

ECON® Ball valve Type: 7442FS Stainless steel Fire safe Internal thread (BSPP) Class 600



Characteristics

Type: 7442FS

Norm: ASME

Construction type: 2-way

Housing construction: 3-part

Housing material: Stainless steel

Material quality: ASTM A351 CF8M

Connection: Internal thread (BSPP)

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: Graphite

Body seal: Graphite

Material connection piece: ASTM A351 CF8M

Minimum medium temperature (continuous): -40 °C

Maximum medium temperature (continuous): 220 °C

Fire safe: Yes

Pressure relief:

- Design with antistatic equipment between ball and housing.

Approval

- Fire-safe according to ISO 10497 (third edition) and API 607 (seventh edition).
- Type approval from Lloyd's Register.
- 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 or for cold applications (up to -50°C).
- 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, socket weld according to ASME B16.11 or EN 12760, and butt weld according to ASME B16.25 S40 or EN 12627 or ISO 1127 S1 or SMS 3008 (EN 10357 series D) or DIN 11850 series 1 and 2 (EN 10357 series B and A).

Application

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

Technical Information

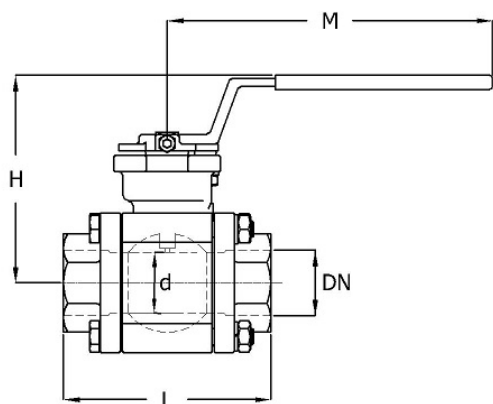
- Connection according to ISO 228-1 BSPP.
- Floating ball.
- Pressure class: Class 600.
- With direct-mount top flange according to ISO 5211.
- Closed neck design with leak detection opening.
- Equipped with a robust lever.
- Average temperature for a tap with standard TF 4103 seats: -40°C/+220°C. Up to a maximum of 250° C for taps with TF 4215 seats.

Construction

- Three-part housing construction.
- Wall thickness according to EN 12516-1 and ASME B16.34.
- Full or reduced bore.

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Size table:



DN	Full bore	d mm	L mm	H mm	M mm	Weight 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	190	2
1.1/4" [32]	No	25	109	97	190	2
1.1/4" [32]	Yes	31.8	118	103	190	3
1.1/2" [40]	No	31.8	118	103	190	3
1.1/2" [40]	Yes	38	129	148	290	4.5
2" [50]	No	38	129	148	290	4.5
2" [50]	Yes	50	145	157	290	6.5
2.1/2" [65]	No	50	145	157	290	6.5

Pressure and temperature range								
Seat material + DN full bore	-40	50	100	150	175	200	250	[°C]
TF4103 & TFM1600 1/4" - 1"	99.3	96.2	72	48	25	0	-	[bar]
TF4215 1/4" - 1"	99.3	96.2	84.4	65	45	23	0	[bar]
TF4103 & TFM1600 1.1/4" - 1.1/2"	80	80	60	40	20	0	-	[bar]
TF4215 1.1/4" - 1.1/2"	80	80	80	61	42	21	0	[bar]
TF4103 & TFM1600 2"	76	76	56	38	20	0	-	[bar]
TF4215 2"	76	76	76	58	39	20	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]	ISO 228-1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	No	99	13708514
3/8" [10]	ISO 228-1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	No	99	13708515
1/2" [15]	ISO 228-1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	No	99	13559683
3/4" [20]	ISO 228-1	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore	No	99	14256518
3/4" [20]	ISO 228-1	Class 600	Manufacturer standard	Handle	F03	F04	Full bore	No	99	13559684
1" [25]	ISO 228-1	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore	No	99	14256519
1" [25]	ISO 228-1	Class 600	Manufacturer standard	Handle	F04	F05	Full bore	No	99	13559685

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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
1.1/4" [32]	ISO 228-1	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore	No	99	14256520
1.1/4" [32]	ISO 228-1	Class 600	Manufacturer standard	Handle	F04	F05	Full bore	No	80	13559686
1.1/2" [40]	ISO 228-1	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore	No	80	14256521
1.1/2" [40]	ISO 228-1	Class 600	Manufacturer standard	Handle	F07		Full bore	No	80	13559687
2" [50]	ISO 228-1	Class 600	Manufacturer standard	Handle	F07		Reduced bore	No	80	14256522
2" [50]	ISO 228-1	Class 600	Manufacturer standard	Handle	F07		Full bore	No	76	13559688
2.1/2" [65]	ISO 228-1	Class 600	Manufacturer standard	Handle	F07		Reduced bore	No	76	14256523

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