# ECON® Ball valve Type: 7522 Steel Internal thread (NPT) Class 300/600









**Type:** 7522 Norm: ASME

Construction type: 2-way Housing construction: 3-part Housing material: Steel

Material quality: ASTM A216 WCB Surface protection: Chemical blackened Connection: Internal thread (NPT)

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 ● Design with worm gearbox, pneumatic, electric or

### **Application**

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

#### **Technical Information**

- Connection according to ASME B1.20.1.
- 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
- 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**

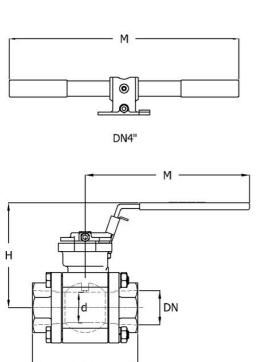
- hydraulic drives.
- Position feedback for manual and automatic valves.
- Available with different seat materials such as TF 4215, TFM 1600 and PEEK.
- Fire-safe design available.
- Stainless steel extended spindle for insulation.
- With connection for earthing.
- With 30°, 60° or 90° V-shaped ball bore for modulating applications.
- Connections with BSPP thread according to ISO 228-1, socket weld according to ASME B16.11 or EN 12760, and butt weld according to ASME B16.25 S40 or EN 12627.



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## Ball Valves | Ball valves with threaded connection

## Size table:



DN	Full bore	d	L	Н	М	Weight
		mm	mm	mm	mm	kg
1/4" (8)	Yes	15	71	83	140	0.9
3/8" (10)	Yes	15	71	83	140	0.9
1/2" (15)	Yes	15	72	83	140	1
3/4" [20]	No	15	72	83	140	1
3/4" [20]	Yes	20	97	88	140	1.5
1" (25)	No	20	97	88	140	1.5
1" (25)	Yes	25	109	97	165	2
1.1/4" [32]	No	25	109	97	165	2
1.1/4" [32]	Yes	31.8	118	103	165	3
1.1/2" (40)	No	31.8	118	103	165	3
1.1/2" (40)	Yes	38	129	130	202	4.5
2" (50)	No	38	129	130	202	4.5
2" (50)	Yes	50	145	139	202	6.5
2.1/2" [65]	No	50	145	139	202	6.5
2.1/2" [65]	Yes	65	185	178	257	12.5
3" (80)	Yes	76	205	188	257	16.5
3" (80)	No	65	185	178	257	12.5
4" (100)	No	76	205	188	257	16.5
4" (100)	Yes	100	240	207.5	405	26

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]		
PEEK 2" 76 76 76 76 76 76 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.										

## Ball Valves | Ball valves with threaded connection

Pressure and temperature range										
Seat material + DN full bore	-29	50	100	150	200	250	300	[°C]		
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	Standard thread connection	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]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278849
3/8" (10)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278850
1/2" (15)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278851
3/4" [20]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore	Yes	102	13278841
3/4" [20]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	Yes	102	13278852
1" (25)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore	Yes	102	13278842
1" (25)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F04	F05	Full bore	Yes	102	13278853
1.1/4" [32]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore	Yes	102	13278843
1.1/4" (32)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F04	F05	Full bore	Yes	80	13278854
1.1/2" [40]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore	Yes	80	13278844
1.1/2" (40)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F07		Full bore	Yes	80	13278855
2" (50)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F07		Reduced bore	Yes	80	13278845
2" (50)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F07		Full bore	Yes	76	13278856
2.1/2" [65]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F07		Reduced bore	Yes	76	13278846
2.1/2" [65]	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F07	F10	Full bore	Yes	69	13278857
3" (80)	ASME B1.20.1	Class 300	Manufacturer standard	Handle	F07	F10	Full bore	Yes	51	13278858
3" (80)	ASME B1.20.1	Class 600	Manufacturer standard	Handle	F07	F10	Reduced bore	Yes	69	13278847
4" (100)	ASME B1.20.1	Class 300	Manufacturer standard	Handle	F07	F10	Reduced bore	Yes	51	13278848
4" (100)	ASME B1.20.1	Class 300	Manufacturer standard	T-wrench	F10		Full bore	No	51	13278859

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