



Hydrogen Service High Pressure Floating Ball 3 Piece Threaded-Body

Technical Information

Operation

Maximum Working Pressure: 550bar (8,000psi)
 Working temperature: -40°C up to +85°C (-40°F up to +185°F).

Design

- Threaded body
- Automation-ready with standard ISO 5211 connecting plate
- Total HermetiX Integrity package with:
 - ISO 15848-1 and API 641 emission standard certificated design
 - ISO 10497 and API607 fire-safe standard certificated design
 - Double body sealing

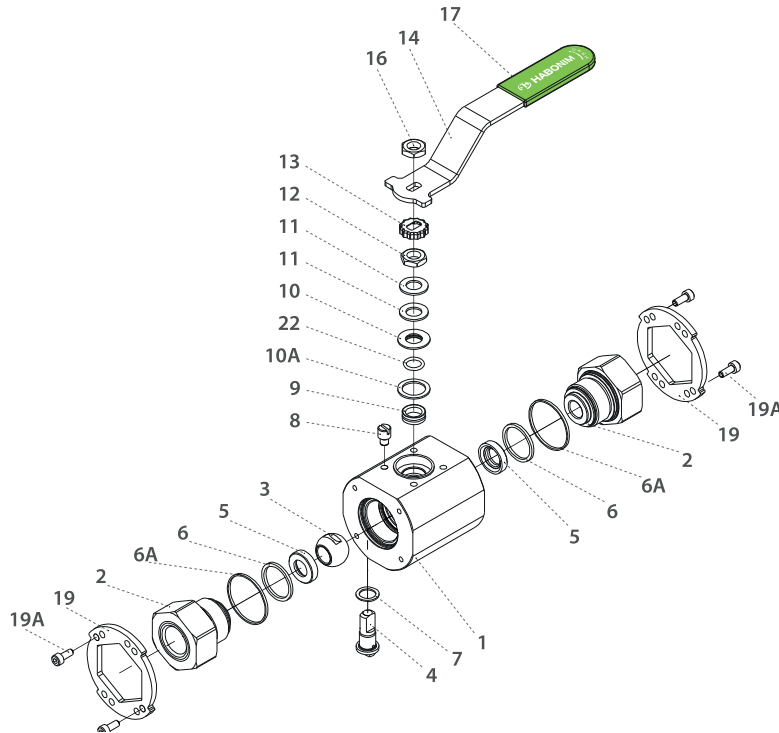
Testing & Certifications

- TPED Certified, up to 550bar (8,000psi) MWP
- 100% shell & inline leak tested
- Marine classification (on demand): DNV GL, LR, BV, ABS, KR, RINA, others

Materials

- Stainless steel body & ends
- All materials compatible for Hydrogen use

Components & materials



Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Ends	Acc. Ordering Code	2
3	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	2
6*	Inner Seal	Acc. Ordering Code	2
6A*	Outer Seal	Acc. Ordering Code	2
7	Stem thrust seal	PEEK, PCTFE	1
8	Stop Pin	S. Steel	1
9*	Stem Seal	PEEK, CFPEEK, PCTFE	1
10	Follower	S. Steel	1
10A*	Slide Bearing	CF PTFE, TFM	1
11	Disc Spring	S. Steel	2
12	Stem Nut	S. Steel	1
13	Locking Clip	S. Steel	1
14	Handle	S. Steel	1
16	Handle Nut	S. Steel	1
17	Sleeve	PVC	1
19	Locking Plate	S. Steel	2
19A	Locking Bolt	S. Steel	4
22	O-Ring	Acc. to 6	1

* Repair kit components

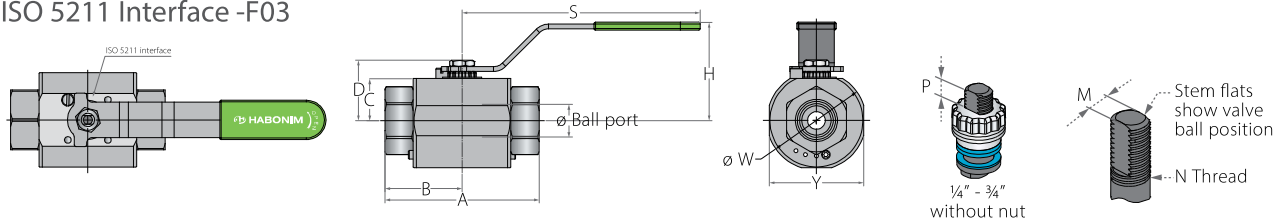
Hydrogen Service High Pressure Floating Ball Threaded Body

End connections

Valve size code	Connection		Minimum orifice mm (in)	Cv	Kv
2	Medium Pressure Coned & Threaded	CTM	1/4"	2.8	0.33
3		CTM	3/8"	5.2	1.17
6		CTM	9/16"	7.9	4.4
7		CTM	3/4"	11.1	21.28
2	High Pressure Coned & Threaded	CTH	1/4"	2.4	0.24
3		CTH	3/8"	3.2	0.43
6		CTH	9/16"	6.4	2.54
10		CTH	1"	11.1	22.27
2	Threaded	NPT/BSPP/DIN3852/BSPT	1/4"	7.66	2.62
3		NPT/BSPP/DIN3852/BSPT	3/8"	10.7	12.51
5		NPT/BSPP/DIN3852/BSPT	1/2"	11.15	12.7

Valve dimensions

ISO 5211 Interface -F03



Port	Unit	Ball port	A	B	C	D	H	M	N	P	W	S	Y	Weight kg/ib
DN8	mm	11.15	98	62	26.7	37.9	62.45	5.5	3/8" UNF	6.6	63	150	60	1.8
1/4"	inch	0.44	3.86	2.44	1.05	1.49	2.46	0.22		0.26	2.48	5.91	2.36	3.96
DN10	mm	11.15	98	62	26.7	37.9	62.45	5.5		6.6	63	150	60	1.8
3/8"	inch	0.44	3.86	2.44	1.05	1.49	2.46	0.22		0.26	2.48	5.91	2.36	3.96
DN15	mm	11.15	98	62	26.7	37.9	62.45	5.5		6.6	63	150	60	1.8
1/2"	inch	0.44	3.86	2.44	1.05	1.49	2.46	0.22		0.26	2.48	5.91	2.36	3.96
DN14	mm	11.15	98	62	26.7	37.9	62.45	5.5		6.6	63	150	60	1.8
9/16"	inch	0.44	3.86	2.44	1.05	1.49	2.46	0.22		0.26	2.48	5.91	2.36	3.96
DN20	mm	11.15	118	62	26.7	37.9	62.45	5.5		6.6	63	150	60	1.8
3/4"	inch	0.44	4.65	2.44	1.05	1.49	2.46	0.22		0.26	2.48	5.91	2.36	3.96
DN25	mm	11.15	118	62	26.7	37.9	62.45	5.5		6.6	63	150	60	1.8
1"	inch	0.44	4.65	2.44	1.05	1.49	2.46	0.22		0.26	2.48	5.91	2.36	3.96



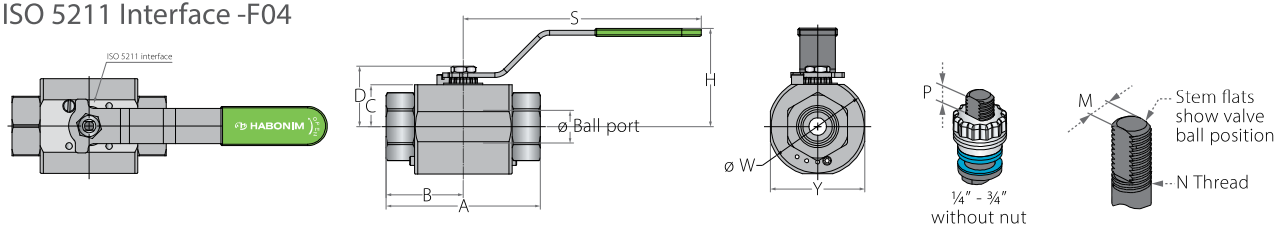
Hydrogen Service High Pressure Floating Ball Threaded Body

End connections

Valve size code	Connection		Minimum orifice mm (in)	Cv	Kv
7	Medium Pressure Coned & Threaded	CTM	3/4"	11.1	4.89
10		CTM	1"	14.31	12.66
15		CTM	1 1/2"	54.73	48.44
7	Threaded	NPT/BSPP/DIN3852/BSPT	3/4"	18.88	30.17
10		NPT/BSPP/DIN3852/BSPT	1"	71.36	63.15
15		NPT/BSPP/DIN3852/BSPT	1 1/2"	20.51	18.15

Valve dimensions

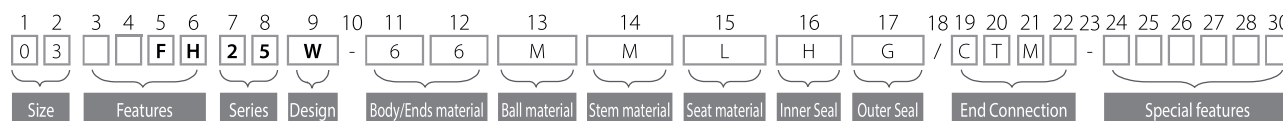
ISO 5211 Interface -F04



Port	Unit	Ball port	A	B	C	D	H	M	N	P	W	S	Y	Weight kg/ib
DN20	mm	20.65	168.6	88.6	39.6	55.6	81.5	7.5	7/16" UNF	11.74	96	187.13	92	5.9
3/4"	inch	0.81	6.64	3.49	1.56	2.19	3.21	0.30		0.46	3.78	7.37	3.62	12.98
DN25	mm	20.65	168.6	88.6	39.6	55.6	81.5	7.5		11.74	96	187.13	92	5.9
1"	inch	0.81	6.64	3.49	1.56	2.19	3.21	0.30		0.46	3.78	7.37	3.62	12.98
DN40	mm	20.65	188.6	88.6	39.6	55.6	81.5	7.5		11.74	96	187.13	92	6.5
1 1/2"	inch	0.81	7.43	3.49	1.56	2.19	3.21	0.30		0.46	3.78	7.37	3.62	14.3

Ordering Code System

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



Size (1-2)		
Code	inch	mm
02	1/4"	8
03	3/8"	10
05*	1/2"	13
06	9/16"	15
07	3/4"	20
10	1"	25
15	1 1/2"	40

* Not applicable for CTM/CTH

Features (3-6)	
F	Fire safe
H	Hydrogen use
	Body size A
B	Body size B
Series (7-8)	
25	HP Float 3 piece
Design (9)	
W	Total HermetiX Integrity package
Body/Ends material (11-12)	
6	S. Steel 316L

Ball material (13)	
M	High Strength S. Steel
Stem material (14)	
M	High Strength S. Steel
Seat material (15)	
L	Virgin PEEK
Inner Seal Material (16)	
H	HNBR
V	Viton
A	TFM

Outer Seal Material (17)	
G	Expanded graphite
A	TFM
End connections (19-22)	
CTM	Coned & Threaded Medium pressure
CTH	Coned & Threaded High pressure
NPT	ASME B1.20.1 - National Pipe Taper thread
BSPP	ISO228-1 - Pipe Parallel thread
DIN3852	DIN3852 - Pipe Parallel thread
BSPT	EN 10226 - Pipe Taper thread