



ECON® Ball valve Type: 7622 Steel Butt weld B16.25 S40 Class 300/600



Characteristics

Type: 7622

Norm: ASME

Construction type: 2-way

Housing construction: 3-part

Housing material: Steel

Material quality: ASTM A216 WCB

Surface protection: Chemical blackened

Connection: Butt weld

Standard welding connection: B16.25 S40

Face to Face norm: Manufacturer standard

Top flange standard: ISO 5211 Direct Mount

Material ball: ASTM A351 CF8M

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

Application

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

Technical Information

- Connection according to ASME B16.25 S40.
- 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

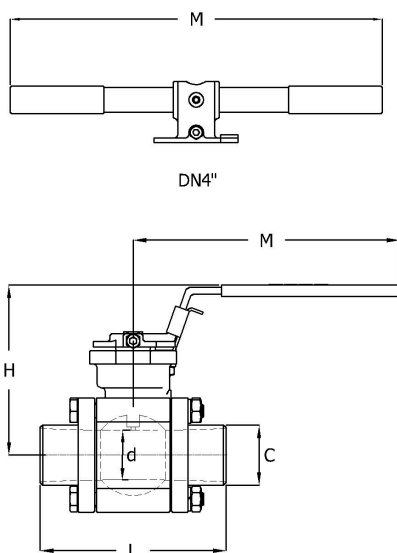
- Fugitive emission certified according to the German Technical Instructions on Air Quality Control [TA-Luft], VDI 2440, point 3.3.1.3.
- Fugitive emission certified according to ISO 15848-1, CO1 and CO2.
- Safety integrity level [SIL] 2.

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 NPT thread according to ASME B1.20.1, BSPP thread according to ISO 228-1, socket weld according to ASME B16.11 or EN 12760, and butt weld according to 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	13.7	0.9
3/8" [10]	Yes	15	71	83	140	17.1	0.9
1/2" [15]	Yes	15	72	83	140	21.3	1
3/4" [20]	No	15	72	83	140	26.7	1
3/4" [20]	Yes	20	97	88	140	26.7	1.5
1" [25]	No	20	97	88	140	33.4	1.5
1" [25]	Yes	25	109	97	165	33.4	2
1.1/4" [32]	No	25	109	97	165	42.2	2
1.1/4" [32]	Yes	31.8	118	103	165	42.2	3
1.1/2" [40]	No	31.8	118	103	165	48.3	3
1.1/2" [40]	Yes	38	129	130	202	48.3	4.5
2" [50]	No	38	129	130	202	60.3	4.5
2" [50]	Yes	50	145	139	202	60.3	6.5
2.1/2" [65]	No	50	145	139	202	75	6.5
2.1/2" [65]	Yes	65	185	178	257	75	12.5
3" [80]	Yes	76	205	188	257	88.9	16.5
3" [80]	No	65	185	178	257	88.9	12.5
4" [100]	No	76	205	188	257	114.3	16.5
4" [100]	Yes	100	240	207.5	405	114.3	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	Wall thickness, connection mm	Pressure rating	Manual operation	Mounting flange	Mounting flange 2	Bore	With locking device	Seat material	Article
1/4" [8]	13.7	2.25	Class 600	Handle	F03	F04	Full bore	Yes	TF 4215	14228422
1/4" [8]	13.7	2.25	Class 600	Handle	F03	F04	Full bore	Yes	TF 4103	13279007
3/8" [10]	17.1	2.3	Class 600	Handle	F03	F04	Full bore	Yes	TF 4103	13279008
3/8" [10]	17.1	2.3	Class 600	Handle	F03	F04	Full bore	Yes	TF 4215	14228424
1/2" [15]	21.3	2.75	Class 600	Handle	F03	F04	Full bore	Yes	TF 4215	14228425
1/2" [15]	21.3	2.75	Class 600	Handle	F03	F04	Full bore	Yes	TF 4103	13279009
3/4" [20]	26.7	2.85	Class 600	Handle	F03	F04	Reduced bore	Yes	TF 4103	13278999
3/4" [20]	26.7	2.85	Class 600	Handle	F03	F04	Reduced bore	Yes	TF 4215	14228434
3/4" [20]	26.7	2.85	Class 600	Handle	F03	F04	Full bore	Yes	TF 4215	14228426
3/4" [20]	26.7	2.85	Class 600	Handle	F03	F04	Full bore	Yes	TF 4103	13279010
1" [25]	33.4	3.4	Class 600	Handle	F03	F04	Reduced bore	Yes	TF 4103	13279000
1" [25]	33.4	3.4	Class 600	Handle	F03	F04	Reduced bore	Yes	TF 4215	14228436
1" [25]	33.4	3.4	Class 600	Handle	F04	F05	Full bore	Yes	TF 4215	14228427
1" [25]	33.4	3.4	Class 600	Handle	F04	F05	Full bore	Yes	TF 4103	13279011
1.1/4" [32]	42.2	3.55	Class 600	Handle	F04	F05	Reduced bore	Yes	TF 4215	14228437
1.1/4" [32]	42.2	3.55	Class 600	Handle	F04	F05	Reduced bore	Yes	TF 4103	13279001
1.1/4" [32]	42.2	3.55	Class 600	Handle	F04	F05	Full bore	Yes	TF 4215	14228428
1.1/4" [32]	42.2	3.55	Class 600	Handle	F04	F05	Full bore	Yes	TF 4103	13279012
1.1/2" [40]	48.3	3.7	Class 600	Handle	F04	F05	Reduced bore	Yes	TF 4103	13279002
1.1/2" [40]	48.3	3.7	Class 600	Handle	F04	F05	Reduced bore	Yes	TF 4215	14228438
1.1/2" [40]	48.3	3.7	Class 600	Handle	F07		Full bore	Yes	TF 4215	14228429
1.1/2" [40]	48.3	3.7	Class 600	Handle	F07		Full bore	Yes	TF 4103	13279013
2" [50]	60.3	3.9	Class 600	Handle	F07		Reduced bore	Yes	TF 4215	14228439
2" [50]	60.3	3.9	Class 600	Handle	F07		Reduced bore	Yes	TF 4103	13279003
2" [50]	60.3	3.9	Class 600	Handle	F07		Full bore	Yes	TF 4103	13279014
2" [50]	60.3	3.9	Class 600	Handle	F07		Full bore	Yes	TF 4215	14228430
2.1/2" [65]	75	6.25	Class 600	Handle	F07		Reduced bore	Yes	TF 4215	14228440
2.1/2" [65]	75	6.25	Class 600	Handle	F07		Reduced bore	Yes	TF 4103	13279004
2.1/2" [65]	75	6.25	Class 600	Handle	F07	F10	Full bore	Yes	TF 4103	13279015
2.1/2" [65]	75	6.25	Class 600	Handle	F07	F10	Full bore	Yes	TF 4215	14228431
3" [80]	88.9	5.5	Class 300	Handle	F07	F10	Full bore	Yes	TF 4215	14228432
3" [80]	88.9	5.5	Class 300	Handle	F07	F10	Full bore	Yes	TF 4103	13279016
3" [80]	88.9	5.5	Class 600	Handle	F07	F10	Reduced bore	Yes	TF 4103	13279005
3" [80]	88.9	5.5	Class 600	Handle	F07	F10	Reduced bore	Yes	TF 4215	14228441
4" [100]	114.3	6	Class 300	Handle	F07	F10	Reduced bore	Yes	TF 4215	14228442
4" [100]	114.3	6	Class 300	Handle	F07	F10	Reduced bore	Yes	TF 4103	13279006
4" [100]	114.3	6	Class 300	T-wrench	F10		Full bore	No	TF 4215	14228433
4" [100]	114.3	6	Class 300	T-wrench	F10		Full bore	No	TF 4103	13279017

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.