



ECON® Ball valve Type: 7722 Steel Socket weld B16.11 Class 300/600



Characteristics

Type: 7722

Norm: ASME

Construction type: 2-way

Housing construction: 3-part

Housing material: Steel

Material quality: ASTM A216 WCB

Surface protection: Chemical blackened

Connection: Socket weld

Standard welding connection: B16.11

Top flange standard: ISO 5211 Direct Mount

Material ball: ASTM A351 CF8M

Seat material: TF 4103

Spindle material: ASTM A276 316 Grade S

Primary spindle seal material: RPTFE

Secondary spindle seal material: FPM (FKM)

Tertiary spindle seal material: RPTFE

Body seal: RPTFE

Material connection piece: ASTM A216 WCB

Actuator material: 1.4301

Minimum medium temperature (continuous): -29 °C

Maximum medium temperature (continuous): 220 °C

Application

- Industrial and maritime applications.
- Liquid and gaseous media.
- Recommended in: Chemical

Technical Information

- Connection according to ASME B16.11, size 1/4" to 2" full bore also meet the EN 12760 standard.
- Floating ball.
- Pressure class: Class 600 up to and including 2.1/2". Class 300 for 3" and 4".
- With direct-mount top flange according to ISO 5211.
- Closed neck design with leak detection opening.
- The chevron seal set used as a spindle seal and the axial seal ensure a longer service life and lower torque.
- Equipped with a robust, lockable lever.
- Average temperature for a tap with standard TF 4103 seats: -29°C/+220°C. Up to a maximum of 280° C for taps with PEEK seats.

Construction

- Three-part housing construction.
- Design certified according to ISO 7121, MSS SP-110 and MSS SP-72.
- Wall thickness according to EN 12516-1 and ASME B16.34.
- Full or reduced bore.
- Design with antistatic equipment between ball and housing.

Approval

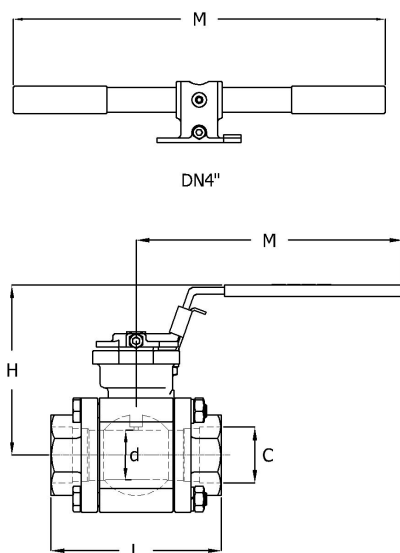
- Fugitive emission certified according to the German Technical Instructions on Air Quality Control [TA-Luft], VDI 2440, point 3.3.1.3.
- Fugitive emission certified according to ISO 15848-1, CO1 and CO2.
- Safety integrity level [SIL] 2.

Options

- Design with worm gearbox, pneumatic, electric or hydraulic drives.
- Position feedback for manual and automatic valves.
- Available with different seat materials such as TF 4215, TFM 1600 and PEEK.
- Fire-safe design available.
- Stainless steel extended spindle for insulation.
- With connection for earthing.
- With 30°, 60° or 90° V-shaped ball bore for modulating applications.
- Connections with BSPP thread according to ISO 228-1, NPT thread according to ASME B1.20.1, socket weld according to EN 12760 and butt weld according to ASME B16.25 S40 or EN 12627.

Size table:

DN	Full bore	d mm	L mm	H mm	M mm	C mm	Weight kg
1/4" [8]	Yes	15	71	83	140	14.4	0.9
3/8" [10]	Yes	15	71	83	140	17.8	0.9
1/2" [15]	Yes	15	72	83	140	21.9	1
3/4" [20]	No	15	72	83	140	27.4	1
3/4" [20]	Yes	20	97	88	140	27.4	1.5
1" [25]	No	20	97	88	140	34.1	1.5
1" [25]	Yes	25	109	97	165	34.1	2
1.1/4" [32]	No	25	109	97	165	42.9	2
1.1/4" [32]	Yes	31.8	118	103	165	42.9	3
1.1/2" [40]	No	31.8	118	103	165	49	3
1.1/2" [40]	Yes	38	129	130	202	49	4.5
2" [50]	No	38	129	130	202	61.5	4.5
2" [50]	Yes	50	145	139	202	61.5	6.5
2.1/2" [65]	No	50	145	139	202	74	6.5
2.1/2" [65]	Yes	65	185	178	257	74	12.5
3" [80]	Yes	76	205	188	257	90	16.5
3" [80]	No	65	185	178	257	90	12.5
4" [100]	No	76	205	188	257	115.5	16.5
4" [100]	Yes	100	240	207.5	405	115.5	26



Pressure and temperature range

Seat material + DN full bore	-29	50	100	150	200	250	300	[°C]
TF4103 & TFM1600 1/4" - 1"	102.1	100.2	68	34	0	-	-	[bar]
TF4215 1/4" - 1"	102.1	100.2	93.2	63	32	0	-	[bar]
PEEK 1/4" - 1"	102.1	100.2	93.2	77	48	18	0	[bar]
TF4103 & TFM1600 1.1/4" - 1.1/2"	80	80	55	28	0	-	-	[bar]
TF4215 1.1/4" - 1.1/2"	80	80	80	55	28	0	-	[bar]
PEEK 1.1/4" - 1.1/2"	80	80	80	77	48	18	0	[bar]
TF4103 & TFM1600 2"	76	76	53	27	0	-	-	[bar]
TF4215 2"	76	76	76	51	25	0	-	[bar]
PEEK 2"	76	76	76	76	47	18	0	[bar]
TF4103 & TFM1600 2.1/2"	69	69	48	24	0	-	-	[bar]
TF4215 2.1/2"	69	69	69	47	24	0	-	[bar]

Disclaimer: The content of this document has been composed with the utmost care. However, it is possible that certain information changes over time, becomes inaccurate or incomplete. ERIKS does not guarantee that the information provided on this document is up to date, accurate and complete; the information provided is not intended to be advice. ERIKS shall never be liable for damage resulting from the use of the information provided.

Pressure and temperature range								
PEEK 2.1/2"	69	69	69	69	42	16	0	[bar]
TF4103 & TFM1600 3" - 4"	51.1	50.1	34	17	0	-	-	[bar]
TF4215 3" - 4"	51.1	50.1	46.6	45.1	23	0	-	[bar]
PEEK 3" - 4"	51.1	50.1	46.6	45.1	43.8	17	0	[bar]

Nominal inner diameter	External tube diameter of connection mm	Pressure rating	Face to Face norm	Manual operation	Mounting flange	Mounting flange 2	Bore	With locking device	Maximum operating pressure bar	Article
1/4" [8]	14.4	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278884
3/8" [10]	17.8	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278885
1/2" [15]	21.9	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278886
3/4" [20]	27.4	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore	Yes	102	13278878
3/4" [20]	27.4	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278887
1" [25]	34.1	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore	Yes	102	13278879
1" [25]	34.1	Class 600	Manufacturer standard	Handle	F04	F05	Full bore	Yes	102	13278888
1.1/4" [32]	42.9	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore	Yes	102	13278880
1.1/4" [32]	42.9	Class 600	Manufacturer standard	Handle	F04	F05	Full bore	Yes	80	13278889
1.1/2" [40]	49	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore	Yes	80	13278881
1.1/2" [40]	49	Class 600	Manufacturer standard	Handle	F07		Full bore	Yes	80	13278890
2" [50]	61.5	Class 600	Manufacturer standard	Handle	F07		Reduced bore	Yes	80	13278882
2" [50]	61.5	Class 600	Manufacturer standard	Handle	F07		Full bore	Yes	76	13278891
2.1/2" [65]	74	Class 600	Manufacturer standard	Handle	F07		Reduced bore	Yes	76	13278883
2.1/2" [65]	74	Class 600	Manufacturer standard	Handle	F07	F10	Full bore	Yes	69	13278892
3" [80]	90	Class 300	Manufacturer standard	Handle	F07	F10	Full bore	Yes	51	13279035
3" [80]	90	Class 600	Manufacturer standard	Handle	F07	F10	Reduced bore	Yes	69	13279024
4" [100]	115.5	Class 300	Manufacturer standard	Handle	F07	F10	Reduced bore	Yes	51	13279025
4" [100]	115.5	Class 300	Manufacturer standard	T-wrench	F10		Full bore	No	51	13279036

Disclaimer: The content of this document has been composed with the utmost care. However, it is possible that certain information changes over time, becomes inaccurate or incomplete. ERIKS does not guarantee that the information provided on this document is up to date, accurate and complete; the information provided is not intended to be advice. ERIKS shall never be liable for damage resulting from the use of the information provided.