

2-way ball valve, Article 470-VA with lever

Diameter G 1/4“ up to G 4“

Ball valve with threads **3-parts design with standardized interface** according to ISO 5211. **-Middle part can be swiveled out-** (Easily to exchange seal set, easy accessibility during dismantle the pipeline). Pressure class depends on nominal diameter up to PN 68. Full bore, floating ball, both sides 100% tight closing. Shaft seal consisting of multilayer PTFE V-rings, preloaded and self-adjusting by belleville washers and additional FKM O-ring.

Suitable for gaseous and liquid media (no steam) considering material resistance stainless steel 1.4408.

- both sides female thread according to ISO 228-1, UNI 7/1, EN 10226
- face to face dimensions according to DIN 3202 M-3
- ball above with pressure compensation bore
- ISO 5211 mounting flange for actuators (direct mounting)

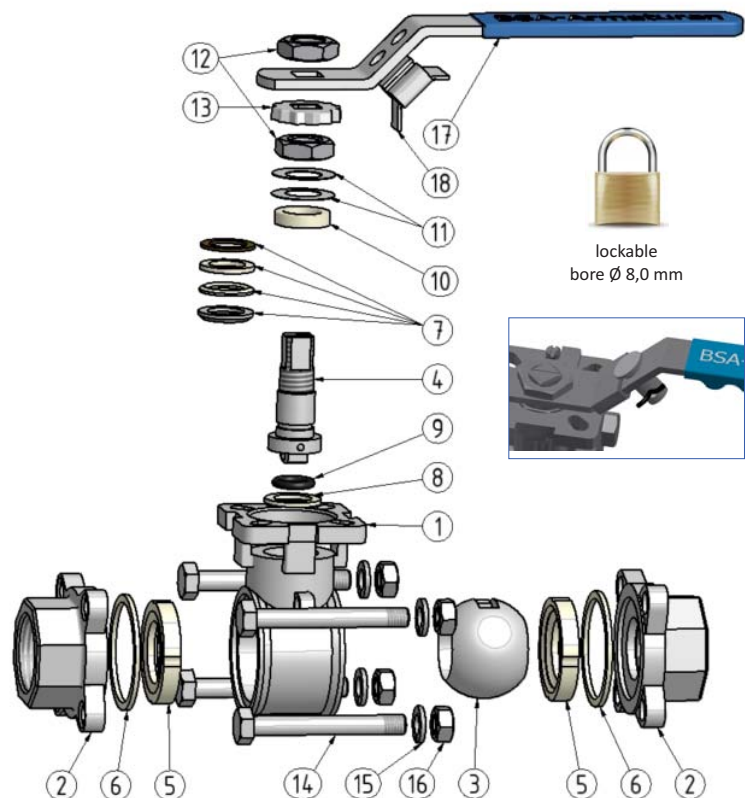
Operation optionally with lever (lockable), pneumatic or electrical actuator. Unit (ball valve / actuator) is mounted ready for connection including functional test.

Optional: For the steam area we recommend the use of the ball seal made of material TFM4215 (25% carbon-graphite content).



	TÜV TA-Luft certified
	Antistatic design ATEX 2014/34/EU
	0036
	Ambient -20° C ... +60° C
	Medium -34° C ... +200° C

Pos.	Description	Material
1	Body	Stainless steel 1.4408
2	Threaded end	Stainless steel 1.4404
3	Ball	Stainless steel 1.4408
4	Stem	Stainless steel 1.4401
5	Ball seal	PTFE-profile shells
6	Body seal	PTFE
7	Chevron packing set	PTFE
8	Thrust ring	PTFE
9	Stem seal	VITON-O-Ring
10	Pressure ring	Stainless steel 1.4401
11	Belleville washers	Stainless steel 1.4301
12	Stem nut	Stainless steel
13	Pressure ring	Stainless steel 1.4401
14	Bolt	Stainless steel
15	Washer	Stainless steel
16	Nut	Stainless steel
17	Lever	Stainless steel
	Lever sleeve	PVC, blue
18	Lever locking device	Stainless steel



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- Design Standard: DIN EN 12516-1
- Housing strength: DIN EN 12516-2
- Design pressure: PN 68 / PN 63 / PN 50 (depending on nominal diameter)
- Marking: EN 19, MSS SP-25
- Inspection / test: DIN EN 12266 P10 / P11 / P12

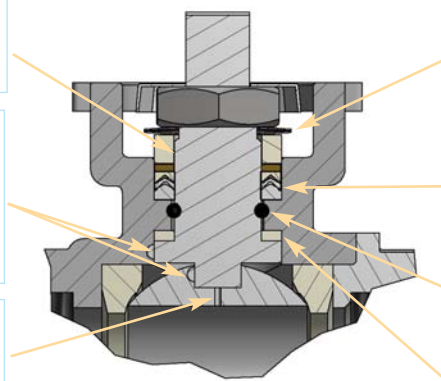


shaft sealing according to VDI 2440 (TA-Luft)

Operating stem is inserted into the body shaft from inside. This guarantees blow-out safety stem.

ATEX-antistatic, the ball-stem connection and the stem-body connection have an anti static feature, which ensures electrical continuity contact between those parts. As a result the ball valve complies with the ATEX Directive 2014/34/EU (Ex II 2 G/D Ex-c II)

The highly polished solid ball has a **pressure relief hole** in the stem slot in order to avoid pressure build-up in the body cavity. This ensures a right shutoff and a long service life



Disc springs ensure the permanent pretensioning of the chevron ring set.

primary shaft seal 3-ply V-ring chevron packing set (PTFE)

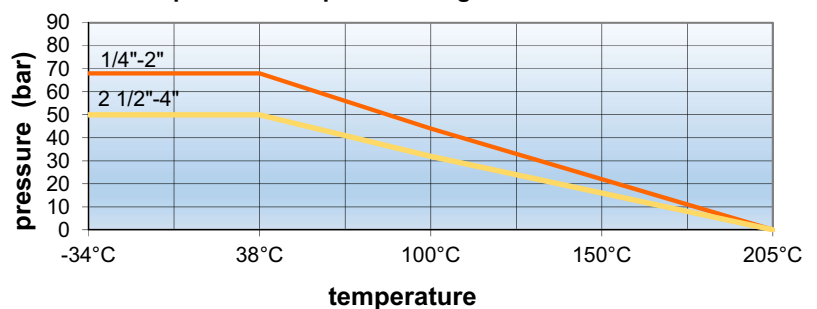
secondary shaft seal (O-ring FPM)

tertiary shaft feedthrough (PTFE sealing washer)

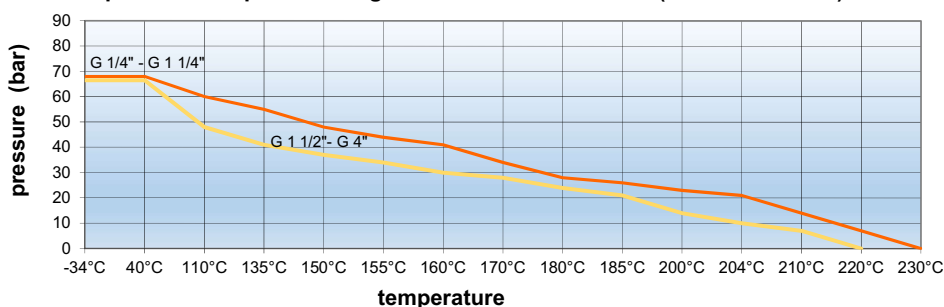
Seal kit, consisting of:

Pos.	Description	Material
5	Ball seal (2x)	PTFE-profile shells
6	Body seal (2x)	PTFE
7	Chevron packing set	PTFE
8	Thrust washer	PTFE
9	O-Ring	FKM (Viton)

pressure-temperature diagram ball seal PTFE



pressure-temperature diagram ball seal TFM 4215 (steam execution)

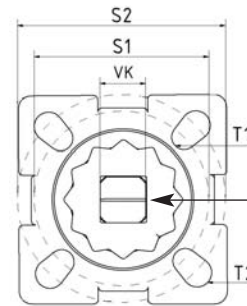
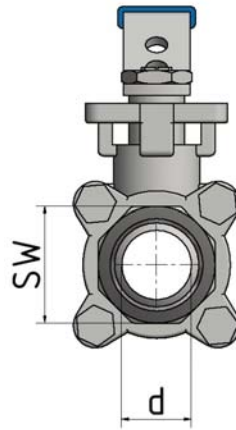
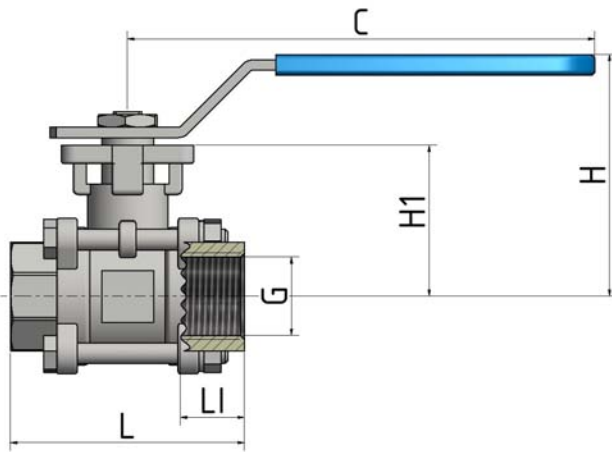


Seal kit TFM 4215

Diameter	Article-No.
G 1/4"	215.7821.18.61-DTF
G 3/8"	215.7821.18.62-DTF
G 1/2"	215.7821.18.63-DTF
G 3/4"	215.7821.18.65-DTF
G 1"	215.7821.18.67-DTF
G 1 1/4"	215.7821.18.68-DTF
G 1 1/2"	215.7821.18.69-DTF
G 2"	215.7821.18.71-DTF
G 2 1/2"	215.7821.18.72-DTF
G 3"	215.7821.18.73-DTF
G 4"	215.7821.18.75-DTF

2-way ball valve, Article 470-VA with lever

Diameter G 1/4" up to G 4"



Ground joint indicates position of ball bore

Diameter	Article-No.:		L (mm)	LI (mm)	H (mm)	H1 (mm)	C (mm)	d (mm)	SW (mm)	VK (mm)	T1 (mm)	T2 (mm)	LK ISO 5211 S1 / S2	Pressure rating max. (bar)	Weight (kg)	Starting torque (Nm)	
	470-VA Stainless steel															10,0 bar	50,0 bar
G 1/4"	215.3710.6.61		75,0	13,8	72,0	42,0	145	10,6	28	9	6	6	F03 / F04	68	0,7	4,5	4,5
G 3/8"	215.3710.6.62		75,0	14,2	72,0	42,0	145	12,7	28	9	6	6	F03 / F04	68	0,7	4,5	4,5
G 1/2"	215.3710.6.63		75,0	14,5	72,0	42,0	145	15,0	28	9	6	6	F03 / F04	63	0,7	5,0	5,5
G 3/4"	215.3710.6.65		80,0	16,7	80,0	48,5	145	20,0	32	9	6	6	F03 / F04	63	0,9	6,0	8,5
G 1"	215.3710.6.67		90,0	20,5	90,0	58,0	175	25,0	41	11	6	6	F04 / F05	63	1,4	10,0	11,0
G 1 1/4"	215.3710.6.68		110,0	21,8	95,0	63,0	175	32,0	50	11	6	7	F04 / F05	63	2,1	13,0	17,0
G 1 1/2"	215.3710.6.69		120,0	23,5	106,0	71,0	194	38,0	57	14	7	9	F05 / F07	63	3,0	19,0	24,0
G 2"	215.3710.6.71		140,0	24,2	113,0	78,0	194	50,0	70	14	7	9	F05 / F07	63	4,3	29,0	35,0
G 2 1/2"	215.3710.6.72		185,5	26,6	149,0	100,0	265	63,5	86	17	9	11	F07 / F10	50	8,3	45,0	54,0
G 3"	215.3710.6.73		205,0	28,7	159,0	109,0	265	76,0	101	17	9	11	F07 / F10	50	11,9	72,0	90,0
G 4"	215.3710.6.75		240,0	32,4	200,5	140,0	400	100,0	132	22	-	11	F10	50	22,7	110,0	138,0

Diameter	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Ø	10,6	12,7	15,0	20,0	25,0	32,0	38,0	50,0	63,5	76,0	100,0
KV	8,6	11,2	15,5	31,0	41,3	80,0	142,0	178,0	387,0	671,0	1.169,5

Seal kit PTFE (standard)

Diameter	Article-No.
G 1/4"	215.7821.18.61
G 3/8"	215.7821.18.62
G 1/2"	215.7821.18.63
G 3/4"	215.7821.18.65
G 1"	215.7821.18.67
G 1 1/4"	215.7821.18.68

Diameter	Article-No.
G 1 1/2"	215.7821.18.69
G 2"	215.7821.18.71
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G 4"	215.7821.18.75

Operating-variants:

pneumatic



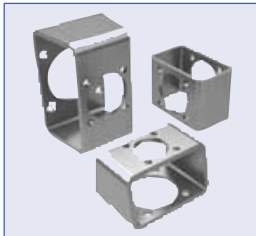
electrical



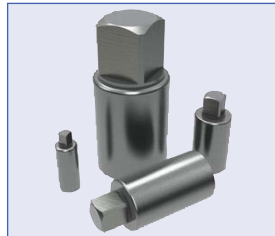
2-way ball valve, Article 470-VA, with optional accessories

Diameter G 1/4" up to G 4"

optional accessories brackets / couplings / shaft extensions



ISO 5211 bracket
Steel zinc plated / stainless steel



couplings stainless steel
Square / two-flat



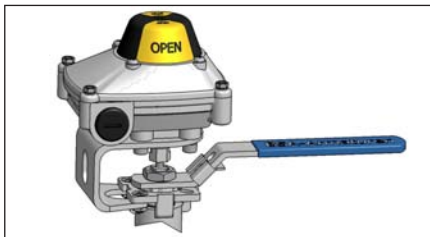
shaft extension ISO 5211
article 22-IVL
100 mm stainless steel



shaft extension T-handle
article 498-TVL
100 mm stainless steel

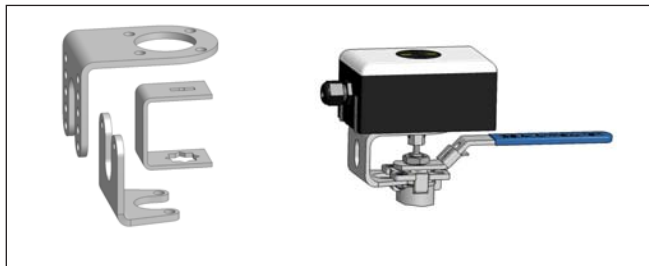
optional accessories limit switch assembly with box or open mounted

limit switch box
2-fold Honeywell, ZM1



switching capacity	max. 5 A, 250 V AC
temperature range	-25° C up to +85° C
cable entry	M20 x 1,5
connection	clamp 2,5 mm ²
body material	aluminium
console	stainless steel
article number:	179.8705HEZ

mounting kit for switch boxes
incl. assembly and adjustment



diameter (ball valve)	article number:
1/4" ... 1/2"	327.8775.F04VMM
3/4" ... 1"	327.8775.F05VMM
1 1/4" ... 2"	327.8775.F07VMM
2 1/2" ... 4"	327.8775.F10VMM

Bernstein-limit switches type I88-SU1Z RiW K



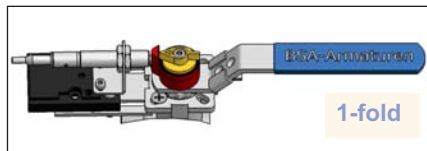
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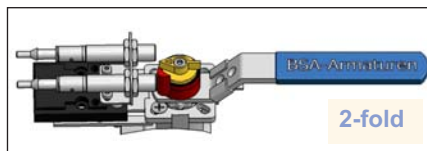
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switching capacity	max. 10 A, 250V AC
temperature range	-30° C up to +80° C
cable entry	M20 x 1,5
connection	clamp 2,5 mm ²
body material	PA 6 self-extinguishing
article number:	1-fold: 208.8716HKE 2-fold: 208.8716HKZ

IFM proximity switches type IF5297



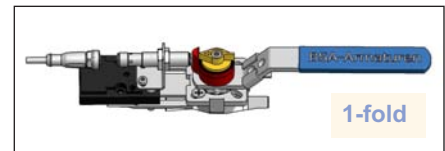
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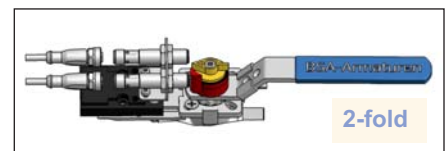
2-fold

operating voltage	10 ... 55 V DC
current consumpt.	< 15 mA (24 V)
temperature range	-25° C up to +80° C
body material	brass with LED
mounting bracketed	stainless steel / plastic
article number:	1-fold: 302.8770HEE 2-fold: 302.8770HEZ

IFM proximity switches type IFS209



1-fold



2-fold

operating voltage	10 ... 30 V DC
current consumpt.	< 12 mA (24 V)
temperature range	-25° C up to +70° C
body material	brass with LED
mounting bracketed	stainless steel / plastic
article number:	1-fold: 302.8771HEE 2-fold: 302.8771HEZ