



## ECON® Ball valve Type: 7642 Stainless steel Butt weld NEN EN10357 serie A Class 600



### Characteristics

**Type:** 7642

**Norm:** ASME

**Construction type:** 2-way

**Housing construction:** 3-part

**Housing material:** Stainless steel

**Material quality:** ASTM A351 CF8M

**Connection:** Butt weld

**Standard welding connection:** NEN EN10357 serie A

**Top flange standard:** ISO 5211 Direct Mount

**With locking device:** Yes

**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 A351 CF3M

**Actuator material:** ASTM A351 CF8

**Minimum medium temperature (continuous):** -40 °C

**Maximum medium temperature (continuous):** 220 °C

### Application

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

### Technical Information

- Connection according to EN 10357 serie A (DIN 11850, row 2).
- 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.
- All components intended to come into contact with food comply with EC 1935.
- 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: -40°C/+220°C. Up to a maximum of 280°

C for taps with PEEK seats.

### Construction

- Three-part housing construction.
- Relevant design standards: EN-ISO 17292, ISO 5211 and API 608.
- Full bore.
- Design with antistatic equipment between ball and housing.

### Approval

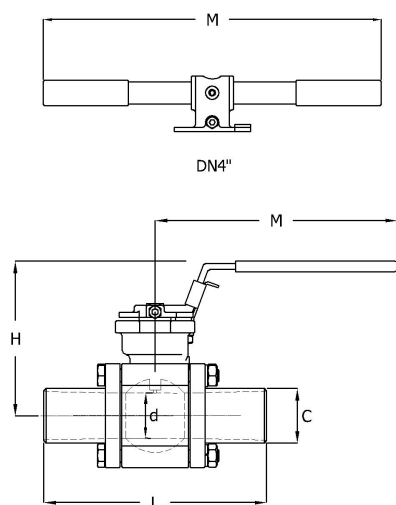
- Fugitive emission certified according to the German Technical Instructions on Air Quality Control [TA-Luft], VDI 2440, point 3.3.1.3.
- Fugitive emission certified according to ISO 15848-1, CO1 Class AH and CO3 Class BH.
- Safety integrity level [SIL] 2.
- Declaration of conformity according to EC 1935/2004.

### 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.
- Reduced bore.
- 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 ASME B16.11 or EN 12760, and butt weld according to ASME B16.25 S40 or EN 12627-1 [1/4" - 3/4"] and EN 12627-2 [1" - 4"] or SMS 3008 [EN 10357 Series D] or DIN 11850 Row 1 [EN 10357 Series B] or ISO 1127-S1.

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Size table:



| DN   | Full bore | d<br>mm | L<br>mm | H<br>mm | M<br>mm | C<br>mm | Weight<br>kg |
|------|-----------|---------|---------|---------|---------|---------|--------------|
| DN10 | Yes       | 15      | 71      | 83      | 140     | 13      | 0.9          |
| DN15 | Yes       | 15      | 72      | 83      | 140     | 19      | 1            |
| DN20 | Yes       | 20      | 97      | 83      | 140     | 23      | 1.5          |
| DN25 | Yes       | 25      | 109     | 97      | 165     | 29      | 2            |
| DN32 | Yes       | 31.8    | 118     | 103     | 165     | 35      | 3            |
| DN40 | Yes       | 38      | 129     | 130     | 202     | 41      | 4.5          |
| DN50 | Yes       | 50      | 145     | 139     | 202     | 53      | 6.5          |
| DN65 | Yes       | 65      | 185     | 178     | 257     | 70      | 12.5         |

| Pressure and temperature range     |      |      |      |     |     |     |     |     |       |
|------------------------------------|------|------|------|-----|-----|-----|-----|-----|-------|
| Seat material<br>+ DN full bore    | -40  | 50   | 100  | 150 | 175 | 200 | 250 | 300 | [°C]  |
| TF4103 &<br>TFM1600<br>DN10 - DN25 | 99.3 | 96.2 | 72   | 48  | 25  | 0   | -   | -   | [bar] |
| TF4215 DN10 -<br>DN25              | 99.3 | 96.2 | 84.4 | 65  | 45  | 23  | 0   | -   | [bar] |
| PEEK DN10 -<br>DN25                | 99.3 | 96.2 | 84.4 | 77  | 58  | 37  | 13  | 0   | [bar] |
| TF4103 &<br>TFM1600<br>DN32 - DN40 | 80   | 80   | 60   | 40  | 20  | 0   | -   | -   | [bar] |
| TF4215 DN32 -<br>DN40              | 80   | 80   | 80   | 61  | 42  | 21  | 0   | -   | [bar] |
| PEEK DN32 -<br>DN40                | 80   | 80   | 80   | 77  | 57  | 36  | 13  | 0   | [bar] |
| TF4103 &<br>TFM1600<br>DN50        | 76   | 76   | 56   | 38  | 20  | 0   | -   | -   | [bar] |
| TF4215 DN50                        | 76   | 76   | 76   | 58  | 39  | 20  | 0   | -   | [bar] |
| PEEK DN50                          | 76   | 76   | 76   | 76  | 56  | 35  | 12  | 0   | [bar] |
| TF4103 &<br>TFM1600<br>DN65        | 69   | 69   | 52   | 35  | 18  | 0   | -   | -   | [bar] |
| TF4215 DN65                        | 69   | 69   | 69   | 53  | 37  | 19  | 0   | -   | [bar] |
| PEEK DN65                          | 69   | 69   | 69   | 69  | 50  | 31  | 10  | 0   | [bar] |

| Nominal inner<br>diameter | External tube<br>diameter of<br>connection<br>mm | Wall<br>thickness,<br>connection<br>mm | Pressure<br>rating | Face to Face<br>norm     | Manual<br>operation | Mounting<br>flange | Mounting<br>flange 2 | Bore      | Maximum<br>operating<br>pressure<br>bar | Article  |
|---------------------------|--------------------------------------------------|----------------------------------------|--------------------|--------------------------|---------------------|--------------------|----------------------|-----------|-----------------------------------------|----------|
| DN10                      | 13                                               | 1.5                                    | Class 600          | Manufacturer<br>standard | Handle              | F03                | F04                  | Full bore | 99                                      | 14011235 |

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| Nominal inner diameter | External tube diameter of connection<br>mm | Wall thickness, connection<br>mm | Pressure rating | Face to Face norm     | Manual operation | Mounting flange | Mounting flange 2 | Bore      | Maximum operating pressure<br>bar | Article  |
|------------------------|--------------------------------------------|----------------------------------|-----------------|-----------------------|------------------|-----------------|-------------------|-----------|-----------------------------------|----------|
| DN15                   | 19                                         | 1.5                              | Class 600       | Manufacturer standard | Handle           | F03             | F04               | Full bore | 99                                | 14011236 |
| DN20                   | 23                                         | 1.5                              | Class 600       | Manufacturer standard | Handle           | F03             | F04               | Full bore | 99                                | 14011237 |
| DN25                   | 29                                         | 1.5                              | Class 600       | Manufacturer standard | Handle           | F04             | F05               | Full bore | 99                                | 14011238 |
| DN32                   | 35                                         | 1.5                              | Class 600       | Manufacturer standard | Handle           | F04             | F05               | Full bore | 80                                | 14011239 |
| DN40                   | 41                                         | 1.5                              | Class 600       | Manufacturer standard | Handle           | F07             |                   | Full bore | 80                                | 14011240 |
| DN50                   | 53                                         | 1.5                              | Class 600       | Manufacturer standard | Handle           | F07             |                   | Full bore | 76                                | 14011241 |
| DN65                   | 70                                         | 2                                | Class 600       | Manufacturer standard | Handle           | F07             | F10               | Full bore | 69                                | 14011242 |

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