

## Ball valve

3-piece, Rp tread, stainless steel

### STAINLESS STEEL

Art. No. 164031

Type No. KH.ES.RP14.BK



Exemplary illustration

2/2-way stainless steel ball valve for shutting off media flows.

The ball valves can be connected to a pneumatic or electric rotary actuator via the mechanical interface in accordance with ISO 5211.

Advantages:

- low torque
- high flow rates
- high media pressures
- long service life
- easy maintenance

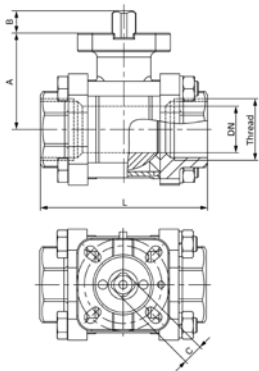
## Technical data

|                         |                        |
|-------------------------|------------------------|
| Housing                 | stainless steel 1.4408 |
| Ball                    | stainless steel 1.4401 |
| Ball seal               | PTFE                   |
| Stem seal               | FKM                    |
| Max. operating pressure | 63 bar                 |
| Operating temperature   | -10 to 200 °C          |
| Standard thread         | DIN EN 10226-1         |
| Thread                  | Rp 1/4 IT              |
| DN                      | 10 mm                  |
| L                       | 65.0 mm                |
| A                       | 40.0 mm                |
| B                       | 7.0 mm                 |
| ISO 5211                | F 03 / F 04            |

## Commercial data

|                         |                  |
|-------------------------|------------------|
| Customs tariff number   | 84818081         |
| Country of origin       | TW               |
| eCl@ss 5.1.4            | 27292002         |
| eCl@ss 9.0              | 27292002         |
| UNSPSC_Code_v190501     | 40141603         |
| UNSPSC_CodeDesc_v190501 | Pneumatic valves |

## Dimensions



| Thread    | DN<br>mm | A<br>mm | B<br>mm | C<br>mm | L<br>mm |
|-----------|----------|---------|---------|---------|---------|
| Rp 1/4 IT | 10       | 40.0    | 7.0     | 9.0     | 65.0    |

**DATA SHEET**
**Type 2654**

**bürkert**  
FLUID CONTROL SYSTEMS


**2/2-way ball valve, 3-piece**

- Stainless steel ball valve
- High flow values
- High medium pressures
- Long service life
- ISO 5211 mounting flange



Product variants described in the data sheet may differ from the product presentation and description.

**Can be combined with**

|                                                                                     |                                                                                                            |   |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---|
|  | <b>Type 2051</b><br>Pneumatic rotary actuator                                                              | ▶ |
|  | <b>Type 2053</b><br>Pneumatic rotary actuator for the automation of ball and butterfly valves              | ▶ |
|  | <b>Type 3003</b><br>Electrical Rotary Actuator<br>- On/Off and control                                     | ▶ |
|  | <b>Type 3005</b><br>Electric Rotary Actuator - On/Off and Control                                          | ▶ |
|  | <b>Type 3004</b><br>Explosion-Proof Rotary Actuator - On/Off or Control                                    | ▶ |
|  | <b>Type 1061</b><br>Position feedback unit for pneumatic rotary actuators                                  | ▶ |
|  | <b>Type 8692</b><br>Digital electro-pneumatic positioner for integrated mounting on process control valves | ▶ |

**Type description**

2/2-way ball valve in stainless steel for separating medium flows. The ball valves can be connected via the mechanical interface according to ISO 5211 to a pneumatic (e.g. Type 2051, Type 2052, Type 2053) or electric rotary actuator (e.g. Type 3003, Type 3004, Type 3005). Benefits:

- low torques
- high flow values
- high medium pressure
- long service life
- maintenance-friendly

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## Type 2654



### 1. General technical data

#### Note:

Further information on 3-piece ball valves with hand lever (but without ISO 5211 flange) can be found in data sheet  
Type TKU001 | 002 | 003 | 004 ▶.

| Product properties                      |                                                                                                                                                                                                                      |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions                              | Further information can be found in chapter "4. Dimensions" on page 4.                                                                                                                                               |
| Materials                               |                                                                                                                                                                                                                      |
| Seal                                    | PTFE (ball seal)<br>FKM (selector shaft seal)                                                                                                                                                                        |
| Body                                    | Stainless steel 1.4408/316                                                                                                                                                                                           |
| Ball                                    | Stainless steel 1.4401/316                                                                                                                                                                                           |
| Selector shaft                          | Stainless steel 1.4401/316                                                                                                                                                                                           |
| Nominal diameter                        | DN 10...100                                                                                                                                                                                                          |
| Medium data                             |                                                                                                                                                                                                                      |
| Medium temperature                      | -10 °C...200 °C (see "5.1. Pressure temperature diagram" on page 7)                                                                                                                                                  |
| Medium pressure                         | See "4. Dimensions" on page 4 and "5.1. Pressure temperature diagram" on page 7)                                                                                                                                     |
| Process/Port connection & communication |                                                                                                                                                                                                                      |
| Port connection                         | Rp 1/4"...Rp 2" Whitworth thread according to DIN EN 10226 - 1 (old DIN 2999),<br>Weld end (universal, applicable to different welding standards),<br>DIN flange according to EN 1091 - 1 and EN 558 - 1 series 1-F1 |
| Actuator-side interface                 | According to EN ISO 5211                                                                                                                                                                                             |

### 2. Approvals and conformities

#### 2.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

#### 2.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

#### 2.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

### 3. Materials

#### 3.1. Bürkert resistApp



##### Bürkert resistApp – Chemical resistance chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

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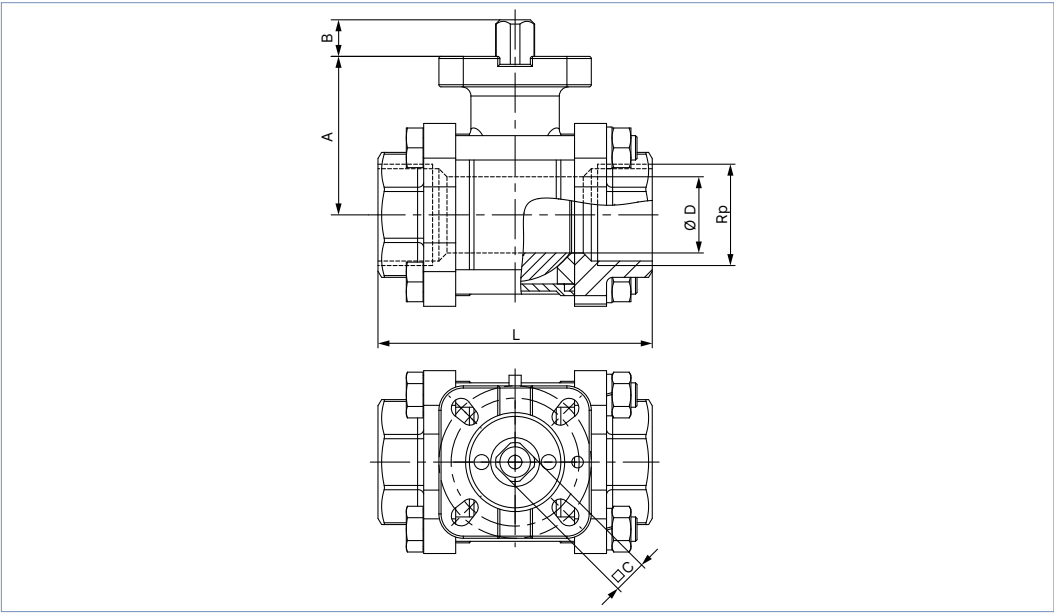
Type 2654



4. Dimensions

4.1. Threaded variant (PN 63)

**Note:**  
Further information on 3-piece ball valves with hand lever (but without ISO 5211 flange) can be found in data sheet  
Type TKU001 | 002 | 003 | 004 ▶



| DN  | Rp<br>[inch] | D<br>[mm] | L<br>[mm] | A<br>[mm] | B<br>[mm] | C<br>[mm] | Interface acc.<br>to ISO 5211 | Article no.                                                                                  |
|-----|--------------|-----------|-----------|-----------|-----------|-----------|-------------------------------|----------------------------------------------------------------------------------------------|
| 10  | ¼            | 10        | 65        | 40        | 7         | 9         | F03/F04                       | 185994  |
| 12  | ⅜            | 12        | 65        | 40        | 7         | 9         | F03/F04                       | 185995  |
| 15  | ½            | 16        | 75        | 40        | 7         | 9         | F03/F04                       | 185996  |
| 20  | ¾            | 20        | 80        | 44        | 7         | 9         | F03/F04                       | 185997  |
| 25  | 1            | 25        | 90        | 52        | 12        | 11        | F04/F05                       | 185998  |
| 32  | 1¼           | 32        | 110       | 58        | 12        | 11        | F04/F05                       | 185999  |
| 40  | 1½           | 40        | 120       | 68        | 16        | 14        | F05/F07                       | 186000  |
| 50  | 2            | 50        | 140       | 77        | 16        | 14        | F05/F07                       | 186001  |
| 65  | 2½           | 65        | 185       | 98        | 19        | 17        | F07/F10                       | 186002  |
| 80  | 3            | 80        | 205       | 110       | 19        | 17        | F07/F10                       | 186003  |
| 100 | 4            | 100       | 240       | 138       | 24        | 22        | F10                           | 217975  |

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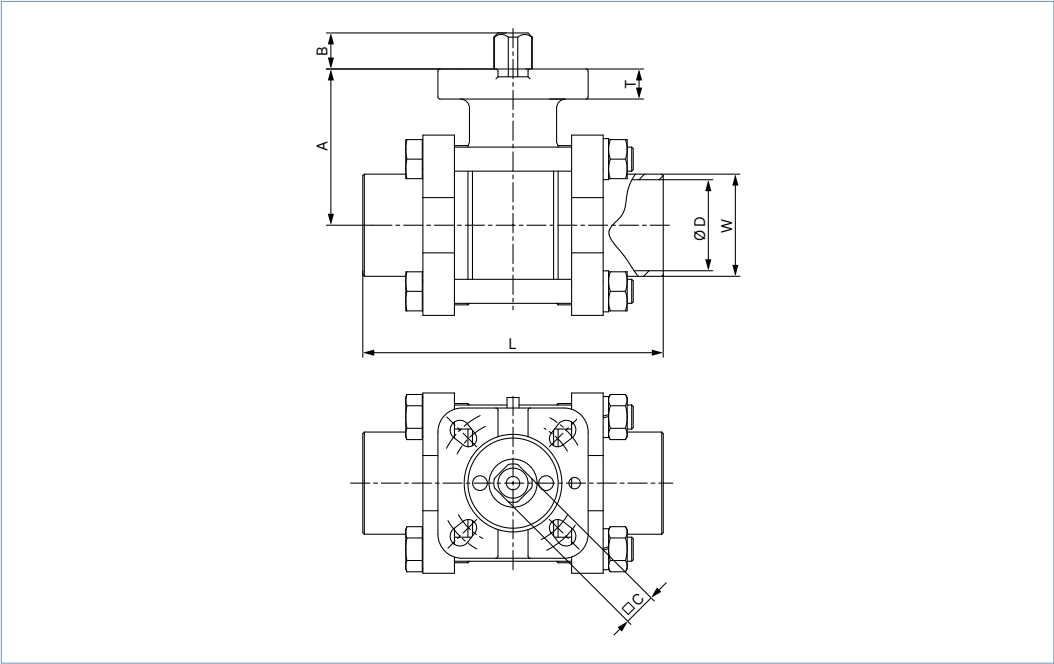
Type 2654



4.2. Weld end variant (PN 63)

Note:

- Universally applicable to different welding standards
- Further information on 3-piece ball valves with hand lever (but without ISO 5211 flange) can be found in data sheet **Type TKU001100210031004** ▶



| DN  | W<br>[mm] | D<br>[mm] | L<br>[mm] | A<br>[mm] | B<br>[mm] | C<br>[mm] | Interface acc.<br>to ISO 5211 | Article no.                                                                                  |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------------|----------------------------------------------------------------------------------------------|
| 12  | 19.3      | 12        | 75        | 40        | 9         | 9         | F03/F04                       | 186004  |
| 15  | 23.3      | 16        | 75        | 40        | 9         | 9         | F03/F04                       | 186005  |
| 20  | 28.2      | 20        | 90        | 44        | 9         | 9         | F03/F04                       | 186006  |
| 25  | 33.8      | 25        | 100       | 52        | 12        | 11        | F04/F05                       | 186007  |
| 32  | 41.1      | 32        | 110       | 58        | 12        | 11        | F04/F05                       | 186008  |
| 40  | 49        | 40        | 125       | 68        | 16        | 14        | F05/F07                       | 186009  |
| 50  | 62        | 50        | 150       | 77        | 16        | 14        | F05/F07                       | 186010  |
| 65  | 78        | 65        | 190       | 98        | 19        | 17        | F07/F10                       | 205429  |
| 80  | 94.3      | 80        | 220       | 110       | 19        | 17        | F07/F10                       | 203221  |
| 100 | 125.2     | 100       | 270       | 138       | 24        | 22        | F10                           | 203222  |

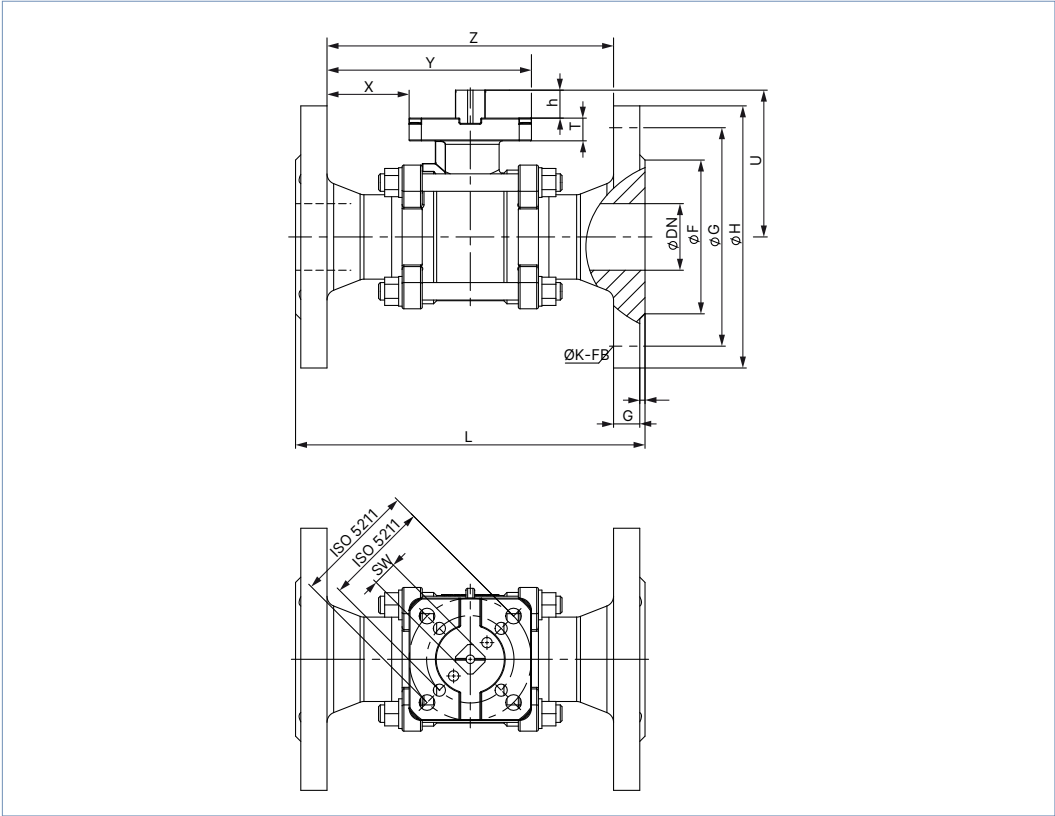
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4.3. Flange variant (PN 40)

**Note:**  
DIN flange according to EN 1091 -1 and EN 558 -1 series 1-F1 (PN 40)



| DN  | L    | Ø F  | Ø G  | Ø H  | U    | T    | h    | G    | D    | X    | Y    | Z    | Ø K | FB   | SW   | Interface<br>acc. to ISO<br>5211 | Article no. |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|----------------------------------|-------------|
|     | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |     | [mm] | [mm] |                                  |             |
| 15  | 130  | 45   | 65   | 95   | 47   | 9    | 7    | 16   | 2    | 26.5 | 70.5 | 97   | M14 | 4    | 9    | F03/F04                          | 276604 ☞    |
| 20  | 150  | 58   | 75   | 105  | 53   | 9    | 9    | 18   | 2    | 34.5 | 78.5 | 113  | M14 | 4    | 9    | F03/F04                          | 20028371 ☞  |
| 25  | 160  | 68   | 85   | 115  | 64   | 10   | 12   | 18   | 2    | 36.5 | 86.5 | 123  | M14 | 4    | 11   | F04/F05                          | 273904 ☞    |
| 32  | 180  | 78   | 100  | 140  | 70   | 10   | 12   | 18   | 2    | 47   | 96.5 | 144  | M18 | 4    | 11   | F04/F05                          | 263482 ☞    |
| 40  | 200  | 88   | 110  | 150  | 84   | 13   | 16   | 18   | 3    | 46   | 117  | 163  | M18 | 4    | 14   | F05/F07                          | 288136 ☞    |
| 50  | 230  | 102  | 125  | 165  | 93   | 13   | 16   | 20   | 3    | 59   | 130  | 189  | M18 | 4    | 14   | F05/F07                          | 189274 ☞    |
| 65  | 290  | 122  | 145  | 185  | 117  | 13   | 19   | 22   | 3    | 71   | 173  | 244  | M18 | 8    | 17   | F07/F10                          | 276605 ☞    |
| 80  | 310  | 138  | 160  | 200  | 129  | 13   | 19   | 24   | 3    | 79   | 181  | 260  | M18 | 8    | 17   | F07/F10                          | 204804 ☞    |
| 100 | 350  | 162  | 190  | 235  | 162  | 20   | 24   | 24   | 3    | 99   | 201  | 300  | M22 | 8    | 22   | F10                              | 289476 ☞    |

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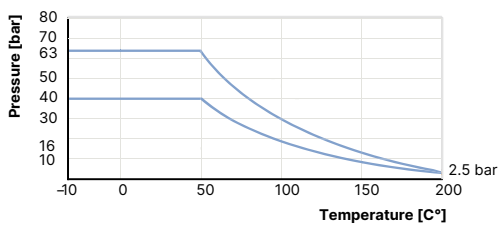
Type 2654



**5. Performance specifications**

**5.1. Pressure temperature diagram**

For general industrial use



**5.2. Torques**

| Torques               |   |    |    |    |    |    |    |    |    |     |     |
|-----------------------|---|----|----|----|----|----|----|----|----|-----|-----|
| DN [mm]               | 8 | 10 | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80  | 100 |
| Breakaway torque [Nm] | 6 | 6  | 10 | 14 | 17 | 24 | 29 | 44 | 78 | 112 | 140 |
| Running torque [Nm]   | 4 | 4  | 7  | 9  | 11 | 16 | 19 | 30 | 52 | 89  | 112 |

**6. Product accessories**

**6.1. Wearing part set for ball valve Type 2654**

**Note:**

Further ordering information can be found in chapter "Wearing part set for ball valve Type 2654" on page 8.

| Description      | Quantity | Material |
|------------------|----------|----------|
| V-packing/V-seal | 4        | PTFE     |
| O-ring           | 1        | FKM      |
| Thrust collar    | 1        | PTFE     |
| Ball seal        | 2        | PTFE     |
| Body gasket      | 2        | PTFE     |

**6.2. Lever for ball valve Type 2654**

**Note:**

- Further ordering information can be found in chapter "Lever for ball valve Type 2654" on page 9.
- The cast iron hand lever, screw and travel stop included, is made of stainless steel 1.4408/316.

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7. Ordering information

7.1. Bürkert eShop



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7.3. Ordering chart threaded variant

**Note:**  
Further information can be found in chapter “4.1. Threaded variant (PN 63)” on page 4.

7.4. Ordering chart weld end variant

**Note:**  
Further information can be found in chapter “4.2. Weld end variant (PN 63)” on page 5.

7.5. Ordering chart accessories

Wearing part set for ball valve Type 2654

**Note:**  
Further information can be found in chapter “6.1. Wearing part set for ball valve Type 2654” on page 7.

| DN<br>[mm] | Article no.                                                                                |
|------------|--------------------------------------------------------------------------------------------|
| 10         | 773127  |
| 12         | 770180  |
| 15         | 789821  |
| 20         | 789822  |
| 25         | 789823  |
| 32         | 789824  |
| 40         | 789825  |
| 50         | 789826  |
| 65         | 789827  |
| 80         | 789828  |
| 100        | 789829  |

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**Type 2654**



**Lever for ball valve Type 2654**

| DN      | Article no.                                                                              |
|---------|------------------------------------------------------------------------------------------|
| [mm]    |                                                                                          |
| 10...20 | 770161  |
| 25...32 | 789897  |
| 40...50 | 789671  |
| 65...80 | 770162  |
| 100     | 770163  |

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