Body nuts	A194 8M, EN3506-2 A4-80	4
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

<sup>(1)</sup> This material can only be used as part of the 78P design.

<sup>(2)</sup> F78P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

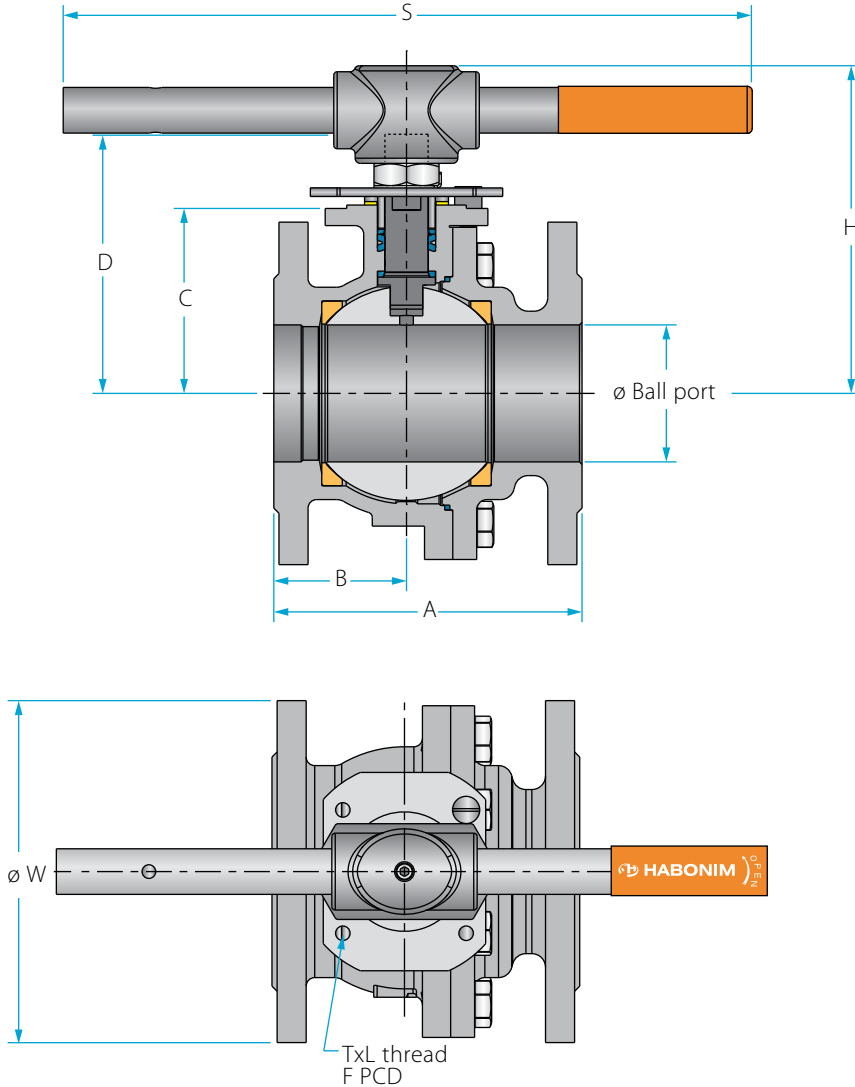
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

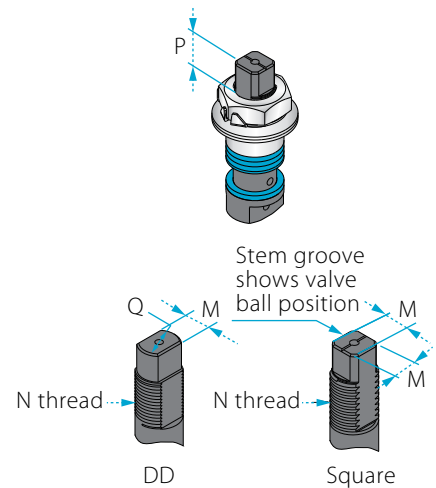
Ordering  
code system

Size 3"-8" | DN80-DN200 | DIN PN16 | 77W, F77P<sup>(2)</sup> Series

### Valve dimensions



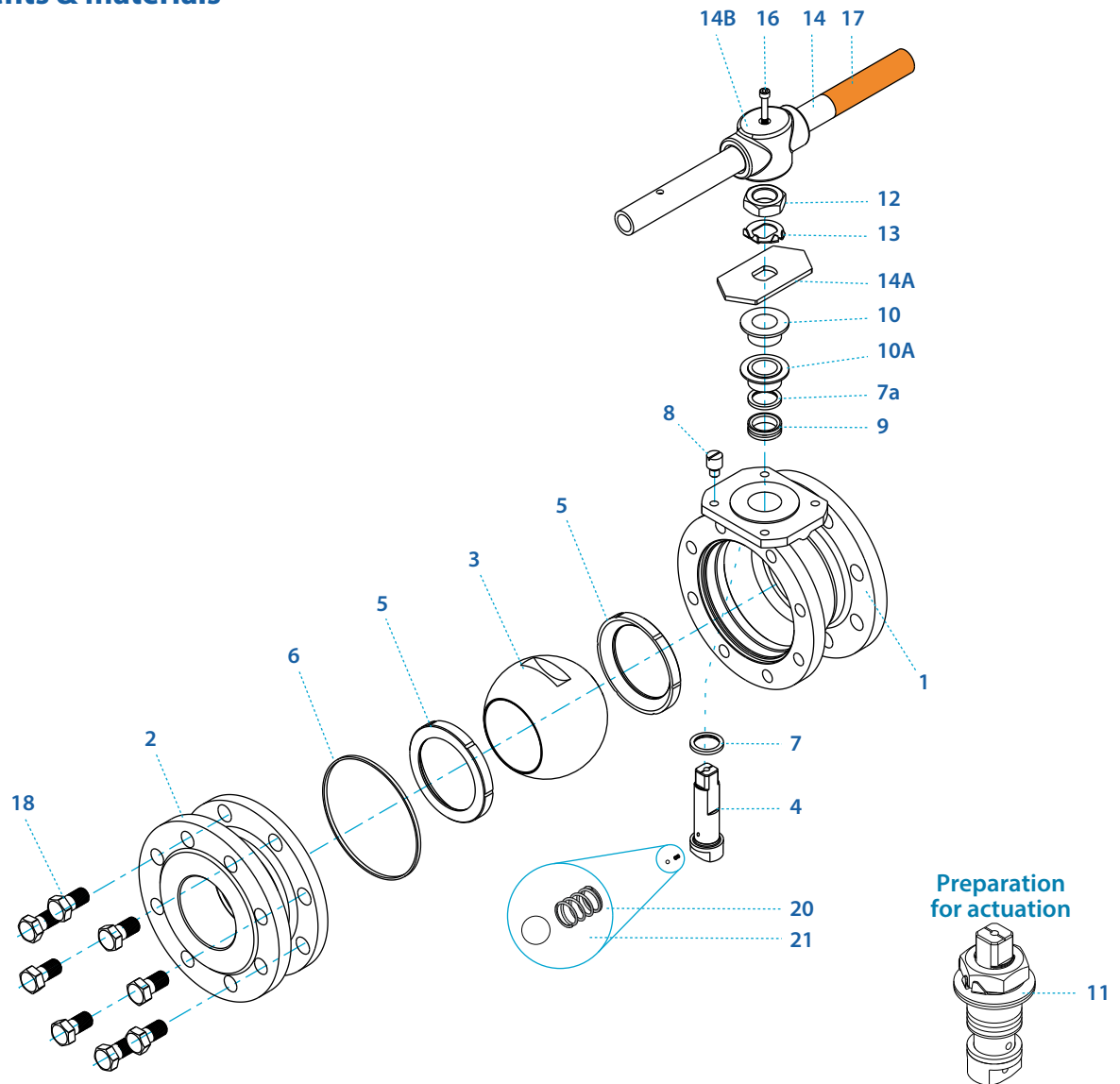
### Preparation for actuation



Std. port	Unit	Ball port	A		C	B	D	H	S	ØW	M	M DD	N	P	F	TxL	Weight kg/lb		Kv
			F5	F4													F5 PN16	F4 PN16	
DN80	mm	80.00	-	180.00	108.00	77.50	162.00	194.80	300.00	200.00	18.90	15.90	1"-14	16.70 (F10)	102.00	M10x20	-	24.00	1000
3"	inch	3.20	-	7.09	4.25	3.05	6.40	7.67	11.81	7.87	0.74	0.63	UNS-2A	0.66	4.02	M10x20	-	52.80	1160
DN100	mm	100.00	-	190.00	132.00	84.50	186.00	211.00	325.00	225.00	18.90	15.90	1"-14	16.70 (F10)	102.00	M10x20	-	30.00	1830
4"	inch	3.94	-	7.48	5.20	3.33	7.32	8.31	12.80	8.86	0.74	0.63	UNS-2A	0.66	4.02	M10x20	-	66.00	2123
DN150	mm	150.00	350.00	-	178.00	163.50	236.00	308.00	362.00	328.00	28.45	23.75	1½"-12	26.20 (F12)	125.00	M12x20	63.00	-	4380
6"	inch	5.91	13.78	-	7.01	6.44	9.29	12.13	14.25	12.91	1.12	0.94	UNF-2A	1.03	4.92	M12x20	139.00	-	5081
DN200	mm	200.00	400.00	-	226.00	243.00	286.00	-	-	395.00	35.92	35.92	2"-8	37.50 (F14)	140.00	M16x30	97.00	-	8070
8"	inch	7.87	15.75	-	8.91	9.55	11.26	-	-	15.55	1.41	1.41	UN-2A	1.48	5.51	M16x30	213.00	-	9361

<sup>(2)</sup> Due to high valve torque, pipe handle cannot be used. A manual gear or automation means should be used to operate the valve.

Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	End	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	RPTFE, CF PTFE, CF PEEK, PVDF, DELRIN, PCTFE (KEL-F)	2
6*	Body seal	Graphite	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM <sup>(1)</sup> , CF PTFE <sup>(1)</sup>	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1

Item	Description	Material specification	Qty.
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Tab lock washer	A240 304	1
14**	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench Head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
18	Body bolts	C.St. 8.8 ZP, S.St. A2-70	8-12
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

\* Standard items supplied in repair kits

\*\* Gear operator should be used for size 8" DN200 (handle components are not included)

<sup>(1)</sup> This material can only be used as part of the 77P design.

<sup>(2)</sup> F77P Series is Habonim's firesafe valve design without the Graphite free HermetiX™ stem seal construction.

# Floating Ball Valves

## Flanged valves

General

HermetiX™

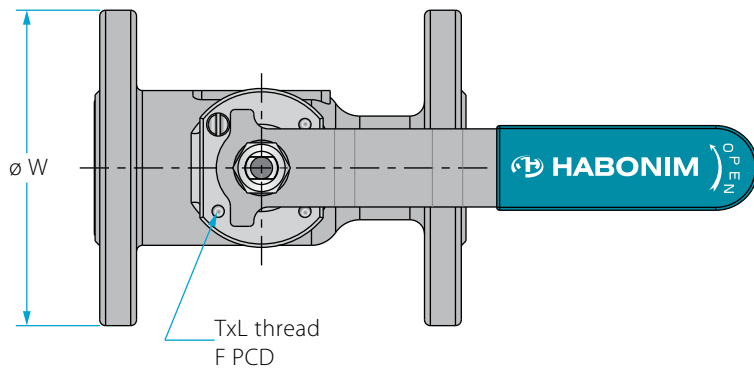
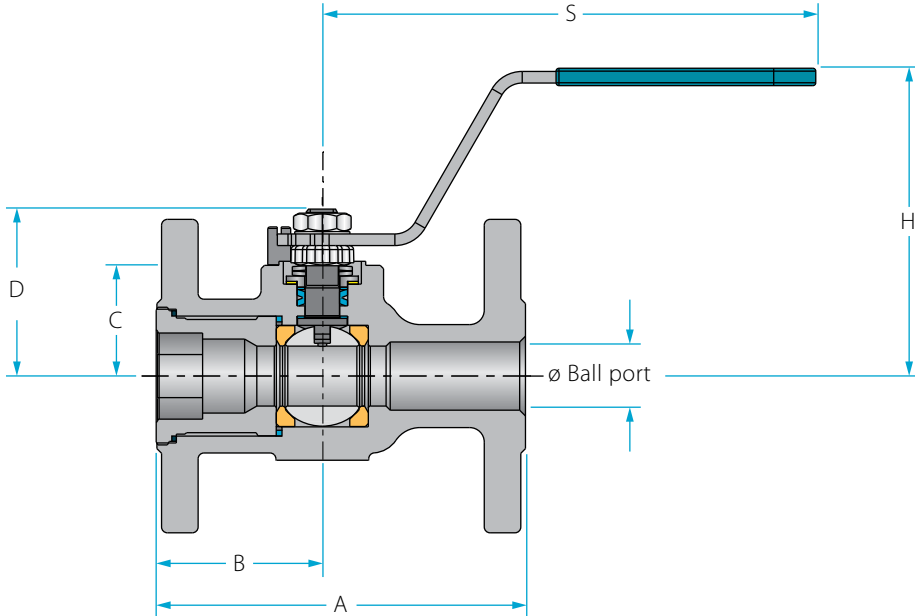
HermetiX™  
Fire-safe

HermetiX™ Graphite-  
free fire-safe

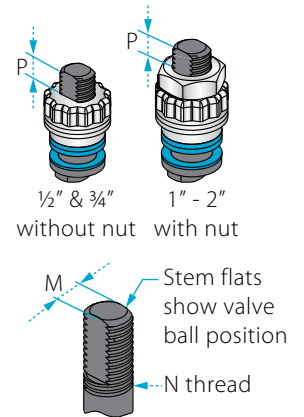
Ordering  
code system

Size ½"-2" | DN15-DN50 | ANSI Class 150/300 | 31G/32G Series

### Valve dimensions

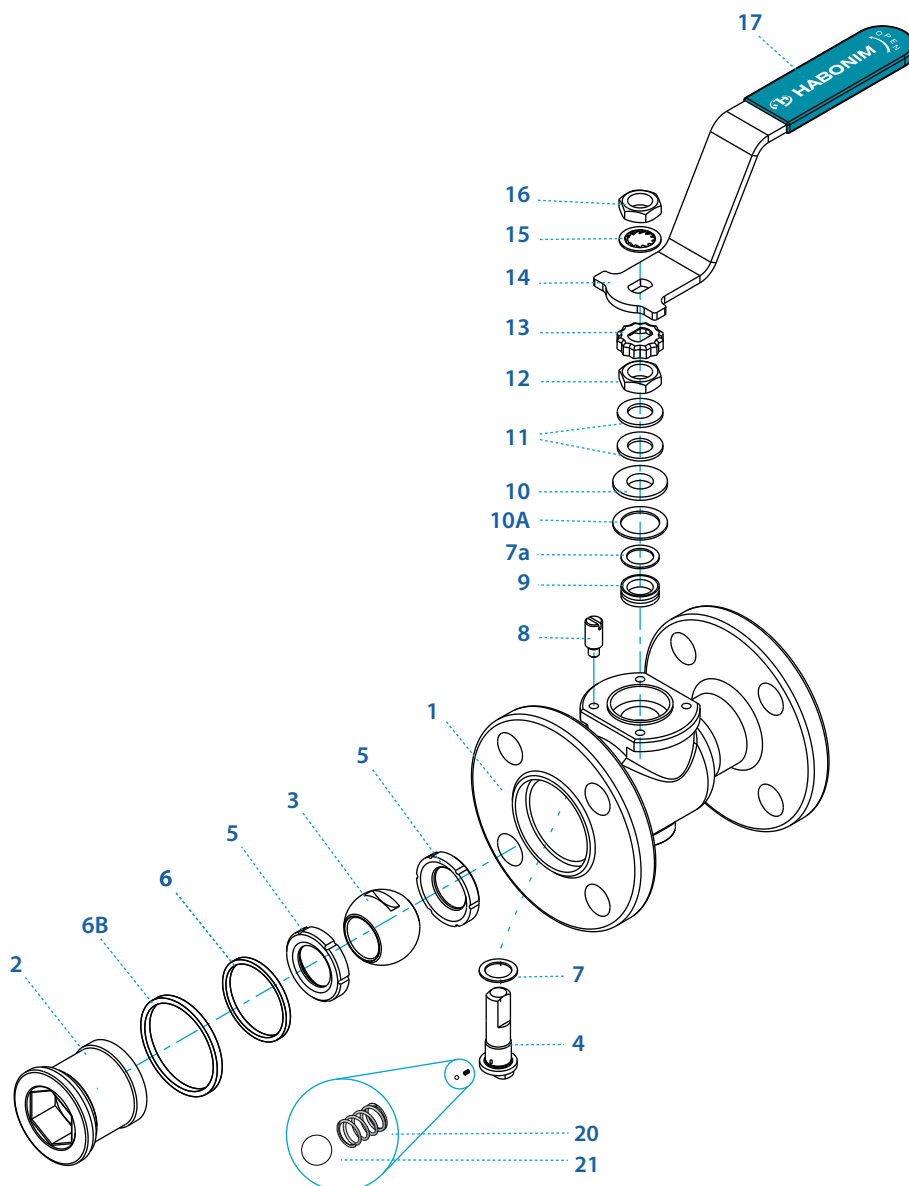


### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	W		M	N	P	F	TxL	Weight kg/lb		Cv	
			150	300						150	300						150	300		Kv
DN15	mm	11.15	108.00	140.00	46.00	29.00	38.00	92.00	151.00	88.90	95.25	5.54	3/8 - UNF	6.65	(F03)	36.00	M5x10	1.70	2.40	6.9
½"	inch	0.44	4.25	5.50	1.81	1.14	1.50	3.62	5.94	3.50	3.75	0.22	UNF	0.26		1.42	M5x10	3.80	5.30	8.0
DN20	mm	14.30	117.00	152.00	49.00	31.40	40.30	94.00	151.00	98.55	163.07	5.54	3/8 - UNF	6.65	(F03)	36.00	M5x10	2.30	3.30	10
¾"	inch	0.56	4.61	6.00	1.93	1.24	1.59	3.70	5.94	3.88	6.42	0.22	UNF	0.26		1.42	M5x10	5.10	7.30	12
DN25	mm	20.60	127.00	165.00	57.00	38.20	55.60	103.50	170.00	107.95	123.95	7.54	7/16 - UNF	7.40	(F04)	42.00	M5x10	3.10	4.60	28
1"	inch	0.81	5.00	6.50	2.25	1.50	2.19	4.07	6.69	4.25	4.88	0.30	UNF	0.29		1.65	M5x10	7.30	10.20	32
DN40	mm	31.80	165.00	190.00	62.00	43.60	73.10	119.20	220.50	127.00	155.52	8.71	9/16 - UNF	8.50	(F05)	50.00	M6x12	5.50	8.70	69
1½"	inch	1.25	6.50	7.50	2.44	1.72	2.88	4.70	8.68	5.00	6.10	0.34	UNF	0.33		1.97	M6x12	12.20	19.30	80
DN50	mm	38.20	178.00	216.00	68.00	48.30	77.80	123.90	220.50	152.40	165.10	8.71	9/16 - UNF	8.50	(F05)	50.00	M6x12	8.10	10.80	102
2"	inch	1.50	7.00	8.50	2.67	1.90	3.06	4.88	8.68	6.00	6.50	0.34	UNF	0.33		1.97	M6x12	18.00	24.00	118

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Plug	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1

Item	Description	Material specification	Qty.
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

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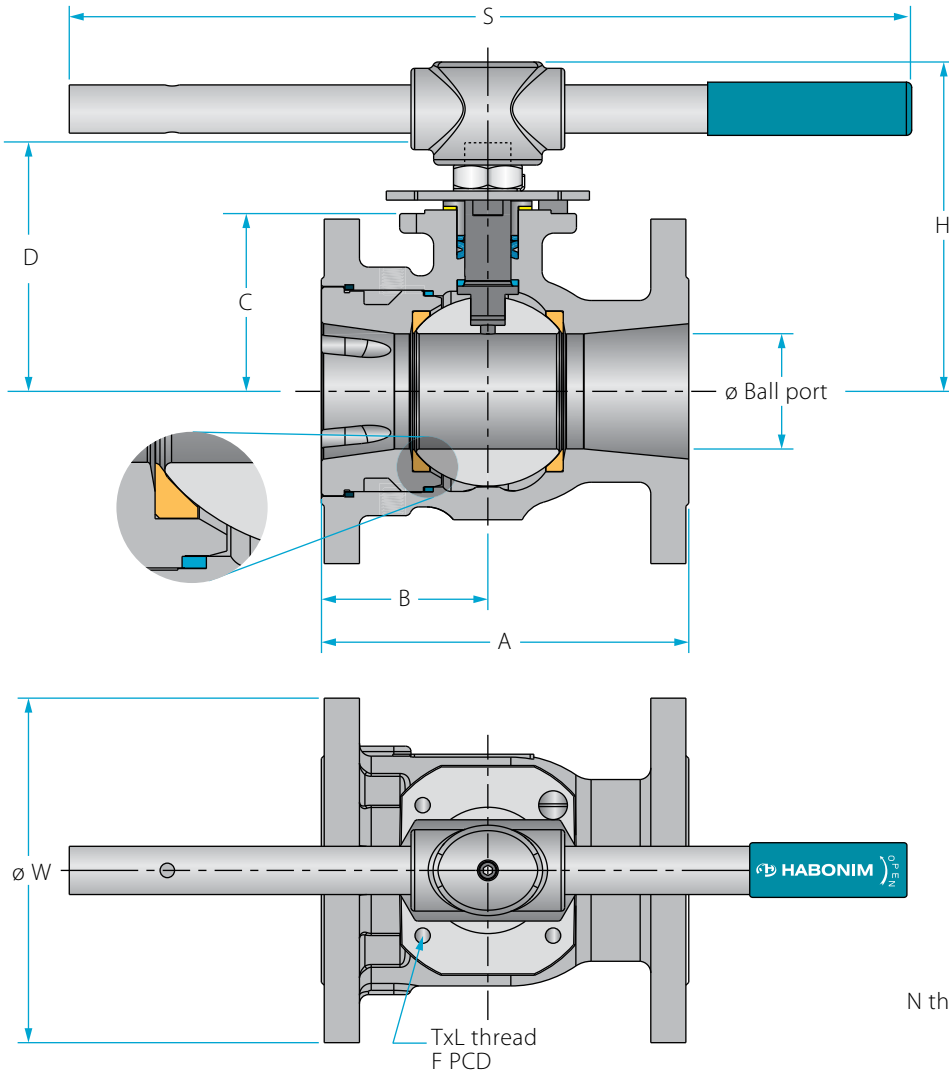
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

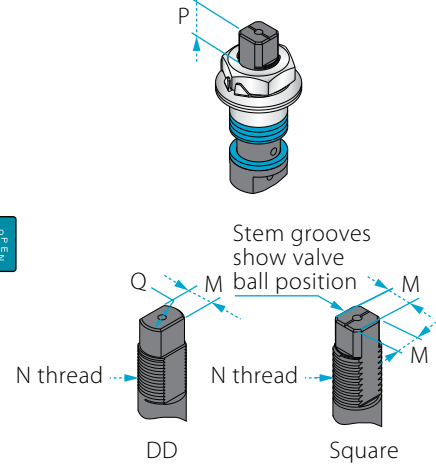
Ordering  
code system

Size 3"-8" | DN80-DN200 | ANSI Class 150/300 | 31G/32G Series

### Valve dimensions



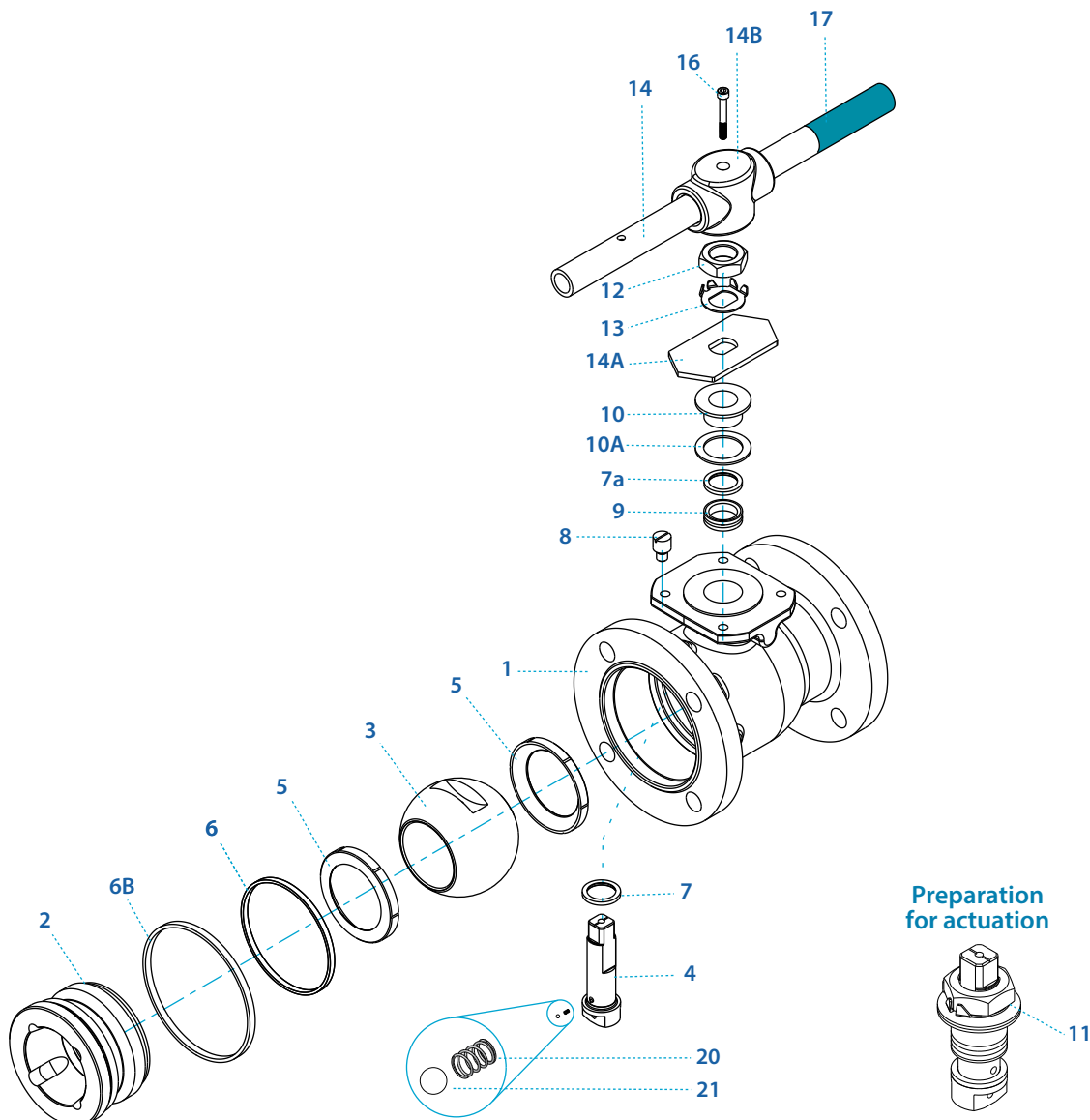
### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	W		M	M-DD	N	P	Q	F	TxL	Weight kg/lb		Kv	
			150	300						150	300								150	300		Cv
DN80	mm	63.50	203.00	284.00	92.00	98.40	145.00	185.10	400.00	190.50	209.55	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10x20	18.00	22.70	300
3"	inch	2.50	8.00	11.18	3.62	3.88	5.72	7.28	15.75	7.50	8.25	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10x20	40.00	50.40	348
DN100	mm	82.60	229.00	305.00	102.00	114.10	161.00	201.00	610.00	228.60	254.00	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10x20	28.20	36.30	615
4"	inch	3.25	9.00	12.00	4.00	4.49	6.34	7.91	24.01	9.00	10.00	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10x20	62.80	80.60	713
DN150	mm	111.10	267.00	403.20	108.00	157.40	226.00	285.90	916.00	279.40	317.50	28.45	23.75	1½"-12	26.20	35.20	(F12)	125.00	M12x20	41.00	69.00	872
6"	inch	4.38	10.50	15.88	4.25	6.20	8.91	11.25	36.08	11.00	12.50	1.12	0.94	UNF-2A	1.03	1.39		4.92	M12x20	91.00	153.00	1012
DN200	mm	144.40	292.00	419.00	163.50	185.20	254.00	313.60	916.00	342.90	381.00	28.45	23.75	1½"-12	26.20	35.20	(F12)	125.00	M12x20	82.00	105.00	1552
8"	inch	5.68	11.50	16.50	5.37	7.30	10.00	12.34	36.08	13.50	15.00	1.12	0.94	UNF-2A	1.03	1.39		4.92	M12x20	182.00	233.00	1800



Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Plug	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	C.st B18 ZP	1
13	Tab lock washer	A240 304	1
14	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

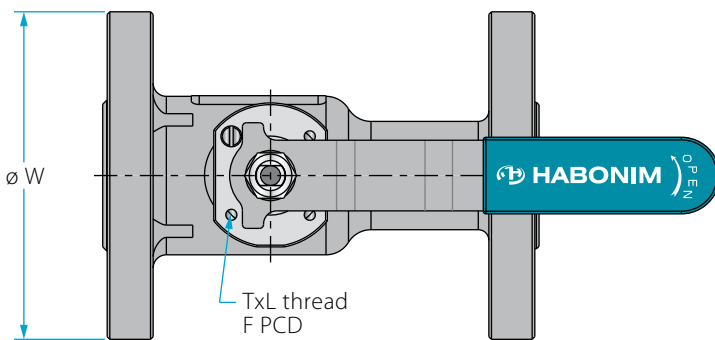
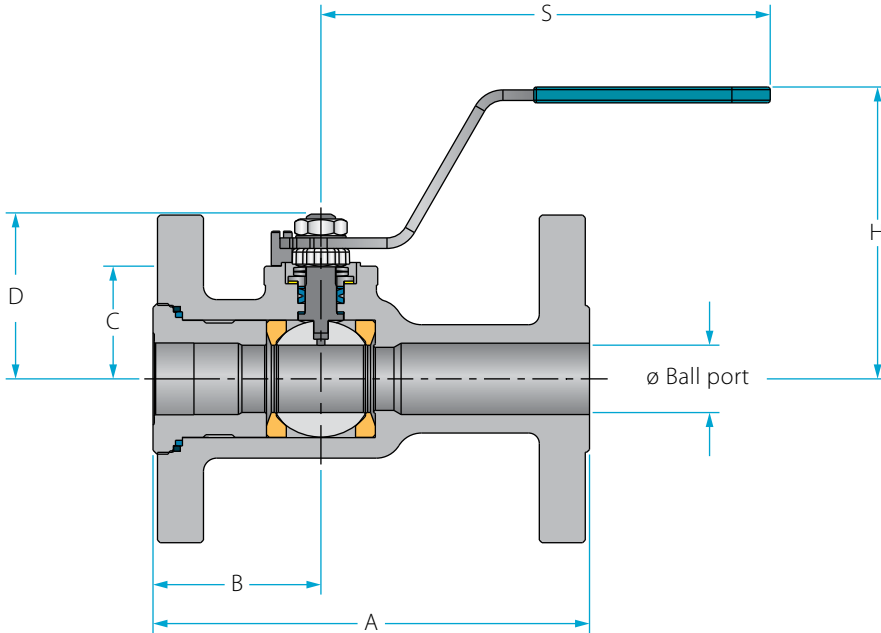
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

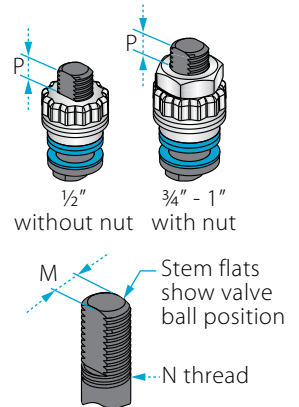
Ordering  
code system

Size ½"-1" | DN15-DN25 | ANSI Class 150/300 | 73G/74G Series

### Valve dimensions

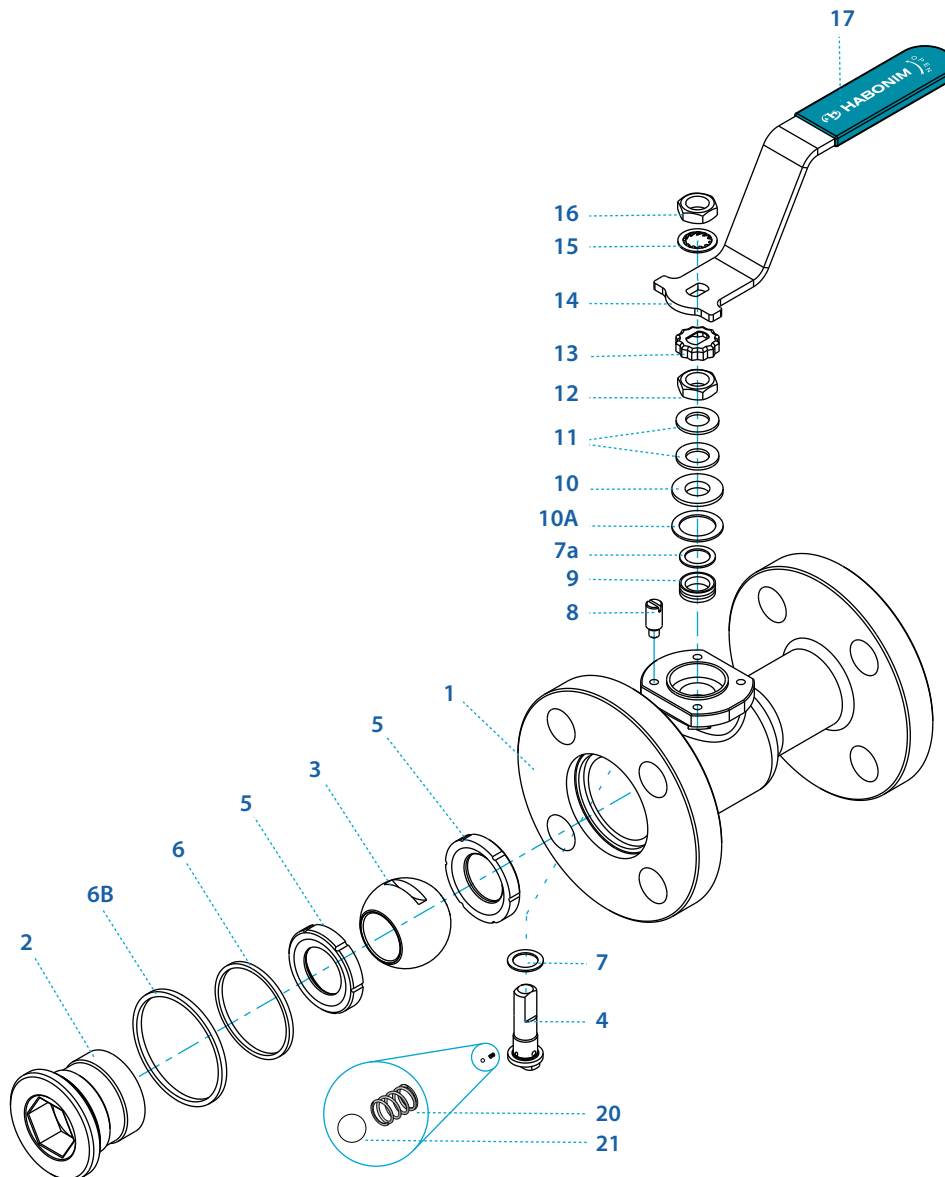


### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	S	ØW		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300						150	300						150	300	
DN15	mm	14.30	108.00	140.00	47.00	31.40	40.50	94.00	151.00	89.00	95.00	5.54	¾" UNF	6.65 (F03)	36.00	M5x10	1.80	2.30	28
½"	inch	0.56	4.25	5.51	1.85	1.24	1.59	3.70	5.95	3.50	3.74	0.22		0.26	1.42		4.00	5.10	32
DN20	mm	20.60	117.00	152.00	57.00	38.20	55.60	103.50	170.00	98.00	117.00	7.54	7/16" UNF	7.40 (F04)	42.00	M5x10	2.20	3.30	46
¾"	inch	0.81	4.61	5.98	2.24	1.50	2.19	4.08	6.69	3.86	4.61	0.30		0.29	1.65		4.80	7.30	53
DN25	mm	25.40	127.00	165.00	62.00	42.70	60.30	108.00	170.00	108.00	124.00	7.54	7/16" UNF	7.40 (F04)	42.00	M5x10	3.20	4.60	80
1"	inch	1.00	5.00	6.50	2.44	1.68	2.37	4.25	6.69	4.25	4.88	0.30		0.29	1.65		7.00	10.10	93

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	Insert	A351 CF8M, A216 WCB, A351 CN7M, A494	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1
8	Stop pin	A582 303	1

Item	Description	Material specification	Qty.
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

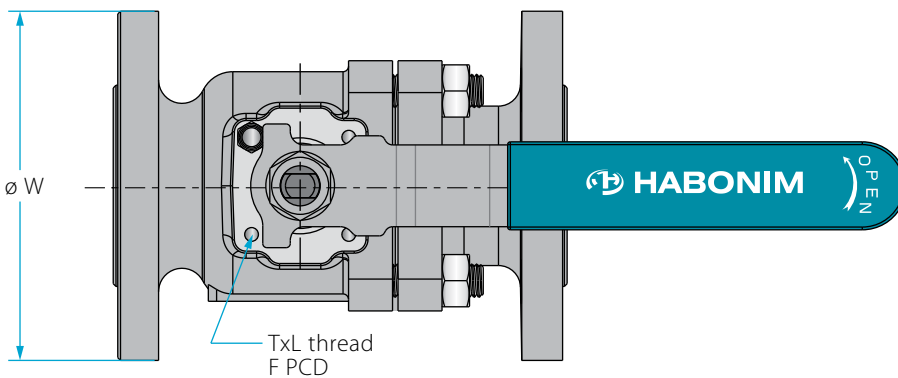
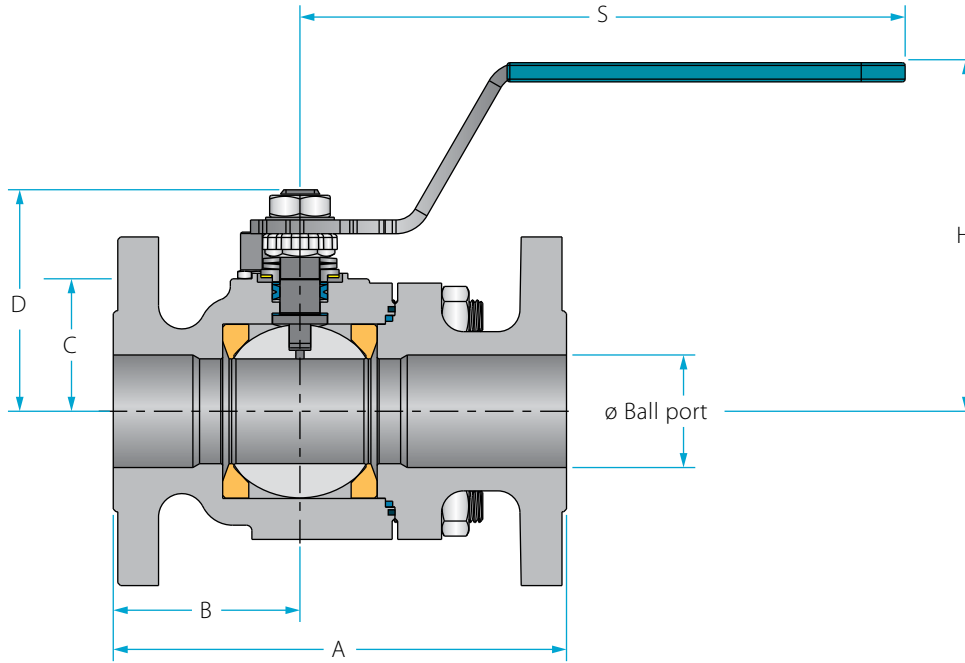
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

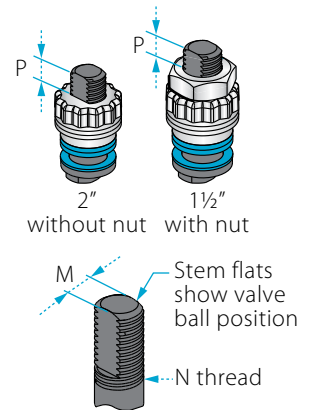
Ordering  
code system

Size 1½"-2" | DN40-DN50 | ANSI Class 150/300 | 73G/74G Series

### Valve dimensions

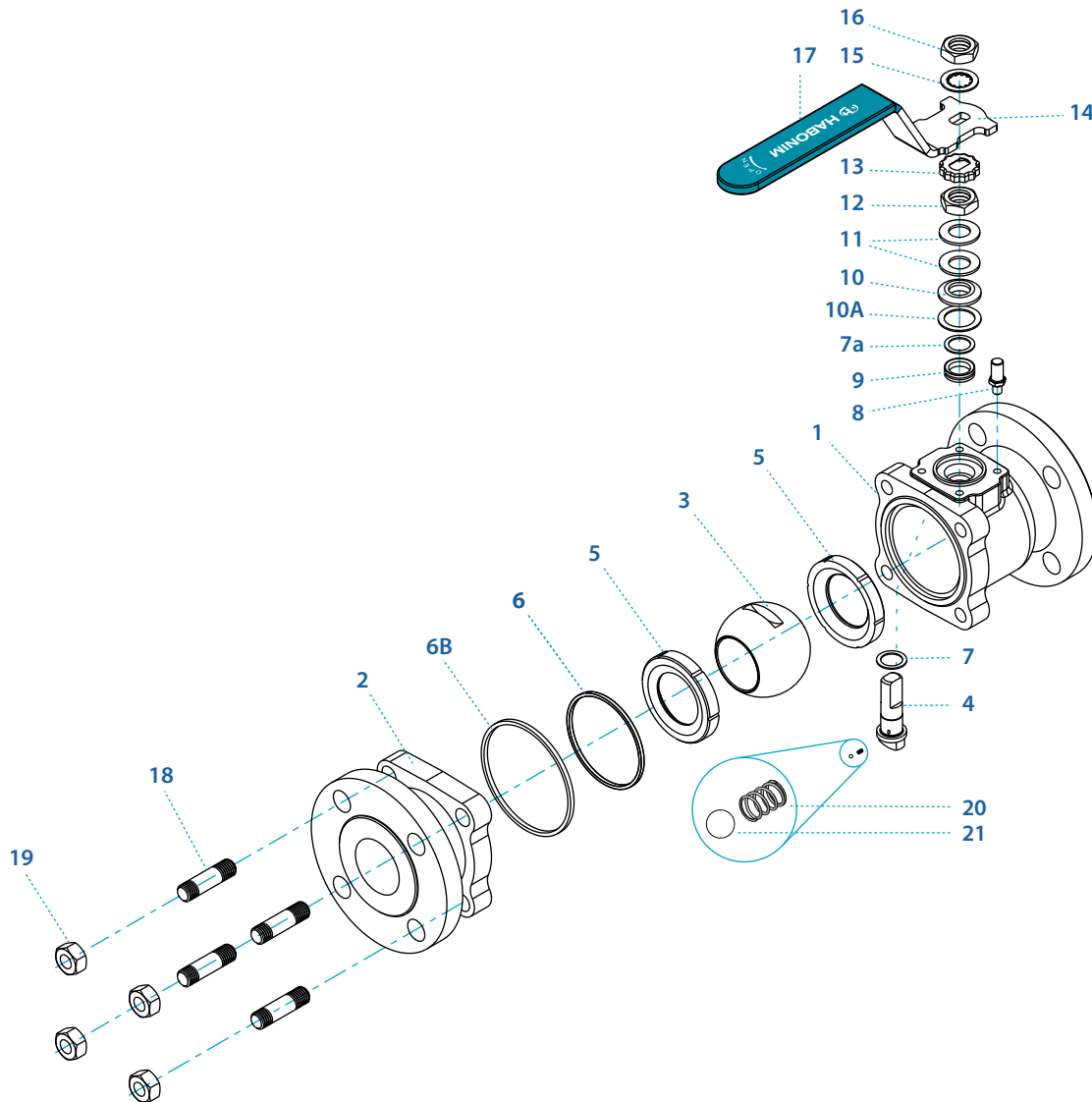


### Preparation for actuation



Std. port	Unit	Ball port	A		B		C	D	H	S	$\varnothing$ W		M	N	P	F	TxL	Weight kg/lb		Kv
			150	300	150	300					150	300								
DN40	mm	38.10	165.00	190.00	97.00	110.00	48.30	77.80	124.00	220.50	127.00	156.00	8.71	9/16" UNF	8.50 (F05)	50.00	M6x12	6.60	9.80	220
1½"	inch	1.50	6.50	7.50	3.82	4.33	1.90	3.06	4.88	6.68	5.00	6.14	0.34	9/16" UNF	0.33	1.97	M6x12	14.50	21.50	255
DN50	mm	50.00	178.00	216.00	109.00	141.00	70.00	88.00	134.20	220.50	152.00	165.00	8.71	9/16" UNF	13.50 (F07)	70.00	M8x12	13.00	15.00	430
2"	inch	2.00	7.00	8.50	4.29	5.55	2.75	3.46	5.28	6.68	5.98	6.50	0.34	9/16" UNF	0.53	2.76	M8x12	28.60	33.00	499

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	End	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A193 B8, B8A	1
17	Sleeve	PVC	1
18	Body bolts	A193 B8, EN3506-1 A2-70	4
19	Body nuts	A194 8M, EN3506-2 A4-80	4
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

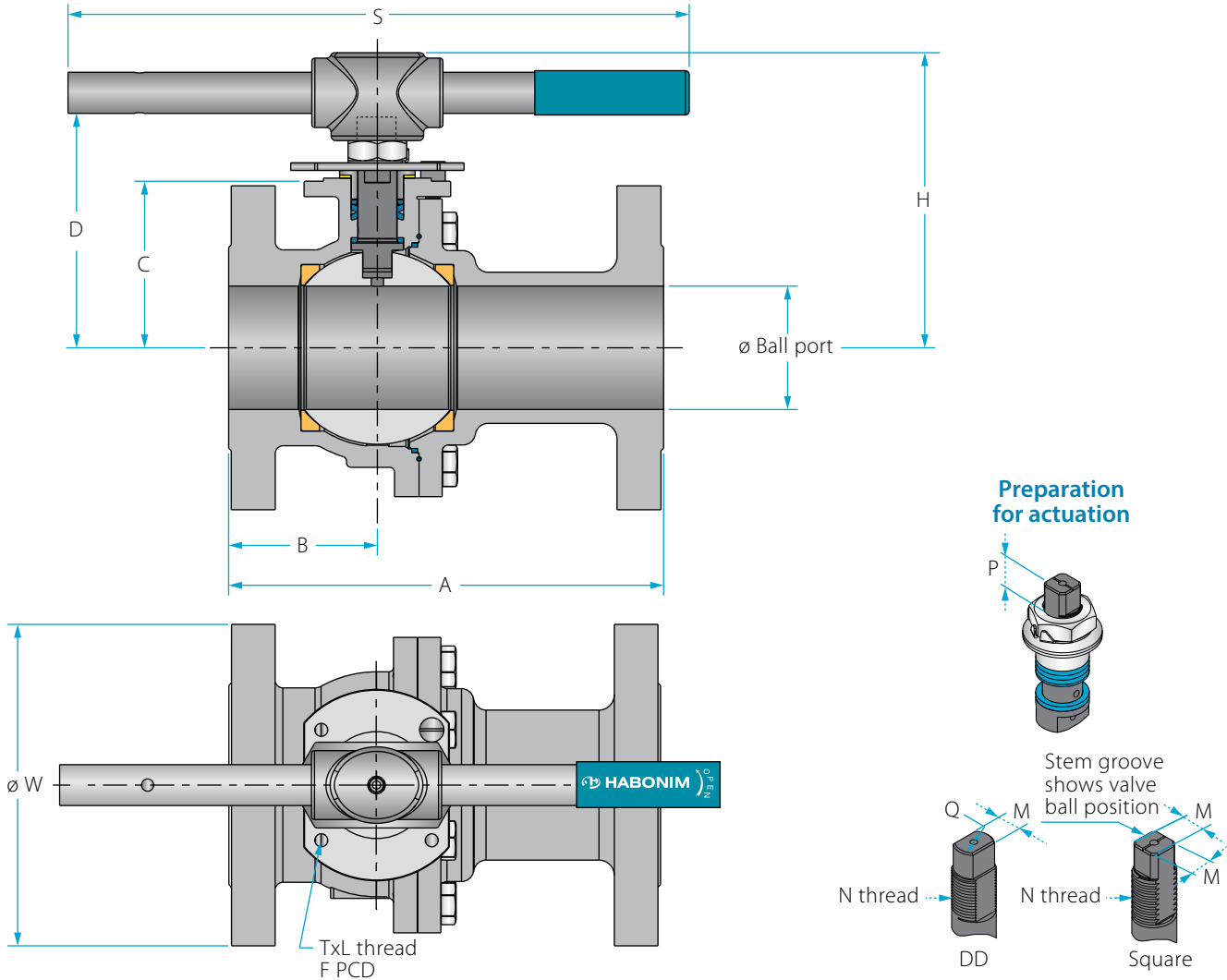
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

Ordering  
code system

Size 3"-8" | DN80-DN200 | ANSI Class 150/300 | 73G/74G Series

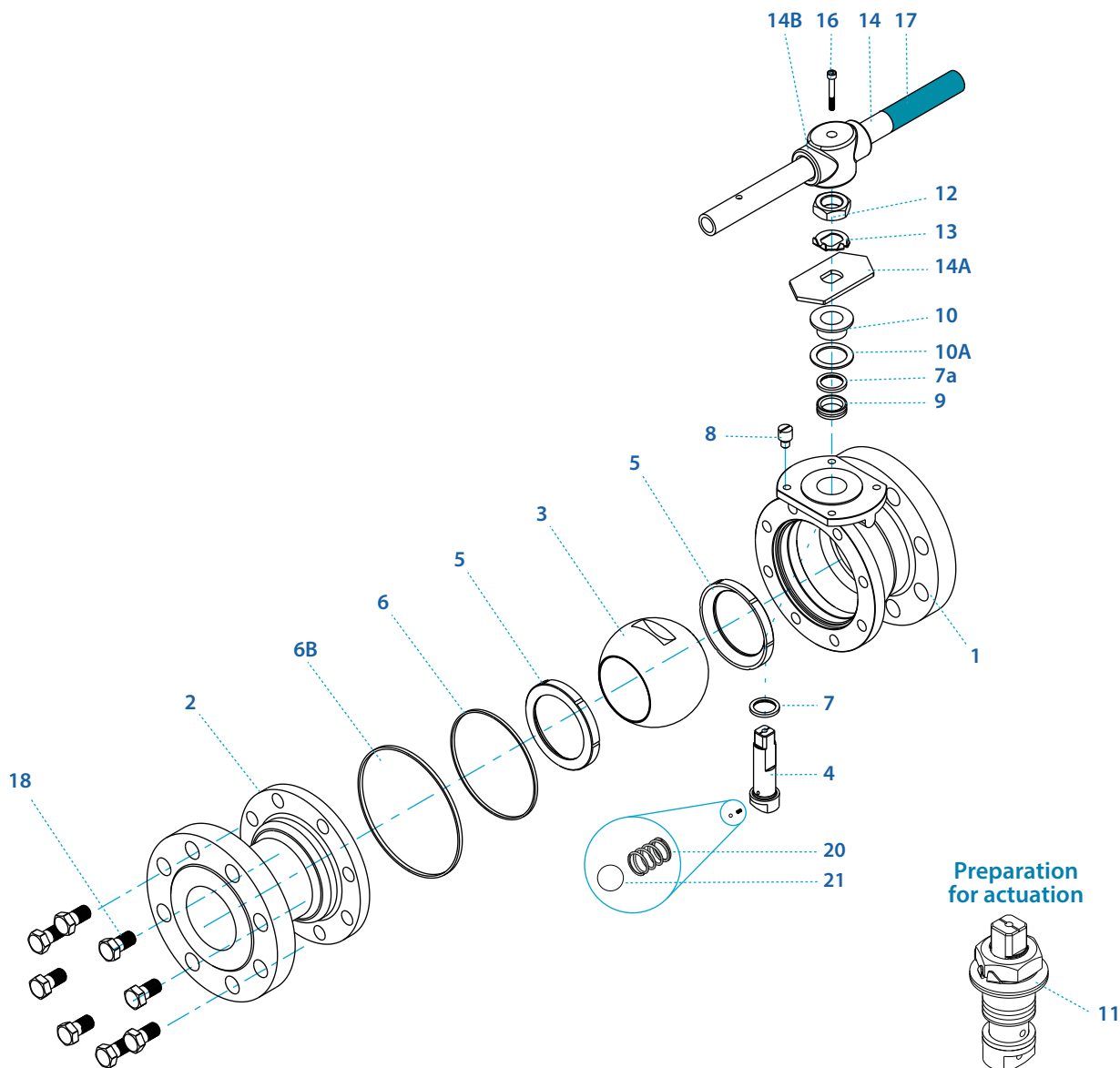
### Valve dimensions



Std. port	Unit	Ball port	A		B		C	D	H	S	ØW		M	M-DD	N	P	Q	F	TxL	Weight kg/lb		Kv	Cv	
			150	300	150	300					150	300												
DN80	mm	80.00	203.00	282.50	77.50	96.40	108.00	154.60	194.80	400.00	191.00	210.00	18.90	15.90	1"-14	16.70	22.70	(F10)	102.00	M10X20	22.00	28.20	1111	
3"	inch	3.15	7.99	11.12	3.05	3.80	4.25	6.09	7.67	15.75	7.52	8.27	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10X20	48.50	62.20	1300	
DN100	mm	100.00	228.50	304.80	84.50	104.50	124.00	210.80	211.00	610.00	230.00	254.00	18.90	15.90	1"-14	16.70	23.00	(F10)	102.00	M10X20	39.00	44.50	2051	
4"	inch	3.94	9.00	12.00	3.33	4.11	4.88	8.30	8.31	24.02	9.06	10.00	0.74	0.63	UNS-2A	0.66	0.89		4.02	M10X20	86.00	98.10	2400	
DN150	mm	150.00	394.00	403.50	163.50	174.50	179.00	248.50	308.00	916.00	279.40	328.00	28.45	23.75	1½"-12	26.20	23.00	(F12)	125.00	M12X20	82.00	100.00	4615	
6"	inch	5.91	15.51	15.89	6.44	6.87	7.05	9.78	12.13	36.06	11.00	12.91	1.12	0.94	UNF-2A	1.03	0.91		4.92	M12X20	180.80	220.50	5400	
DN200	mm	200.00	457.20	502.00	242.50	241.00	241.00	353.70	-	-	460.00	460.00	35.92	35.92	2"-8	37.50	32.00	(F14)	140.00	M16X24	190.00	225.00	7949	
8"	inch	7.87	18.00	19.76	9.55	9.49	9.49	13.93	-	-	18.11	18.11	1.41	1.41	UN-2A	1.48	1.26		5.51	M16X24	418.90	496.00	9300	

<sup>†</sup> Due to high valve torque, pipe handle cannot be used. A manual gear or automation means should be used to operate the valve.

Components & materials



Item	Description	Material specification	Qty.
1	Body	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
2	End	A351 CF8M, A216 WCB, A351 CN7M, A494 M-35-1, A494 CW-12MW, A494 CX-2MW, A351 CK3MCuN, A995 CD3MN 4A, A995 CE3MN 5A	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, B574 N06022, A479 S31254, A479 S31600, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1

Item	Description	Material specification	Qty.
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	C.st B18 ZP	1
13	Tab lock washer	A240 304	1
14**	Handle	C.St. Zinc plate, A240 316L	1
14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
14B	Wrench head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
17	Sleeve	PVC	1
18	Body bolts	C.St. 8.8 ZP, S.St. A2-70	8-12
20	Antistatic spring	A313 302	2
21	Antistatic plunger	A479 304	2
23	Tag (not shown)	A167 304	1

\* Repair kit components

\*\* Gear operator should be used for size 8" DN200 (handle components are not included)

# Floating Ball Valves

## Flanged valves

General

HermetiX™

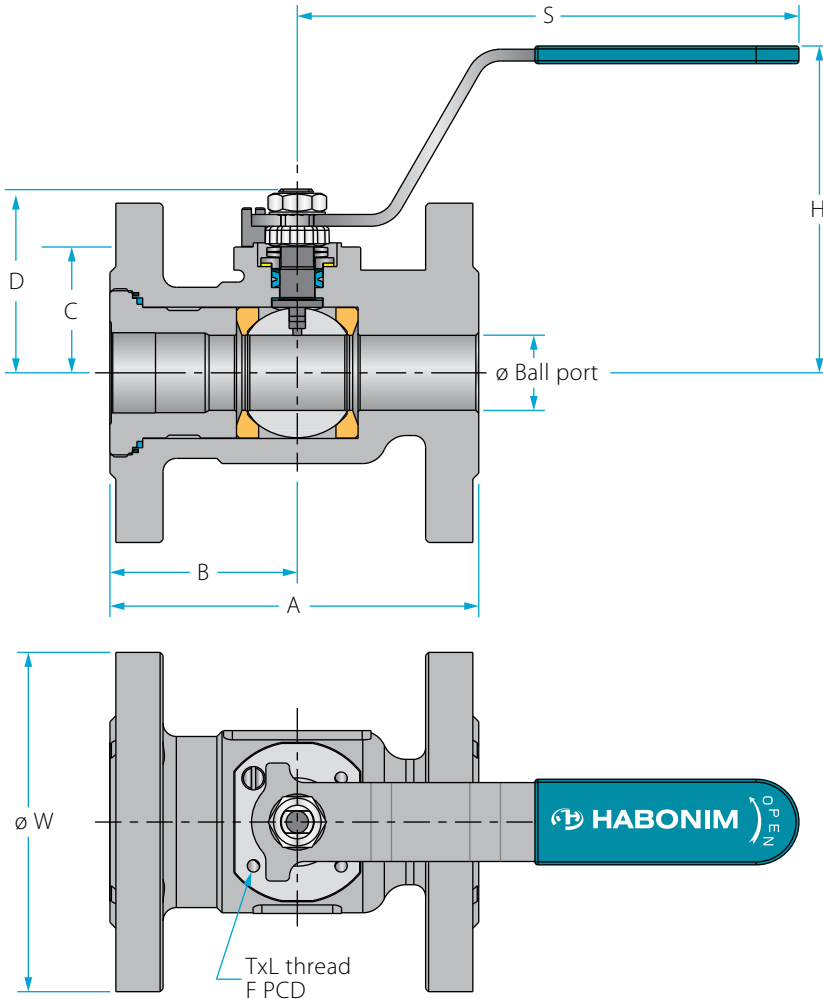
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

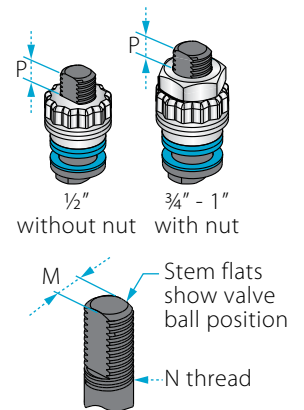
Ordering  
code system

Size ½"-1" | Class DN15-DN25 | DIN PN40 | 78G Series

## Valve dimensions



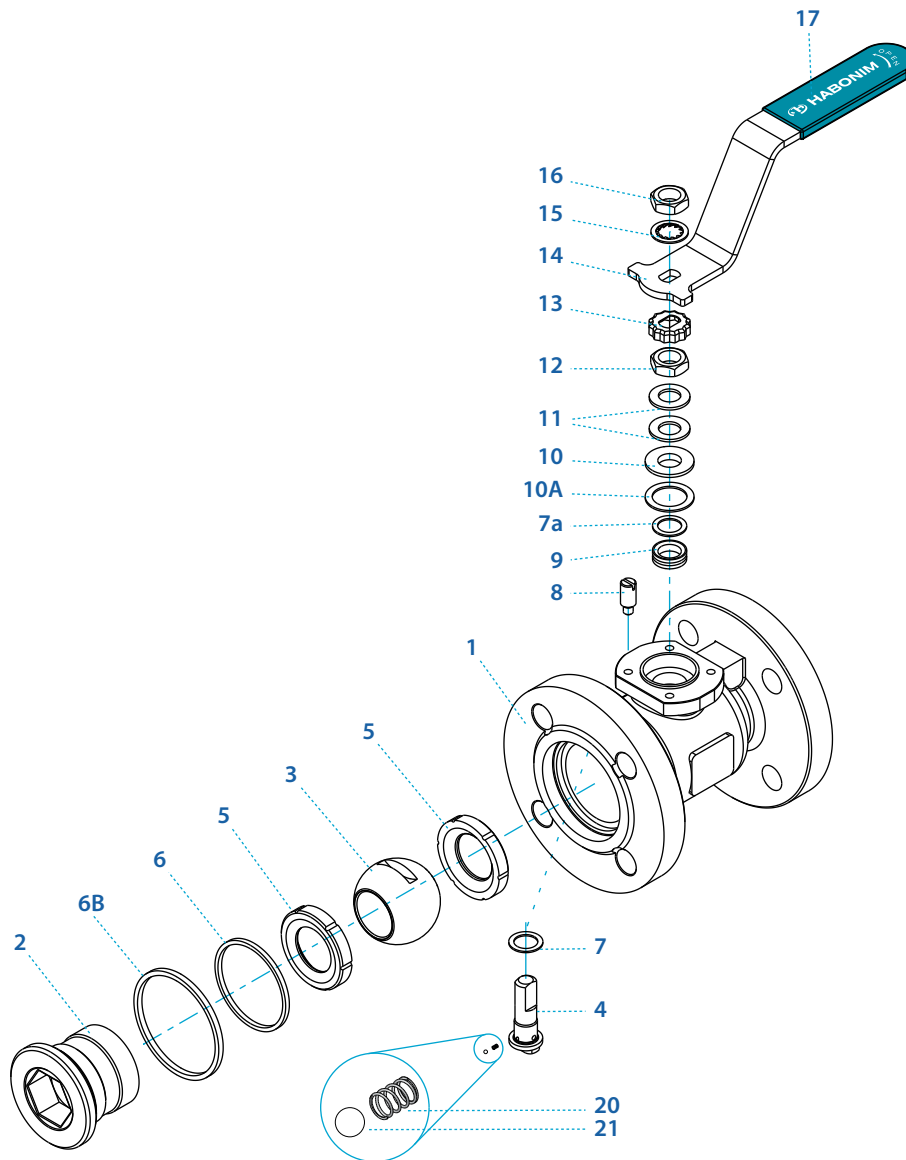
### Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	H	M	N	P	S	ØW	F	TxL	Weight kg/lb		Kv
			F1	F4												F1	F4	
DN15	mm	14.30	130.00	115.00	48.00	31.50	40.50	98.60	5.54	¾" UNF	6.65	160.00	95.00	(F03)36.00	M5x10	2.20	2.10	28
½"	inch	0.56	5.12	4.53	1.89	1.24	1.59	3.88	0.22		0.26	6.30	3.74	1.42		4.80	4.60	32
DN20	mm	20.60	150.00	120.00	58.00	38.30	56.50	105.00	7.54	7/16" UNF	7.40	170.00	105.00	(F04)42.00	M5x10	3.20	3.00	46
¾"	inch	0.81	5.91	4.72	2.28	1.51	2.22	4.13	0.30		0.29	6.69	4.13	1.65		7.00	6.60	53
DN25	mm	25.40	160.00	125.00	63.50	41.80	61.00	108.00	7.54	7/16" UNF	7.40	170.00	115.00	(F04)42.00	M5x10	4.20	4.00	80
1"	inch	1.00	6.30	4.92	2.50	1.65	2.40	4.25	0.30		0.29	6.69	4.53	1.65		9.20	8.80	93



Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	Plug	A351 CF8M	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr.630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE (KEL-F), TFM, CF PTFE	1
8	Stop pin	NiCr19NbMo (2.4668)	1
9*	Stem seal	CF PTFE, TFM	1

Item	Description	Material specification	Qty.
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A194 8M, EN3506-2 A4-80	1
17	Sleeve	PVC	1
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

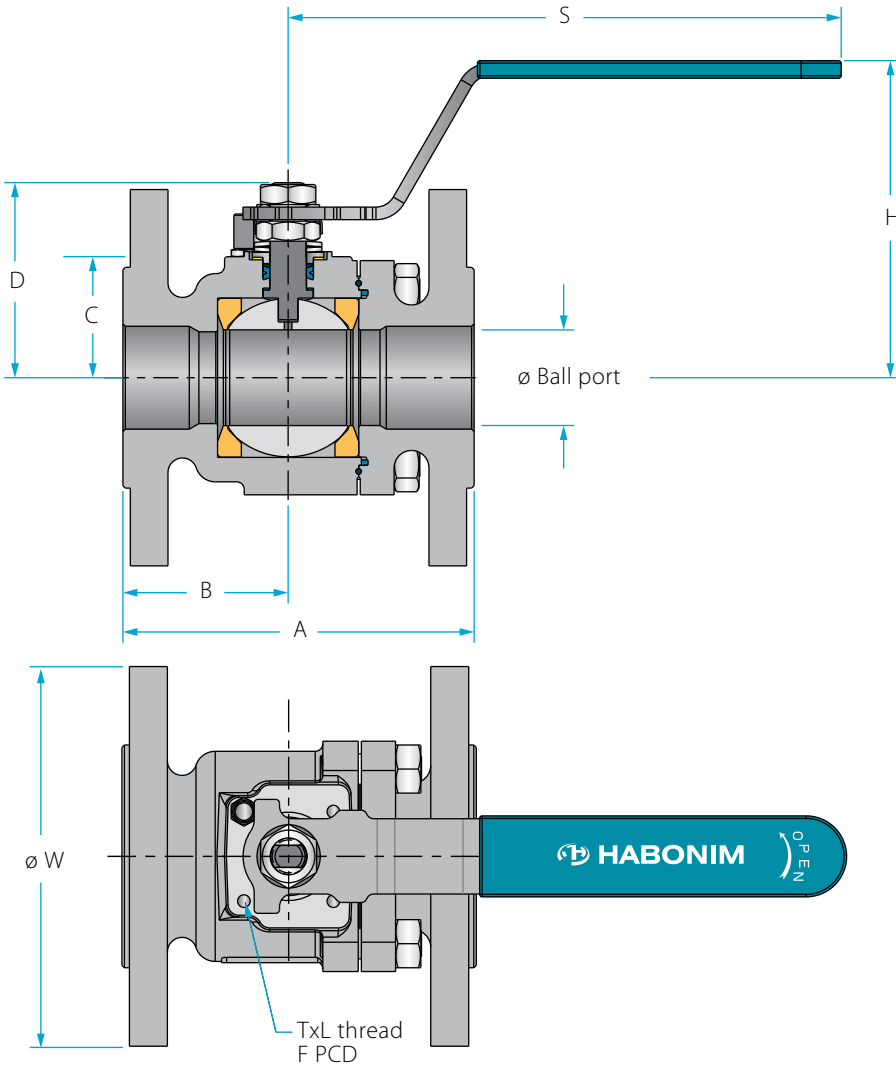
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

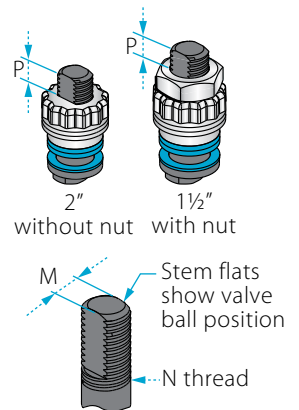
Ordering  
code system

Size 1½"-2" | DN40-DN50 | DIN PN40 | 78G Series

### Valve dimensions

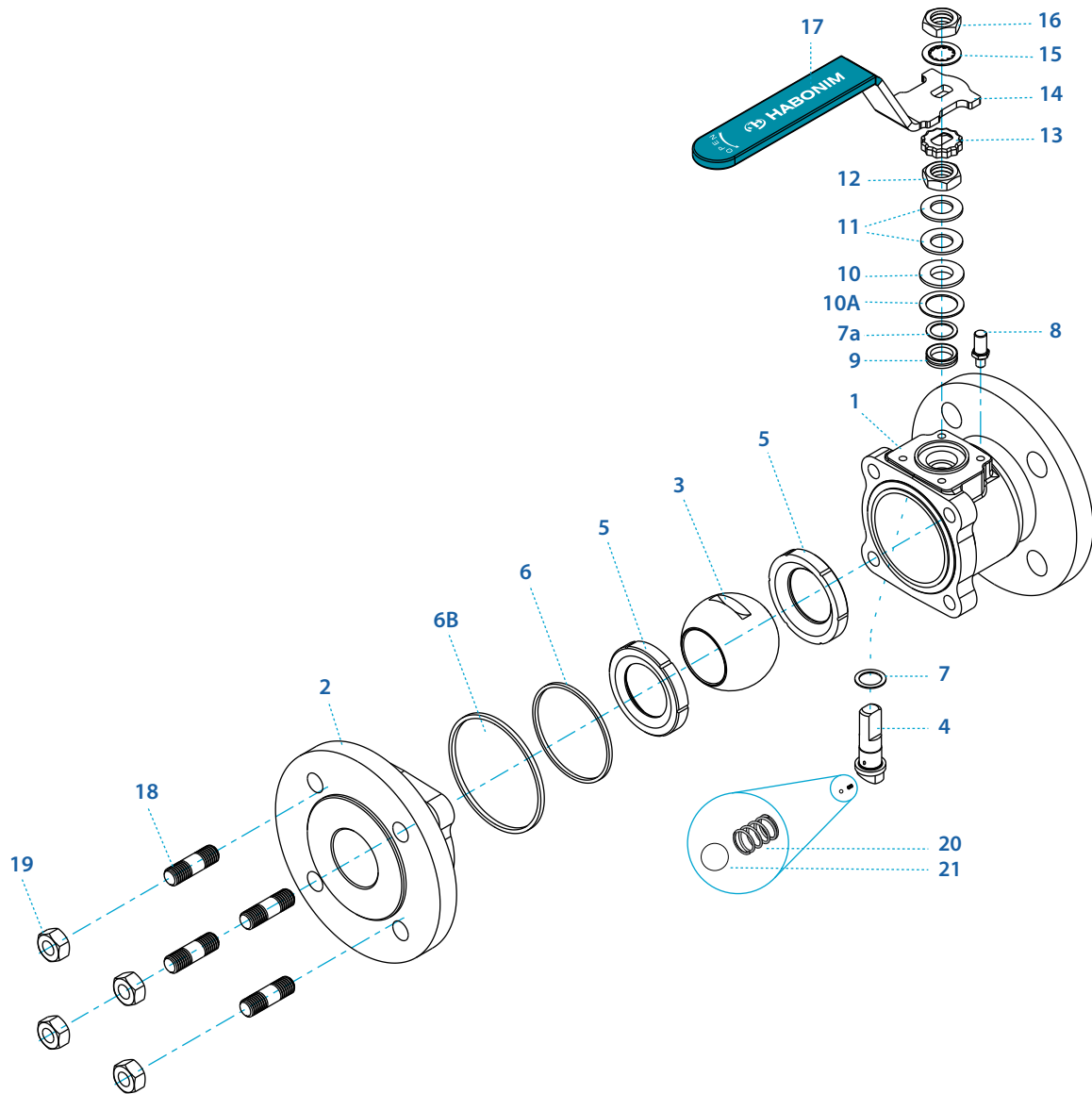


#### Preparation for actuation



Std. port	Unit	Ball port	A		C	B	D	H	S	ØW	M	N	P	F	TxL	Weight kg/lb		Kv	
			F1	F4												F1	F4		Cv
DN40	mm	38.10	200.00	140.00	48.30	65.90	77.80	124.00	122.00	150.00	8.71	¾" UNF	8.50	(F05)	50.00	M6x12	10.90	10.30	220
1½"	inch	1.50	7.87	5.51	1.90	2.59	3.06	4.88	4.81	5.91	0.34		0.33		1.97			24.00	22.70
DN50	mm	50.00	230.00	150.00	78.00	60.70	119.00	137.30	240.00	165.00	8.71	¾" UNF	13.50	(F07)	70.00	M8x12	15.00	13.00	430
2"	inch	2.00	9.06	5.91	3.07	2.39	4.69	5.41	9.45	6.50	0.34		0.53		2.76			33.00	28.60

Components & materials



Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1
2	End	A351 CF8M	1
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2
6*	Primary body seal	PTFE	1
6B*	Secondary body seal	Graphite	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1
8	Stop pin	A582 303	1
9*	Stem seal	CF PTFE, TFM	1

Item	Description	Material specification	Qty.
10	Follower	B783 316L, B164 N04400	1
10A*	Slide bearing	TF316	1
11	Disc spring	A693 631 17-7PH	2
12	Stem nut	A194 8M, EN3506-2 A4-80	1
13	Locking clip	A167 304	1
14	Handle	C.St. A29 G10200 Zinc plate, A240 430	1
15	Serrated washer	A240 410	1
16	Handle nut	A193 B8, B8A	1
17	Sleeve	PVC	1
18	Body bolts	A193 B8, EN3506-1 A2-70	4
19	Body nuts	A194 8M, EN3506-2 A4-80	4
20	Antistatic spring	A313 302	1
21	Antistatic plunger	A479 304	1
23	Tag (not shown)	A167 304	1

\* Repair kit components

# Floating Ball Valves

## Flanged valves

General

HermetiX™

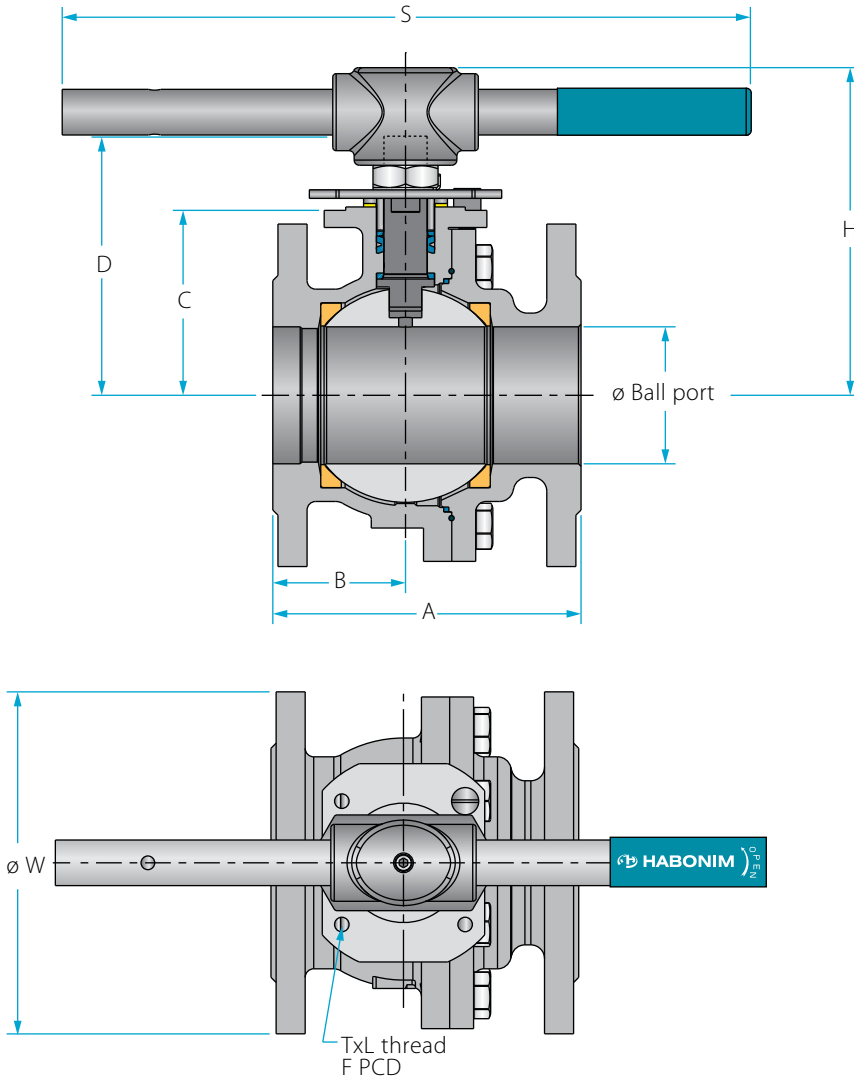
HermetiX™  
Fire-safe

HermetiX™  
Graphite-free fire-safe

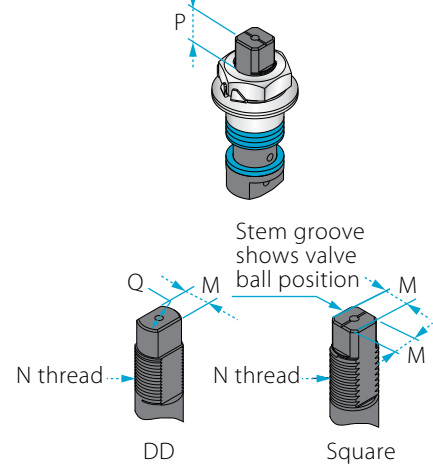
Ordering  
code system

Size 3"- 8" | DN80-DN200 | DIN PN16 | 77G Series

### Valve dimensions



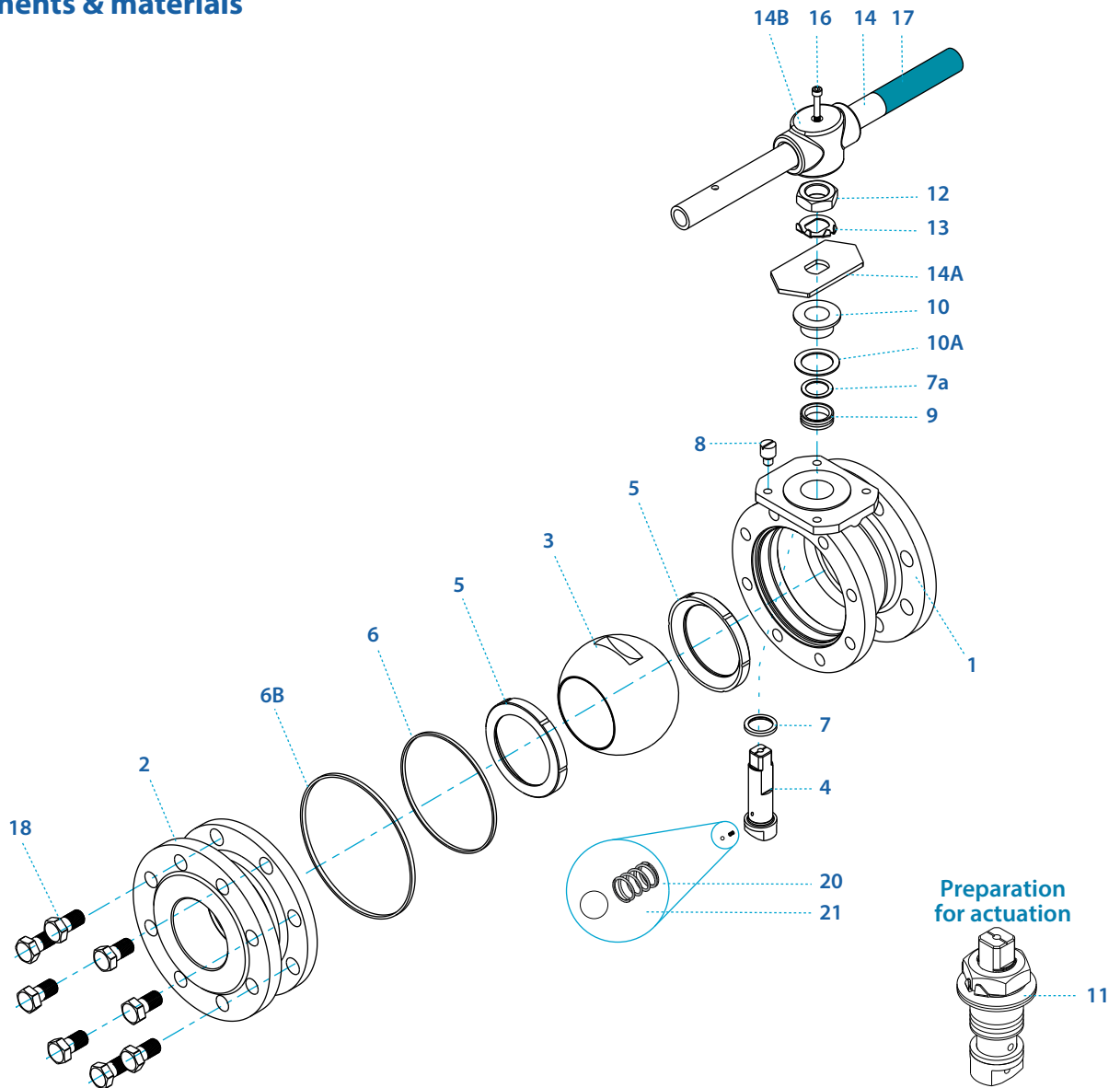
### Preparation for actuation



Std. port	Unit	Ball port	A		C	B	D	H	S	ØW	M	M DD	N	P	F	TxL	Weight kg/lb		Kv	
			F5	F4													F5 PN16	F4 PN16		Cv
DN80	mm	80.00	-	180.00	108.00	77.50	162.00	194.80	300.00	200.00	18.90	15.90	1"-14	16.70	(F10)	102.00	M10x20	-	24.00	1000
3"	inch	3.20	-	7.09	4.25	3.05	6.40	7.67	11.81	7.87	0.74	0.63	UNS-2A	0.66		4.02	M10x20	-	52.80	1160
DN100	mm	100.00	-	190.00	132.00	84.50	186.00	211.00	325.00	225.00	18.90	15.90	1"-14	16.70	(F10)	102.00	M10x20	-	30.00	1830
4"	inch	3.94	-	7.48	5.20	3.33	7.32	8.31	12.80	8.86	0.74	0.63	UNS-2A	0.66		4.02	M10x20	-	66.00	2123
DN150	mm	150.00	350.00	-	178.00	163.50	236.00	308.00	362.00	328.00	28.45	23.75	1 1/2"-12	26.20	(F12)	125.00	M12x20	63.00	-	4380
6"	inch	5.91	13.78	-	7.01	6.44	9.29	12.13	14.25	12.91	1.12	0.94	UNF-2A	1.03		4.92	M12x20	139.00	-	5081
DN200	mm	200.00	400.00	-	226.00	243.00	286.00	-	-	395.00	35.92	35.92	2"-8	37.50	(F14)	140.00	M16x30	97.00	-	8070
8"	inch	7.87	15.75	-	8.91	9.55	11.26	-	-	15.55	1.41	1.41	UN-2A	1.48		5.51	M16x30	213.00	-	9361

<sup>h)</sup> Due to high valve torque, pipe handle cannot be used. A manual gear or automation means should be used to operate the valve.

Components & materials



Item	Description	Material specification	Qty.	Item	Description	Material specification	Qty.
1	Body	X 2 CrNiMo 17 13 2 (1.4404), GS-C25 (DIN1.0619), NiCr20CuMo (2.4660), NiCu30Fe (2.4360), NiCr16Mo15W(2.4819), NiCr21Mo14W(2.4602), X1CrNiMoCuN20-18-7 (1.4547), X2CrNiMoN 22-5-3 (1.4462), X2CrNiMoN25-7-4 (1.4410), A216 WCB, A351 CF8M	1	10A*	Slide bearing	TF316	1
2	End	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1	11	Disc spring	A693 631 17-7PH	2
3	Ball	A351 CF8M, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1	12	Stem nut	A194 8M, EN3506-2 A4-80	1
4	Stem	A479 316L, A564 Gr 630 H1150D 17-4PH, B473 N08020, B164 N04400, B574 N06022, B574 N10276, A479 S31254, A479 S31803, A479 S32750	1	13	Tab lock washer	A240 304	1
5*	Seat	TFM, PTFE, Virgin PEEK, PCTFE (KEL-F)	2	14**	Handle	C.St. Zinc plate, A240 316L	1
6*	Primary body seal	PTFE	1	14A	Stop plate	C.St. 1.0402 Zinc plate, A240 430	1
6B*	Secondary body seal	Graphite	1	14B	Wrench Head	Ductile Iron A536 Gr. 65-45-12, A216 WCB, A351 CF8M	1
7*	Stem thrust seal	VIRGIN PEEK, PCTFE (KEL-F)	1	16	Wrench bolt	EN3506-1 A2-70/A4-80, A193 Gr B8/B8M	1
7a*	Anti-abrasion ring	VIRGIN PEEK, PCTFE (KEL-F)	1	17	Sleeve	PVC	1
8	Stop pin	A582 303	1	18	Body bolts	C.St. 8.8 ZP, S.St. A2-70	8-12
9*	Stem seal	CF PTFE, TFM	1	20	Antistatic spring	A313 302	2
10	Follower	B783 316L, B164 N04400	1	21	Antistatic plunger	A479 304	2
				23	Tag (not shown)	A167 304	1

\* Standard items supplied in repair kits

\*\* Gear operator should be used for size 8" DN200 (handle components are not included)

# Floating Ball Valves

Flanged valves

General

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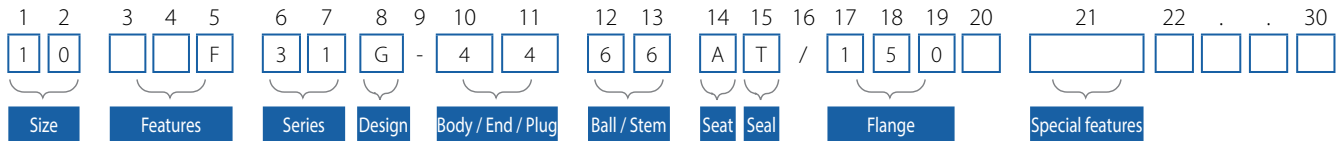
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Ordering code system

## Ordering code system

The HABONIM flanged ball valve identification code



Size			Features		Body / End / Plug		Seat		Special features	
Code	inch	mm	A	F	1	4	A	C	W	
05	½"	15	A	Anti-Static	1	Bronze B62 C83600	A	TFM	W	Threaded plug
07	¾"	20	F	Fire safe	4	C. Steel A216 WCB	C	PCTFE	R	DD stem
10	1"	25	O <sup>(2)</sup>	Clean assembly for O <sub>2</sub> service	R	C. Steel A352 LC1	K	CF PEEK	FF	Flat face
15	1½"	40	M	Ammonia service	9	C. Steel A352 LCB	L	Virgin PEEK	B	Body made from rolled bar
20	2"	50	K	Chlorine service	6	S. Steel A351 CF8M	P	CF PTFE	EP	Electropolished
30	3"	80	V	Vacuum service	8	S. Steel A351 CF8	R	15% Glass filled RPTFE	J2N05	Jacketed valve - number of ports (2), type (NPT) and size (½")
40	4"	100			7	Monel A494 M-35-1	S	VESPEL	SRS	Self relief seat
60	6"	150			I	Inconel 625 A494 CW-6MC	T	PTFE	P250	Ball with upstream pressure relief hole
80	8"	200			A	Alloy-20 A351 CN7M	U	UHMWPE	PN	Ball with LTPN surface treatment
					C	Alloy-C276 A494 CW-12MW	Y	Delrin	N..	Raised face special surface finish (N4-N8)
					W	Alloy-C22 A494 CX-2MW	W	PVDF	G..	Internal surface finish (G24, G32)
					D	Duplex A995 CD3MN 4A			Valve special stem seals for 'P' design	
					K	Super duplex A995 CE3MN 5A			HC	High cycle service
					S	254SMO A351 CK3MCuN			ORV	Viton O-ring based
									ORB	NBR O-ring based
									ORE	EPDM O-ring based
									AAX	FDA compliant stem seal. TFM thrust bearing and X shape gasket
									PPX	CF PTFE thrust and X shape gasket

<sup>(1)</sup> P design is Habonim standard valve without the HermetiX™ stem seal construction.  
<sup>(2)</sup> G series is cleaned for pharma/API service as standard, no need for 'O' prefix.  
 In some applications the available options above are limited to specific sizes please consult with Habonim for details.





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