

ECON® Ball valve Type: 7742FS Stainless steel Fire safe Socket weld B16.11 Class 600



Characteristics

Type: 7742FS
Norm: ASME
Construction type: 2-way
Housing construction: 3-part
Housing material: Stainless steel
Material quality: ASTM A351 CF8M
Connection: Socket weld
Standard welding connection: B16.11
Top flange standard: ISO 5211 Direct Mount
With locking device: No
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:

Application

- Industrial and maritime applications.
- Liquid and gaseous media.
- Recommended in: Chemical, Food & Beverages

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.
- 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.
- Design with antistatic equipment between ball and housing.

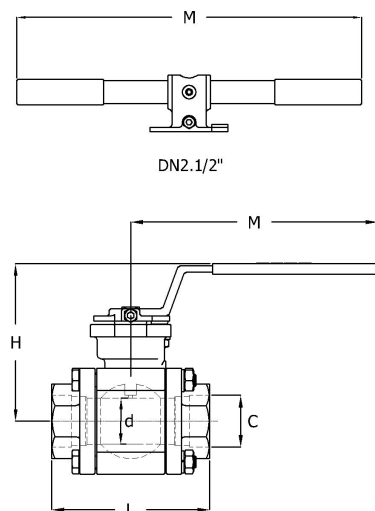
Approval

- 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 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 or ISO 1127 S1 or SMS 3008 (EN 10357 series D) or DIN 11850 series 1 and 2 (EN 10357 series B and A).

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	190	34.1	2
1.1/4" [32]	No	25	109	97	190	42.9	2
1.1/2" [40]	No	31.8	118	103	190	49	3
1.1/2" [40]	Yes	38	129	148	290	49	4.5
2" [50]	No	38	129	148	290	61.5	4.5
2" [50]	Yes	50	145	157	209	61.5	6.5
2.1/2" [65]	No	50	145	157	290	74	6.5

Pressure and temperature range									
Seat material + DN full bore	-40	50	100	150	175	200	250	300	[°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]
PEEK 1/4" - 1"	99.3	96.2	84.4	77	58	37	13	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]
PEEK 1.1/4" - 1.1/2"	80	80	80	77	57	36	13	0	[bar]
TF4103 & TFM1600 2"	76	76	56	38	20	0	-	-	[bar]
TF4215 2"	76	76	76	58	39	20	0	-	[bar]
PEEK 2"	76	76	76	76	56	35	12	0	[bar]

Nominal inner diameter	External tube diameter of connection	Pressure rating	Face to Face norm	Manual operation	Mounting flange	Mounting flange 2	Bore	Actuator material	Maximum operating pressure	Article
mm	mm								bar	
1/4" [8]	14.4	Class 600	Manufacturer standard	Handle	F03	F04	Full bore		99	13708526
3/8" [10]	17.8	Class 600	Manufacturer standard	Handle	F03	F04	Full bore		99	13708527
1/2" [15]	21.9	Class 600	Manufacturer standard	Handle	F03	F04	Full bore		99	13559703
3/4" [20]	27.4	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore		99	14256536
3/4" [20]	27.4	Class 600	Manufacturer standard	Handle	F03	F04	Full bore		99	13559704

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Nominal inner diameter	External tube diameter of connection mm	Pressure rating	Face to Face norm	Manual operation	Mounting flange	Mounting flange 2	Bore	Actuator material	Maximum operating pressure bar	Article
1" [25]	34.1	Class 600	Manufacturer standard	Handle	F03	F04	Reduced bore		99	14256537
1" [25]	34.1	Class 600	Manufacturer standard	Handle	F04	F05	Full bore		99	13559705
1.1/4" [32]	42.9	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore		99	14256538
1.1/2" [40]	49	Class 600	Manufacturer standard	Handle	F04	F05	Reduced bore		80	14256539
1.1/2" [40]	49	Class 600	Manufacturer standard	Handle	F07		Full bore	1.4301	80	13559706
2" [50]	61.5	Class 600	Manufacturer standard	Handle	F07		Reduced bore		80	14256540
2" [50]	61.5	Class 600	Manufacturer standard	Handle	F07		Full bore		76	13559707
2.1/2" [65]	74	Class 600	Manufacturer standard	Handle	F07		Reduced bore		76	14256541

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