

## 2-way ball valve, Article 440-VA with lever

Diameter G 1/4" up to G 3"

**2-way ball valve with threads and standardized interface** according to ISO 5211 for the mounting of pneumatic or electrical actuators. Pressure class depends on nominal diameter up to PN 68. Ball full bore, floating ball, both sides 100% tight closing. Shaft seal consisting of multi-layer 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**

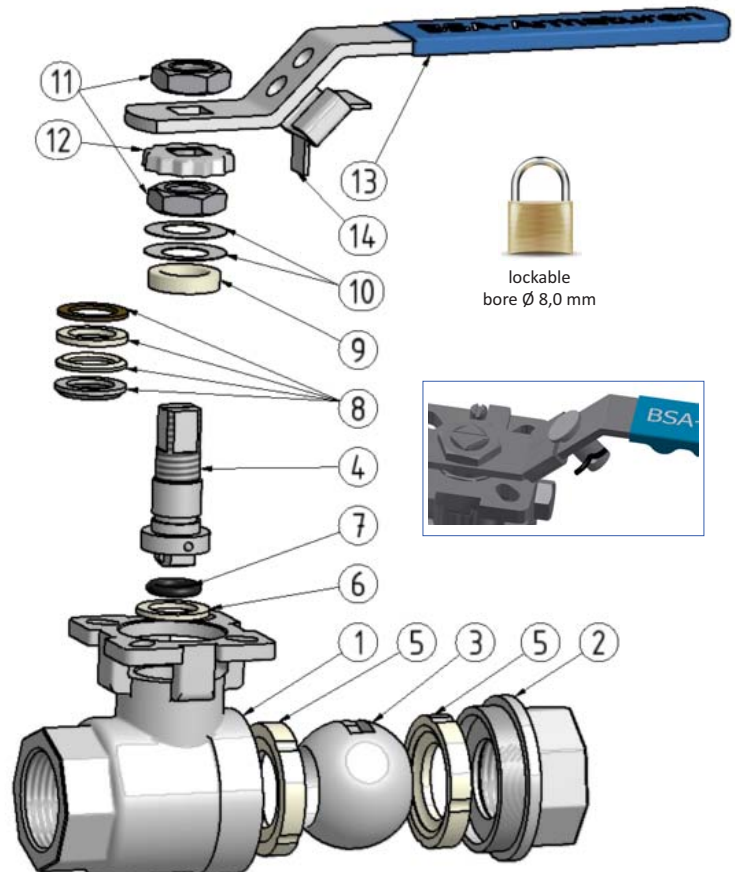
☞ **ISO 5211 mounting flange for actuators (direct mounting)**

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



	TÜV TA-Luft certified
	Antistatic design ATEX 2014/34/EU
	0035
	Ambient -20° C ... +60° C
	Medium -34° C ... +200° C

Pos.	Description	Material
1	Body	Stainless steel 1.4408
2	Threaded end	Stainless steel 1.4408
3	Ball	Stainless steel 1.4408
4	Stem	Stainless steel 1.4401
5	Ball seal	PTFE-profile shells
6	Washer	PTFE
7	Stem seal	FKM-O-Ring (Viton)
8	Chevron packing set	PTFE
9	Pressure ring	Stainless steel 1.4401
10	Belleville washers	Stainless steel 1.4301
11	Stem nut	Stainless steel
12	Pressure ring	Stainless steel
13	Lever	Stainless steel
	Lever sleeve	PVC, blue
14	Lever locking device	Stainless steel



## 2-way ball valve, Article 440-VA with lever

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

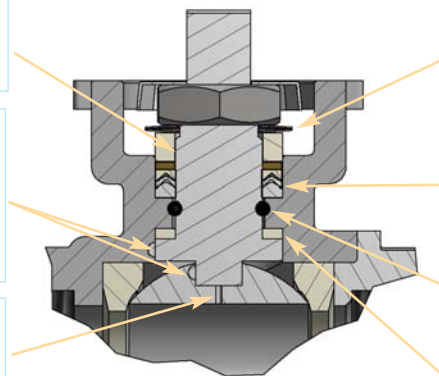


### shaft sealing according to VDI 2440 (TA-Luft)

**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



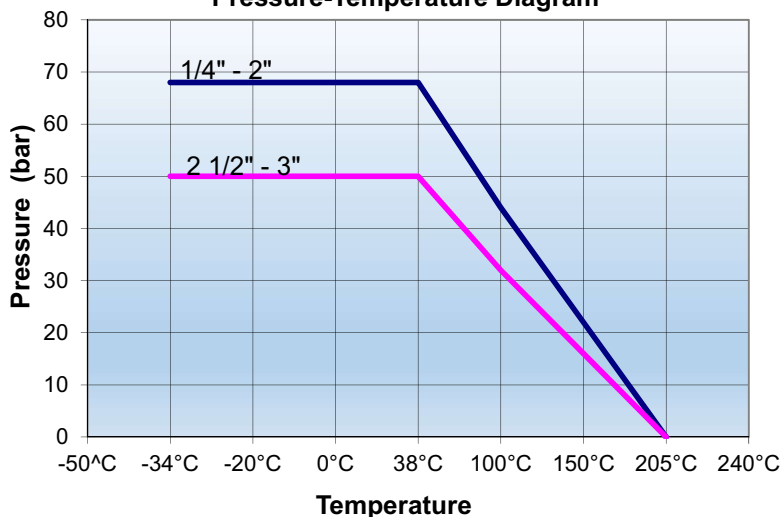
Disc springs ensure the permanent pretensioning of the chevron ring set.

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

**secondary** shaft seal (O-ring FPM)

**tertiary** shaft feedthrough (PTFE sealing washer)

### Pressure-Temperature Diagram



### Operating-variants:

pneumatic actuator

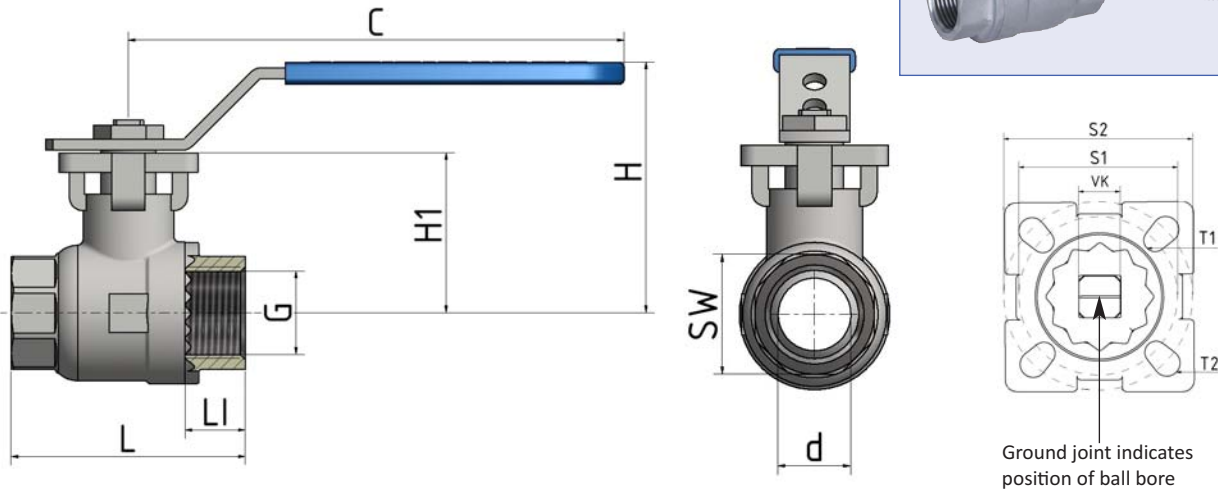


electrical actuator



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Diameter	Article-No. 440-VA Stainless steel	L (mm)	LI (mm)	H1 (mm)	H (mm)	C (mm)	d (mm)	SW (mm)	VK (mm)	T1	T2	LK ISO 5211 S1 / S2	Pressure rating max. (bar)	Weight (kg)	Starting torque (Nm)	
															10,0 bar	50,0 bar
G 1/4"	215.3976.6.61	64,0	9,2	42,0	72	145	10,6	27	9	6	6	F03 / F04	68	0,43	4,5	4,5
G 3/8"	215.3976.6.62	64,0	12,4	42,0	72	145	12,7	27	9	6	6	F03 / F04	68	0,40	4,5	4,5
G 1/2"	215.3976.6.63	64,0	13,0	42,0	72	145	15,0	27	9	6	6	F03 / F04	68	0,45	5,0	5,0
G 3/4"	215.3976.6.65	70,4	15,0	49,0	80	145	20,0	32	9	6	7	F03 / F05	68	0,59	6,0	6,0
G 1"	215.3976.6.67	85,0	18,0	58,0	90	175	25,0	41	11	6	7	F04 / F05	68	1,04	10,0	11,0
G 1 1/4"	215.3976.6.68	94,0	21,0	63,0	95	175	32,0	50	11	6	9	F04 / F07	68	1,42	13,0	17,0
G 1 1/2"	215.3976.6.69	105,0	25,0	71,5	106	194	38,0	56	14	7	9	F05 / F07	68	2,18	19,0	24,0
G 2"	215.3976.6.71	125,0	28,0	78,0	113	194	50,0	70	14	7	9	F05 / F07	68	3,60	29,0	35,0
G 2 1/2"	215.3976.6.72	155,0	26,8	100,0	150	265	63,5	83	17	9	11	F07 / F10	50	6,54	45,0	54,0
G 3"	215.3976.6.73	173,0	29,1	109,0	159	265	76,0	102	17	9	11	F07 / F10	50	9,17	72,0	90,0

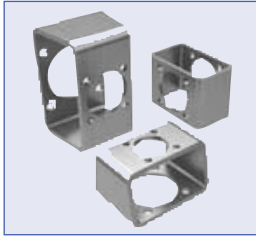
Diameter	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
Ø	10,6	12,7	15,0	20,0	25,0	32,0	38,0	50,0	65,0	80,0
KV	8,6	11,2	15,5	31,0	41,3	80,0	142,0	178,0	387,0	671,0

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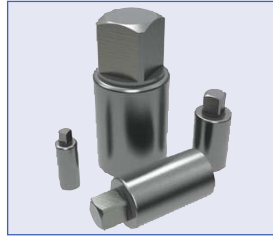
## 2-way ball valve, Article 440-VA, with optional accessories

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### optional accessories brackets / couplings / shaft extensions



ISO 5211 bracket  
Steel zinc plated / stainless steel



couplings stainless steel  
Square / two-flat



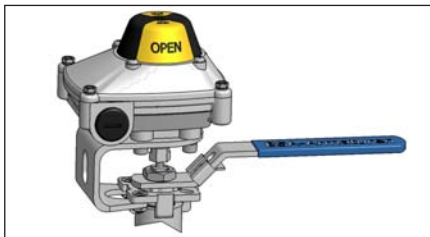
shaft extension ISO 5211  
**article 22-IVL**  
100 mm stainless steel



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

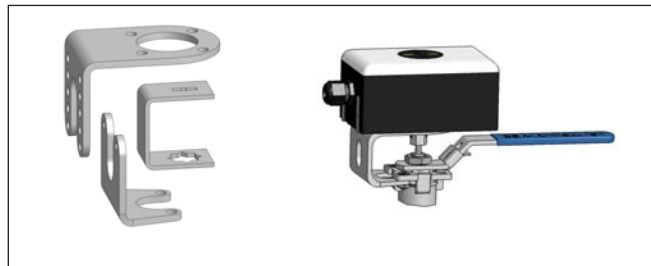
### optional accessories limit switch assembly with box or open mounted

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 <sup>2</sup>
body material	aluminium
console	stainless steel
<b>article number:</b>	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



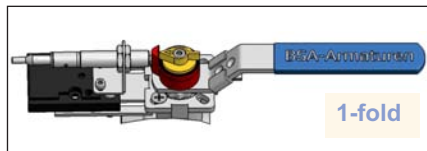
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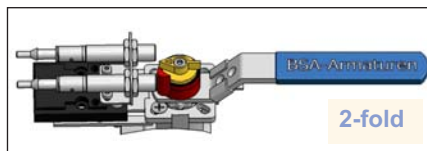
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switching capacity	max. 10 A, 250V AC
temperature range	-30° C up to +80° C
cable entry	M20 x 1,5
connection	clamp 2,5 mm <sup>2</sup>
body material	PA 6 self-extinguishing
<b>article number:</b>	1-fold: 208.8716HKE 2-fold: 208.8716HKZ

IFM proximity switches type IF5297



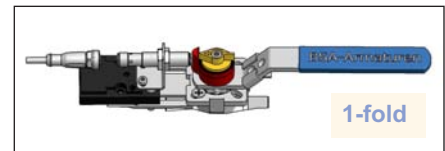
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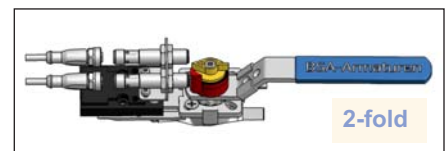
2-fold

operating voltage	10 ... 55 V DC
current consumpt.	< 15 mA (24 V)
temperature range	-25° C up to +80° C
body material	<b>brass with LED</b>
mounting bracketed	stainless steel / plastic
<b>article number:</b>	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	<b>brass with LED</b>
mounting bracketed	stainless steel / plastic
<b>article number:</b>	1-fold: 302.8771HEE 2-fold: 302.8771HEZ