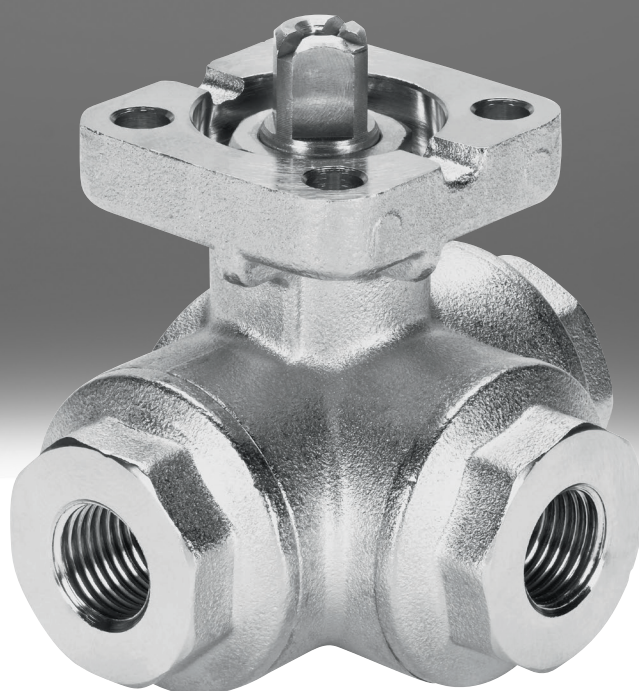


## Ball valve VZBA

**FESTO**



## Characteristics

### At a glance

The automatable 3-way ball valve VZBA is made of stainless steel for trouble-free control of aggressive media or gases in piping systems.

- Stainless steel design
- Blow-out proof shaft
- Can be operated manually using the hand lever
- Connecting thread according to EN 10226-1
- Mounting flange according to ISO 5211
- Use in zones 1, 21, 2, 22

## Type code

| 001  | Series     |  |
|------|------------|--|
| VZBA | Ball valve |  |

| 002   | Nominal diameter DN |  |
|-------|---------------------|--|
| 1/4   | 1/4"                |  |
| 3/8   | 3/8"                |  |
| 1/2   | 1/2"                |  |
| 3/4   | 3/4"                |  |
| 1     | 1"                  |  |
| 1 1/4 | 1 1/4"              |  |
| 1 1/2 | 1 1/2"              |  |
| 2     | 2"                  |  |
| 2 1/2 | 2 1/2"              |  |
| 3     | 3"                  |  |
| 4     | 4"                  |  |

| 003 | Process valve connection type 1 |  |
|-----|---------------------------------|--|
| G   | Rp female thread                |  |
| W   | Suitable for welding            |  |

| 004 | Process valve connection type 2 |  |
|-----|---------------------------------|--|
| G   | Rp female thread                |  |
| W   | Suitable for welding            |  |

| 005 | Process valve connection type 3 |  |
|-----|---------------------------------|--|
|     | None                            |  |
| G   | G female thread                 |  |

| 006 | Nominal pressure [bar] |  |
|-----|------------------------|--|
| 63  | 63                     |  |

| 007 | Design type |  |
|-----|-------------|--|
|     | Standard    |  |
| T   | Three-part  |  |

| 008 | Valve function  |  |
|-----|-----------------|--|
| 22  | 2/2-way         |  |
| 32L | 3/2-way, L-bore |  |
| 32T | 3/2-way, T-bore |  |

| 009   | Flanged connection     |  |
|-------|------------------------|--|
| F0304 | Hole pattern 03 and 04 |  |
| F0405 | Hole pattern 04 and 05 |  |
| F0507 | Hole pattern 05 and 07 |  |
| F0710 | Hole pattern 07 and 10 |  |
| F10   | Hole pattern 10        |  |

| 010 | Housing material                                                                          |  |
|-----|-------------------------------------------------------------------------------------------|--|
| V4  | Stainless steel (chrome-nickel-molybdenum, austenitic/1.4401, 1.4404 (AISI 316L), 1.4408) |  |

| 011 | Shut-off element material                                                                 |  |
|-----|-------------------------------------------------------------------------------------------|--|
| V4  | Stainless steel (chrome-nickel-molybdenum, austenitic/1.4401, 1.4404 (AISI 316L), 1.4408) |  |

| 012 | Sealant |  |
|-----|---------|--|
| T   | PTFE    |  |

## Datasheet

## General technical data, process valve with pipe thread, 2-way

|                              |                                   |         |           |           |           |          |          |          |          |          |            |
|------------------------------|-----------------------------------|---------|-----------|-----------|-----------|----------|----------|----------|----------|----------|------------|
| Nominal size DN              | 8                                 | 10      | 15        | 20        | 25        | 32       | 40       | 50       | 65       | 80       | 100        |
| Connection Process valve     | Rp1/4                             | Rp3/8   | Rp1/2     | Rp3/4     | Rp1       | Rp1 1/4  | Rp1 1/2  | Rp2      | Rp2 1/2  | Rp3      | Rp4        |
| Nominal pressure PN          | 63                                |         |           |           |           |          |          |          |          |          |            |
| Valve function               | 2/2                               |         |           |           |           |          |          |          |          |          |            |
| Design                       | 2-way ball valve                  |         |           |           |           |          |          |          |          |          |            |
| Sealing principle            | Soft                              |         |           |           |           |          |          |          |          |          |            |
| Type of actuation            | Mechanical                        |         |           |           |           |          |          |          |          |          |            |
| Manual override              | None                              |         |           |           |           |          |          |          |          |          |            |
| Switching position indicator | Slot direction = flow direction   |         |           |           |           |          |          |          |          |          |            |
| Flow direction               | Reversible                        |         |           |           |           |          |          |          |          |          |            |
| Type of mounting             | In-line installation              |         |           |           |           |          |          |          |          |          |            |
| Mounting position            | optional                          |         |           |           |           |          |          |          |          |          |            |
| Based on standard            | DIN 3202-M3, EN 10226-1, ISO 5211 |         |           |           |           |          |          |          |          |          |            |
| Actuating torque             | 6 Nm                              |         | 10 Nm     | 14 Nm     | 17 Nm     | 24 Nm    | 29 Nm    | 44 Nm    | 78 Nm    | 112 Nm   | 140 Nm     |
| Inside diameter              | 10 mm                             | 12 mm   | 16 mm     | 20 mm     | 25 mm     | 32 mm    | 38 mm    | 50 mm    | 65 mm    | 80 mm    | 100 mm     |
| Flow rate Kv                 | 7 m3/h                            | 10 m3/h | 19.4 m3/h | 45.6 m3/h | 71.5 m3/h | 105 m3/h | 170 m3/h | 275 m3/h | 507 m3/h | 905 m3/h | 1,414 m3/h |

## General technical data, process valve with welding ends, 2-way

|                              |                                 |         |           |           |           |          |          |          |          |          |            |
|------------------------------|---------------------------------|---------|-----------|-----------|-----------|----------|----------|----------|----------|----------|------------|
| Nominal size DN              | 8                               | 10      | 15        | 20        | 25        | 32       | 40       | 50       | 65       | 80       | 100        |
| Connection Process valve     | Weld-on ends/weld-on ends       |         |           |           |           |          |          |          |          |          |            |
| Nominal pressure PN          | 63                              |         |           |           |           |          |          |          |          |          |            |
| Valve function               | 2/2                             |         |           |           |           |          |          |          |          |          |            |
| Design                       | 2-way ball valve                |         |           |           |           |          |          |          |          |          |            |
| Sealing principle            | Soft                            |         |           |           |           |          |          |          |          |          |            |
| Type of actuation            | Mechanical                      |         |           |           |           |          |          |          |          |          |            |
| Manual override              | None                            |         |           |           |           |          |          |          |          |          |            |
| Switching position indicator | Slot direction = flow direction |         |           |           |           |          |          |          |          |          |            |
| Flow direction               | Reversible                      |         |           |           |           |          |          |          |          |          |            |
| Type of mounting             | In-line installation            |         |           |           |           |          |          |          |          |          |            |
| Mounting position            | optional                        |         |           |           |           |          |          |          |          |          |            |
| Based on standard            | DIN 3202-S13, ISO 5211          |         |           |           |           |          |          |          |          |          |            |
| Actuating torque             | 6 Nm                            |         | 10 Nm     | 14 Nm     | 17 Nm     | 24 Nm    | 29 Nm    | 44 Nm    | 78 Nm    | 112 Nm   | 140 Nm     |
| Inside diameter              | 10 mm                           | 12 mm   | 16 mm     | 20 mm     | 25 mm     | 32 mm    | 38 mm    | 50 mm    | 65 mm    | 80 mm    | 100 mm     |
| Flow rate Kv                 | 7 m3/h                          | 10 m3/h | 19.4 m3/h | 45.6 m3/h | 71.5 m3/h | 105 m3/h | 170 m3/h | 275 m3/h | 507 m3/h | 905 m3/h | 1,414 m3/h |

## Operating and environmental conditions, process valve with pipe thread, 2-way

|                                              |                                                                                                                       |    |    |    |    |                                                    |    |    |    |    |     |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----|----|----|----|----------------------------------------------------|----|----|----|----|-----|
| Nominal size DN                              | 8                                                                                                                     | 10 | 15 | 20 | 25 | 32                                                 | 40 | 50 | 65 | 80 | 100 |
| Medium <sup>1)</sup>                         | Compressed air to ISO 8573-1:2010 [...], Inert gases, Water – no water vapour, Neutral fluids, Other media on request |    |    |    |    |                                                    |    |    |    |    |     |
| Nominal pressure PN                          | 63                                                                                                                    |    |    |    |    |                                                    |    |    |    |    |     |
| Media temperature                            | -10 ... 200°C                                                                                                         |    |    |    |    |                                                    |    |    |    |    |     |
| Corrosion resistance class CRC <sup>2)</sup> | 3 - high corrosion stress                                                                                             |    |    |    |    |                                                    |    |    |    |    |     |
| CE mark (see declaration of conformity)      | –                                                                                                                     |    |    |    |    | In accordance with EU Pressure Equipment Directive |    |    |    |    |     |
| UKCA marking (see declaration of conformity) | –                                                                                                                     |    |    |    |    | to UK Pressure Equipment Regulations               |    |    |    |    |     |

1) Other flow media on request

2) Corrosion resistance class CRC 3 to Festo standard FN 940070 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional surface requirements that are in direct contact with a normal industrial atmosphere.

# Datasheet

## Operating and environmental conditions, process valve with welding ends, 2-way

| Nominal size DN                              | 8                                                                                                                     | 10 | 15 | 20 | 25 | 32                                                 | 40 | 50 | 65 | 80 | 100 |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----|----|----|----|----------------------------------------------------|----|----|----|----|-----|
| Medium <sup>1)</sup>                         | Compressed air to ISO 8573-1:2010 [---], Inert gases, Water – no water vapour, Neutral fluids, Other media on request |    |    |    |    |                                                    |    |    |    |    |     |
| Nominal pressure PN                          | 63                                                                                                                    |    |    |    |    |                                                    |    |    |    |    |     |
| Media temperature                            | -10 ... 200°C                                                                                                         |    |    |    |    |                                                    |    |    |    |    |     |
| Corrosion resistance class CRC <sup>2)</sup> | 3 - high corrosion stress                                                                                             |    |    |    |    |                                                    |    |    |    |    |     |
| CE mark (see declaration of conformity)      | –                                                                                                                     |    |    |    |    | In accordance with EU Pressure Equipment Directive |    |    |    |    |     |
| UKCA marking (see declaration of conformity) | –                                                                                                                     |    |    |    |    | to UK Pressure Equipment Regulations               |    |    |    |    |     |

1) Other flow media on request

2) Corrosion resistance class CRC 3 to Festo standard FN 940070 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional surface requirements that are in direct contact with a normal industrial atmosphere.

## General technical data, 3-way

| Nominal size DN                            | 8                                | 10      | 15       | 20       | 25        | 32        | 40        | 50        |
|--------------------------------------------|----------------------------------|---------|----------|----------|-----------|-----------|-----------|-----------|
| Connection Process valve                   | Rp1/4                            | Rp3/8   | Rp1/2    | Rp3/4    | Rp1       | Rp1 1/4   | Rp1 1/2   | Rp2       |
| Valve function                             | 3/2                              |         |          |          |           |           |           |           |
| Design                                     | 3-way ball valve, L-hole, T-hole |         |          |          |           |           |           |           |
| Sealing principle                          | Soft                             |         |          |          |           |           |           |           |
| Type of actuation                          | Mechanical                       |         |          |          |           |           |           |           |
| Manual override                            | None                             |         |          |          |           |           |           |           |
| Switching position indicator               | Slot direction = flow direction  |         |          |          |           |           |           |           |
| Flow direction                             | Reversible                       |         |          |          |           |           |           |           |
| Type of mounting                           | In-line installation             |         |          |          |           |           |           |           |
| Mounting position                          | optional                         |         |          |          |           |           |           |           |
| Based on standard                          | EN 10226-1, ISO 5211             |         |          |          |           |           |           |           |
| Actuating torque                           | 13 Nm                            |         |          | 18 Nm    | 22 Nm     | 35 Nm     | 42 Nm     | 68 Nm     |
| Inside diameter                            | 11.6 mm                          | 12.7 mm |          | 16 mm    | 20 mm     | 25.4 mm   | 31.8 mm   | 38.1 mm   |
| Flow rate Kv L hole <sup>1)</sup>          | 4.5 m³/h                         |         | 4.7 m³/h | 5.1 m³/h | 11.8 m³/h | 19.6 m³/h | 33.2 m³/h | 53.7 m³/h |
| Flow rate Kv T hole straight <sup>2)</sup> | 8 m³/h                           |         | 8.3 m³/h |          | 22.4 m³/h | 36.5 m³/h | 62 m³/h   | 100 m³/h  |
| Flow rate Kv T hole angled <sup>3)</sup>   | 4.5 m³/h                         |         | 4.8 m³/h |          | 10.9 m³/h | 18 m³/h   | 30 m³/h   | 48.8 m³/h |
| Product weight                             | 700 g                            |         |          | 1,000 g  | 1,600 g   | 2,800 g   | 3,800 g   | 7,400 g   |

1) Ball with L-shaped drilled hole

2) Ball with T-shaped drilled hole, straight flow

3) Ball with T-shaped drilled hole, flow around the corner

## Operating and environmental conditions, 3-way

| Nominal size DN                              | 8                                                                                                                     | 10 | 15 | 20 | 25 | 32                                                 | 40 | 50 |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----|----|----|----|----------------------------------------------------|----|----|
| Medium <sup>1)</sup>                         | Compressed air to ISO 8573-1:2010 [---], Inert gases, Water – no water vapour, Neutral fluids, Other media on request |    |    |    |    |                                                    |    |    |
| Nominal pressure PN                          | 63                                                                                                                    |    |    |    |    |                                                    |    |    |
| Media temperature                            | -10 ... 200°C                                                                                                         |    |    |    |    |                                                    |    |    |
| Corrosion resistance class CRC <sup>2)</sup> | 3 - high corrosion stress                                                                                             |    |    |    |    |                                                    |    |    |
| CE mark (see declaration of conformity)      | –                                                                                                                     |    |    |    |    | In accordance with EU Pressure Equipment Directive |    |    |
| UKCA marking (see declaration of conformity) | –                                                                                                                     |    |    |    |    | to UK Pressure Equipment Regulations               |    |    |

1) Other flow media on request

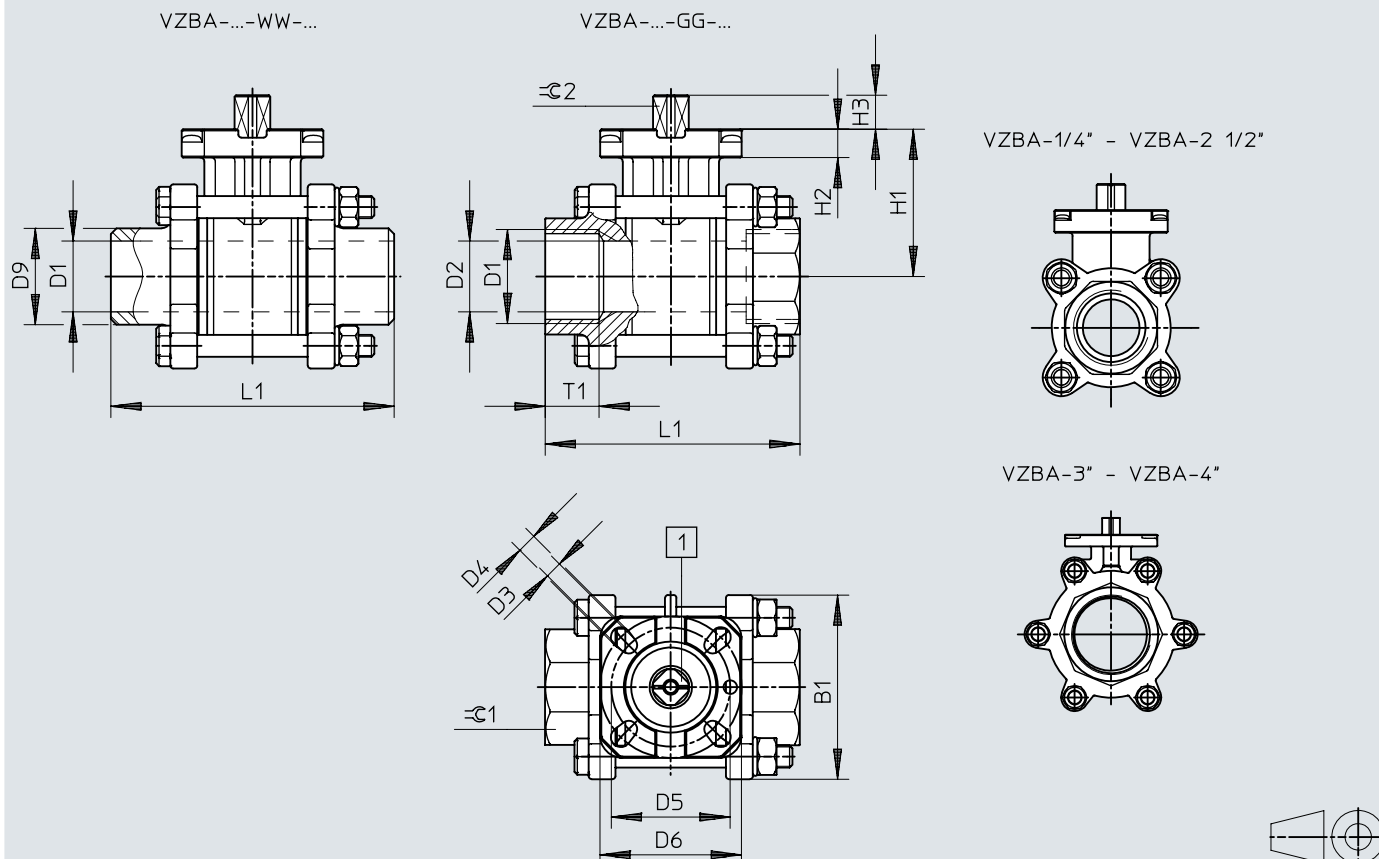
2) Corrosion resistance class CRC 3 to Festo standard FN 940070 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional surface requirements that are in direct contact with a normal industrial atmosphere.

Datasheet

| Materials, 2/3-way      |                            |
|-------------------------|----------------------------|
| Material housing        | High-alloy stainless steel |
| Material number housing | 1.4408                     |
| Material ball           | High-alloy stainless steel |
| Material number ball    | 1.4408                     |
| Material shaft          | High-alloy stainless steel |
| Material number shaft   | 1.4401                     |
| Material seat seal      | PTFE, modified             |
| Material seals          | FPM, PTFE, PTFE reinforced |
| Note on materials       | RoHS-compliant             |

## Dimensions

## Dimensions – Ball valves VZBA, 2-way

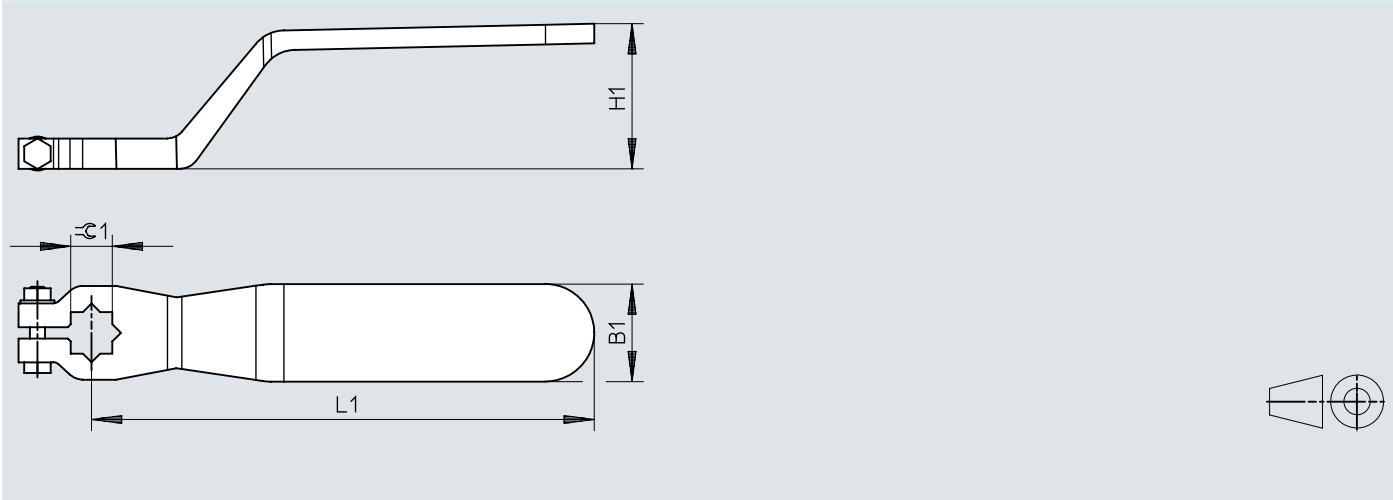
Download CAD data [www.festo.com](http://www.festo.com)

[1] Switching position indicator: the slot direction corresponds to the flow direction

|                                    | B1   | D1<br>ø<br>±0,15 | D2      | D3<br>ø | D4<br>ø | D5<br>ø | D6<br>ø | D9<br>ø | H1  | H2 | H3<br>±0,5 | L1<br>±2 | T1   | ≈ 1 | ≈ 2<br>-0,1 |
|------------------------------------|------|------------------|---------|---------|---------|---------|---------|---------|-----|----|------------|----------|------|-----|-------------|
| VZBA-1/4"-GG-63-T-22-F0304-V4V4T   | 42   | 10               | Rp1/4   | 6       | 6       | 36      | 42      | –       | 40  | 9  | 8,5        | 65       | 14,5 | 24  | 9           |
| VZBA-3/8"-GG-63-T-22-F0304-V4V4T   | 42   | 12               | Rp3/8   | 6       | 6       | 36      | 42      | –       | 40  | 9  | 8,5        | 65       | 14,5 | 24  | 9           |
| VZBA-1/2"-GG-63-T-22-F0304-V4V4T   | 49   | 16               | Rp1/2   | 6       | 6       | 36      | 42      | –       | 40  | 9  | 8,5        | 75       | 16   | 29  | 9           |
| VZBA-3/4"-GG-63-T-22-F0304-V4V4T   | 54   | 20               | Rp3/4   | 6       | 6       | 36      | 42      | –       | 44  | 9  | 8,5        | 80       | 17   | 35  | 9           |
| VZBA-1"-GG-63-T-22-F0405-V4V4T     | 60,5 | 25               | Rp1     | 6       | 7       | 42      | 50      | –       | 52  | 10 | 11,5       | 90       | 19   | 41  | 11          |
| VZBA-1 1/4"-GG-63-T-22-F0405-V4V4T | 71,5 | 32               | Rp1 1/4 | 6       | 7       | 42      | 50      | –       | 58  | 10 | 11,5       | 110      | 23   | 50  | 11          |
| VZBA-1 1/2"-GG-63-T-22-F0507-V4V4T | 80,5 | 38               | Rp1 1/2 | 7       | 9       | 50      | 70      | –       | 68  | 13 | 15,5       | 120      | 24   | 58  | 14          |
| VZBA-2"-GG-63-T-22-F0507-V4V4T     | 99,5 | 50               | Rp2     | 7       | 9       | 50      | 70      | –       | 77  | 13 | 15,5       | 140      | 25,8 | 73  | 14          |
| VZBA-2 1/2"-GG-63-T-22-F0710-V4V4T | 127  | 65               | Rp2 1/2 | 9       | 11      | 70      | 102     | –       | 98  | 13 | 18,5       | 185      | 34   | 90  | 17          |
| VZBA-3"-GG-63-T-22-F0710-V4V4T     | 191  | 80               | Rp3     | 9       | 11      | 70      | 102     | –       | 110 | 13 | 18,5       | 205      | 36   | 105 | 17          |
| VZBA-4"-GG-63-T-22-F10-V4V4T       | 222  | 100              | Rp4     | –       | 11      | –       | 102     | –       | 138 | 16 | 23,5       | 240      | 38   | 135 | 22          |
| VZBA-1/4"-WW-63-T-22-F0304-V4V4T   | 42   | 10               | –       | 6       | 6       | 36      | 42      | 16      | 40  | 9  | 8,5        | 70       | –    | –   | 9           |
| VZBA-3/8"-WW-63-T-22-F0304-V4V4T   | 42   | 12               | –       | 6       | 6       | 36      | 42      | 18      | 40  | 9  | 8,5        | 70       | –    | –   | 9           |
| VZBA-1/2"-WW-63-T-22-F0304-V4V4T   | 49   | 16               | –       | 6       | 6       | 36      | 42      | 22      | 40  | 9  | 8,5        | 75       | –    | –   | 9           |
| VZBA-3/4"-WW-63-T-22-F0304-V4V4T   | 54   | 20               | –       | 6       | 6       | 36      | 42      | 28      | 44  | 9  | 8,5        | 90       | –    | –   | 9           |
| VZBA-1"-WW-63-T-22-F0405-V4V4T     | 60,5 | 25               | –       | 6       | 7       | 42      | 50      | 35      | 52  | 10 | 11,5       | 100      | –    | –   | 11          |
| VZBA-1 1/4"-WW-63-T-22-F0405-V4V4T | 71,5 | 32               | –       | 6       | 7       | 42      | 50      | 44      | 58  | 10 | 11,5       | 110      | –    | –   | 11          |
| VZBA-1 1/2"-WW-63-T-22-F0507-V4V4T | 80,5 | 38               | –       | 7       | 9       | 50      | 70      | 50      | 68  | 13 | 15,5       | 125      | –    | –   | 14          |
| VZBA-2"-WW-63-T-22-F0507-V4V4T     | 99,5 | 50               | –       | 7       | 9       | 50      | 70      | 62      | 77  | 13 | 15,5       | 150      | –    | –   | 14          |
| VZBA-2 1/2"-WW-63-T-22-F0710-V4V4T | 127  | 65               | –       | 9       | 11      | 70      | 102     | 77      | 98  | 13 | 18,5       | 190      | –    | –   | 17          |
| VZBA-3"-WW-63-T-22-F0710-V4V4T     | 191  | 80               | –       | 9       | 11      | 70      | 102     | 91      | 110 | 13 | 18,5       | 220      | –    | –   | 17          |
| VZBA-4"-WW-63-T-22-F10-V4V4T       | 222  | 100              | –       | –       | 11      | –       | 102     | 117     | 138 | 16 | 23,5       | 270      | –    | –   | 22          |

Dimensions

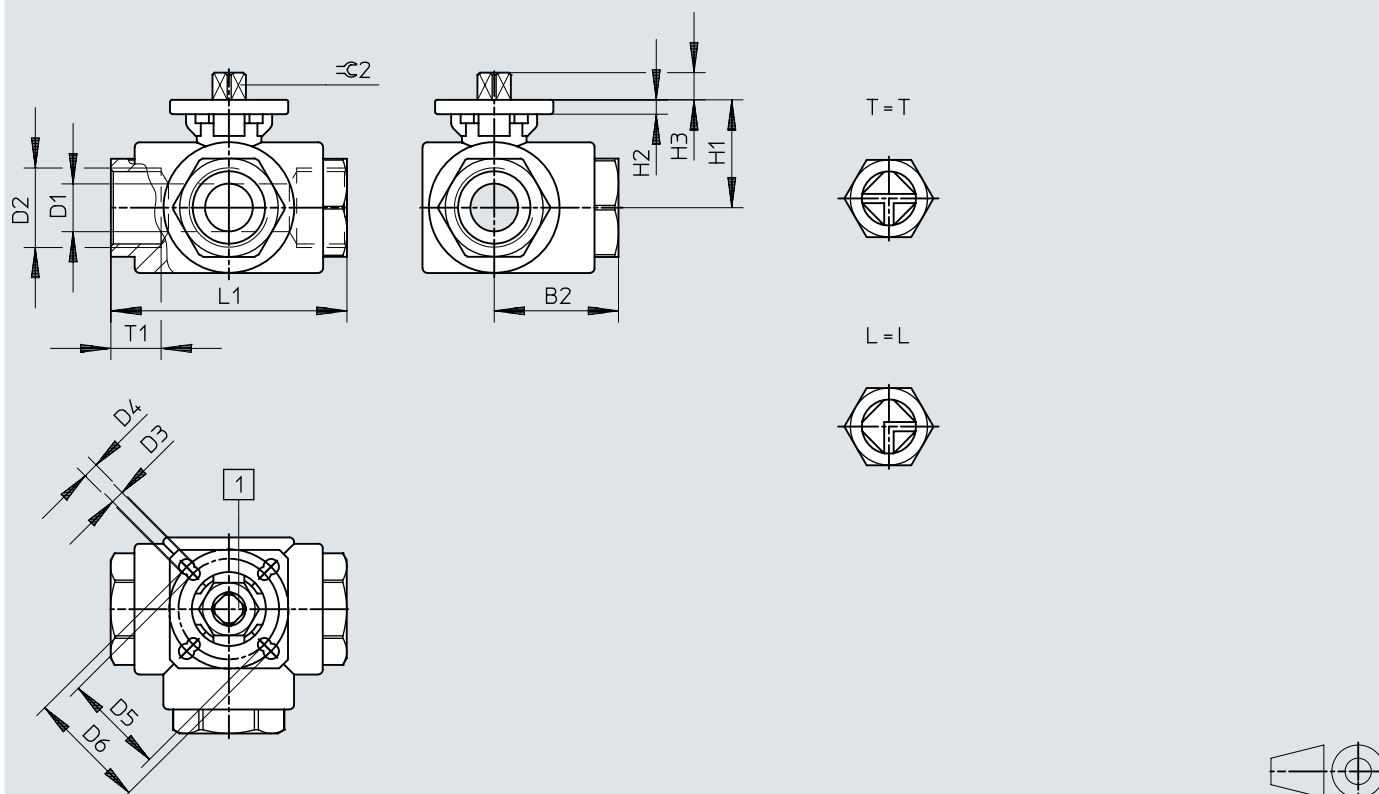
Dimensions – Hand lever VAOH, 2-way Download CAD data [www.festo.com](http://www.festo.com)



|            |                 | B1 | H1 | L1  | ≅C1  |
|------------|-----------------|----|----|-----|------|
|            |                 | ±5 | ±5 | ±10 | ±0,5 |
| VAOH-9-H9  | Rp1/4 ... Rp3/4 | 21 | 36 | 120 | 9    |
| VAOH-11-H9 | Rp1 ... Rp1 1/4 | 26 | 40 | 140 | 11   |
| VAOH-14-H9 | Rp1 1/2 ... Rp2 | 31 | 46 | 180 | 14   |
| VAOH-17-H9 | Rp2 1/2 ... Rp3 | 36 | 55 | 240 | 17   |
| VAOH-22-H9 | Rp4             | 36 | 70 | 280 | 22   |

## Dimensions

## Dimensions – Ball valves VZBA, 3-way

Download CAD data [www.festo.com](http://www.festo.com)

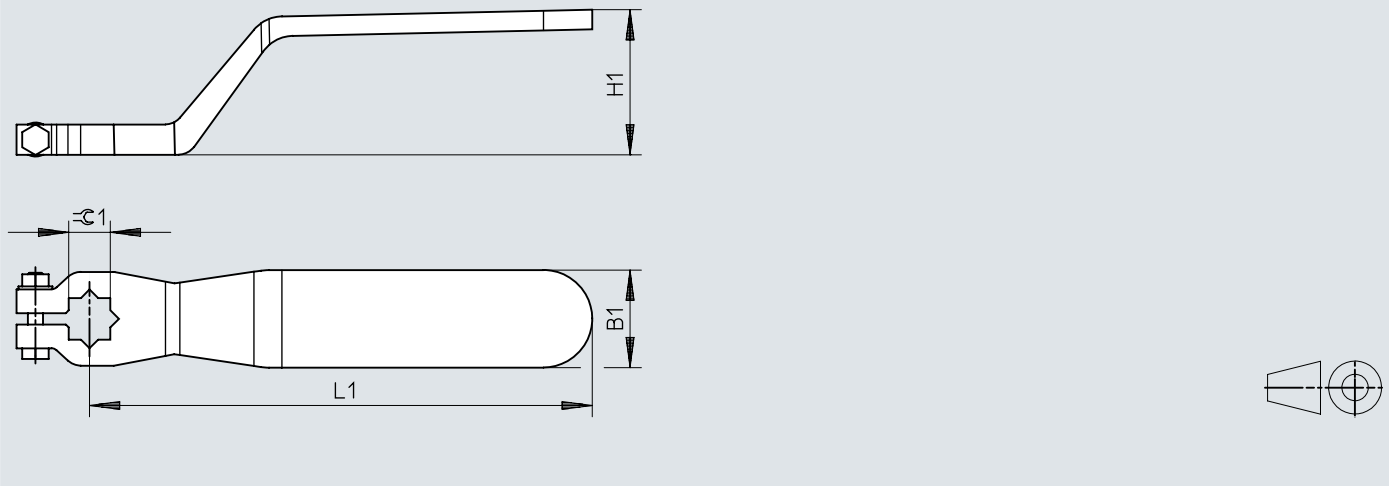
[1] Switching position indicator: the slot direction corresponds to the flow direction

|                                    | B2   | D1<br>Ø | D2      | D3<br>Ø | D4<br>Ø | D5<br>Ø | D6<br>Ø | H1   | H2<br>±1 | H3   | L1<br>±1 | T1   | ≈ 2<br>-0,1 |
|------------------------------------|------|---------|---------|---------|---------|---------|---------|------|----------|------|----------|------|-------------|
| VZBA-1/4"-GGG-63-32L-F0304-V4V4T   | 40   | 11,6    | Rp1/4   | 5,5     | 5,5     | 36      | 42      | 35,9 | 6        | 7,4  | 80       | 15   | 9           |
| VZBA-1/4"-GGG-63-32T-F0304-V4V4T   | 40   | 12,7    | Rp3/8   | 5,5     | 5,5     | 36      | 42      | 35,9 | 6        | 7,4  | 80       | 18   | 9           |
| VZBA-3/8"-GGG-63-32L-F0304-V4V4T   | 40   | 12,7    | Rp1/2   | 5,5     | 5,5     | 36      | 42      | 35,9 | 6        | 7,4  | 80       | 17,5 | 9           |
| VZBA-3/8"-GGG-63-32T-F0304-V4V4T   | 40   | 12,7    | Rp3/4   | 5,5     | 6,5     | 42      | 50      | 40,9 | 6        | 12,8 | 87,5     | 20   | 11          |
| VZBA-1/2"-GGG-63-32L-F0405-V4V4T   | 43,8 | 16      | Rp1     | 5,5     | 6,5     | 42      | 50      | 45,2 | 6        | 11,4 | 100      | 21   | 11          |
| VZBA-1/2"-GGG-63-32T-F0405-V4V4T   | 50   | 20      | Rp1 1/4 | 5,5     | 6,5     | 42      | 50      | 51   | 6        | 12,6 | 123      | 21   | 11          |
| VZBA-3/4"-GGG-63-32L-F0405-V4V4T   | 61,5 | 25,4    | Rp1 1/2 | 5,5     | 6,5     | 42      | 50      | 55,5 | 6        | 12,6 | 142,2    | 23   | 11          |
| VZBA-3/4"-GGG-63-32T-F0405-V4V4T   | 71,1 | 31,8    | Rp2     | 6,5     | 8,5     | 50      | 70      | 66   | 6        | 14,3 | 170,6    | 26   | 14          |
| VZBA-1"-GGG-63-32L-F0507-V4V4T     | 85,3 | 38,1    |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-1"-GGG-63-32T-F0507-V4V4T     |      |         |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-1 1/4"-GGG-63-32L-F0405-V4V4T |      |         |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-1 1/4"-GGG-63-32T-F0405-V4V4T |      |         |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-1 1/2"-GGG-63-32L-F0405-V4V4T |      |         |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-1 1/2"-GGG-63-32T-F0405-V4V4T |      |         |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-2"-GGG-63-32L-F0507-V4V4T     |      |         |         |         |         |         |         |      |          |      |          |      |             |
| VZBA-2"-GGG-63-32T-F0507-V4V4T     |      |         |         |         |         |         |         |      |          |      |          |      |             |

Dimensions

Dimensions – Hand lever VAOH, 3-way

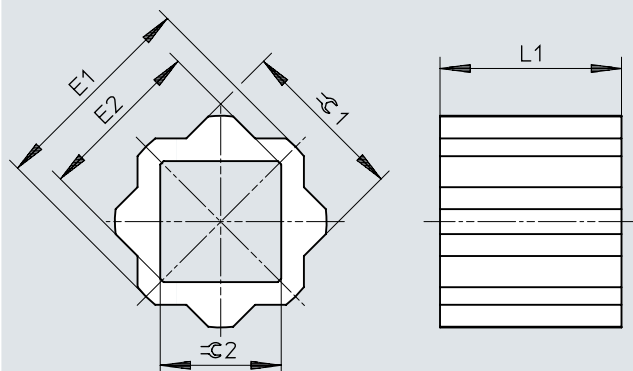
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|            |                   | B1 | H1 | L1  | $\varnothing 1$ |
|------------|-------------------|----|----|-----|-----------------|
|            |                   | ±5 | ±5 | ±10 | ±0,5            |
| VAOH-9-H9  | Rp1/4 ... Rp1/2   | 21 | 36 | 120 | 9               |
| VAOH-11-H9 | Rp3/4 ... Rp1 1/2 | 26 | 40 | 140 | 11              |
| VAOH-14-H9 | Rp2               | 31 | 46 | 180 | 14              |

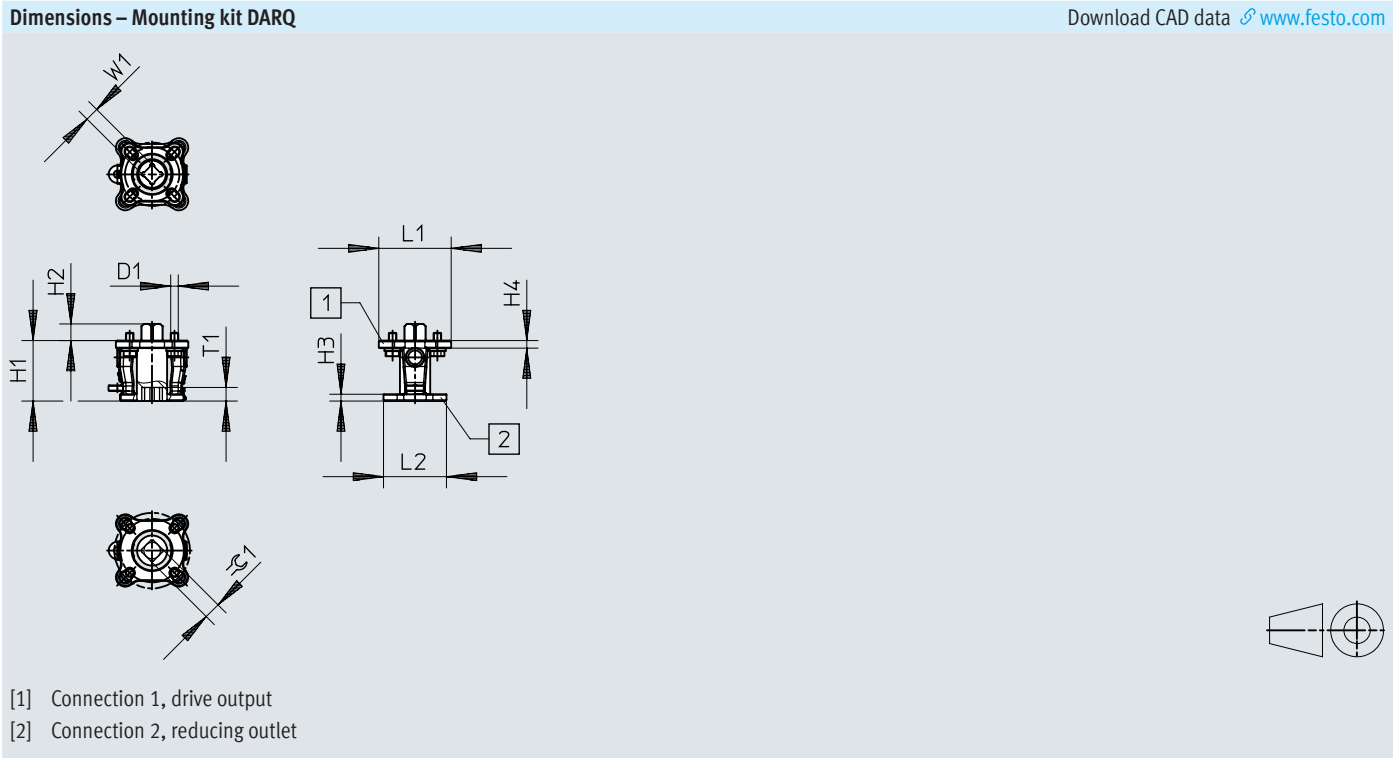
## Dimensions

## Dimensions – Reducing sleeve DARQ

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|                      | E1<br>+0,1/-0,3 | E2<br>+0,3/-0,1 | L1<br>$\pm 0,2$ | $\varnothing 1$<br>-0,02/-0,12 | $\varnothing 2$<br>+0,04/+0,18 |
|----------------------|-----------------|-----------------|-----------------|--------------------------------|--------------------------------|
| DARQ-R-A-S11-S8-...  | 14              | 11              | 12              | 11                             | 8                              |
| DARQ-R-A-S11-S9-...  | 14              | 12,3            | 11              | 11                             | 9                              |
| DARQ-R-A-S14-S8-...  | 18              | 11              | 16              | 14                             | 8                              |
| DARQ-R-A-S14-S9-...  | 18              | 12,3            | 16              | 14                             | 9                              |
| DARQ-R-A-S14-S10-... | 18              | 13,3            | 16              | 14                             | 10                             |
| DARQ-R-A-S14-S11-... | 18              | 14,3            | 16              | 14                             | 11                             |
| DARQ-R-A-S14-S12-... | 18              | 16,3            | 16              | 14                             | 12                             |
| DARQ-R-A-S17-S8-...  | 22              | 11              | 17              | 17                             | 8                              |
| DARQ-R-A-S17-S9-...  | 22              | 12,3            | 17              | 17                             | 9                              |
| DARQ-R-A-S17-S11-... | 22              | 14,3            | 17              | 17                             | 11                             |
| DARQ-R-A-S17-S12-... | 22              | 16,3            | 17              | 17                             | 12                             |
| DARQ-R-A-S17-S14-... | 22              | 18,3            | 17              | 17                             | 14                             |
| DARQ-R-A-S22-S11-... | 28              | 14,3            | 22              | 22                             | 11                             |
| DARQ-R-A-S22-S14-... | 28              | 18,3            | 22              | 22                             | 14                             |
| DARQ-R-A-S22-S16-... | 28              | 21,3            | 22              | 22                             | 16                             |
| DARQ-R-A-S22-S17-... | 28              | 22,3            | 22              | 22                             | 17                             |
| DARQ-R-A-S27-S14-... | 36              | 18,3            | 27              | 27                             | 14                             |
| DARQ-R-A-S27-S17-... | 36              | 22,3            | 27              | 27                             | 17                             |
| DARQ-R-A-S27-S22-... | 36              | 28,5            | 27              | 27                             | 22                             |
| DARQ-R-A-S36-S22-... | 48              | 28,5            | 36              | 36                             | 22                             |
| DARQ-R-A-S36-S27-... | 48              | 36,1            | 36              | 36                             | 27                             |
| DARQ-R-A-S46-S36-... | 59              | 48              | 46              | 46                             | 36                             |

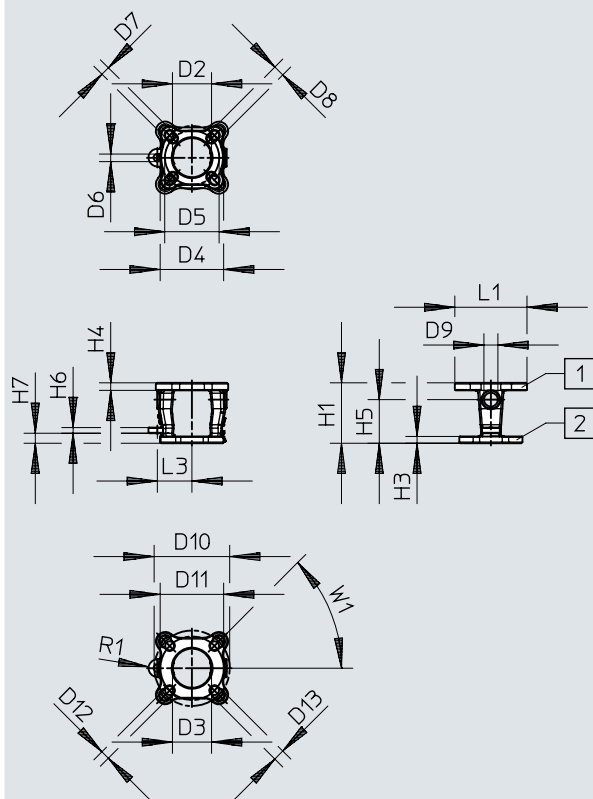
Dimensions



|                            | D1  | H1 | H2 | H3  | H4  | L1    | L2   | T1 | W1<br>H11 | ± 1<br>h11 |
|----------------------------|-----|----|----|-----|-----|-------|------|----|-----------|------------|
| DARQ-K-V-F04S11-F03S9-...  | M5  | 40 | 11 | 3,2 | 5   | 46    | 23   | 9  | 9         | 11         |
| DARQ-K-V-F05S14-F03S9-...  | M6  | 40 | 15 | 3,2 | 5   | 46    | 23   | 9  | 9         | 14         |
| DARQ-K-V-F05S14-F04S11-... | M6  | 40 | 15 | 3,2 | 5   | 46    | 23   | 11 | 11        | 14         |
| DARQ-K-V-F07S17-F04S11-... | M8  | 50 | 18 | 6   | 6   | 66    | 30,5 | 11 | 11        | 17         |
| DARQ-K-V-F07S17-F05S14-... | M8  | 50 | 18 | 6   | 6   | 66    | 30,5 | 15 | 14        | 17         |
| DARQ-K-V-F10S22-F05S14-... | M10 | 75 | 23 | 10  | 9,5 | 132,1 | 63   | 15 | 14        | 22         |
| DARQ-K-V-F10S22-F07S17-... | M10 | 75 | 23 | 10  | 9,5 | 132,1 | 63   | 18 | 17        | 22         |

## Dimensions

### Dimensions – Mounting flange adapter DARQ-B-...R1

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[1] Connection 1, drive output

[2] Connection 2, reducing outlet

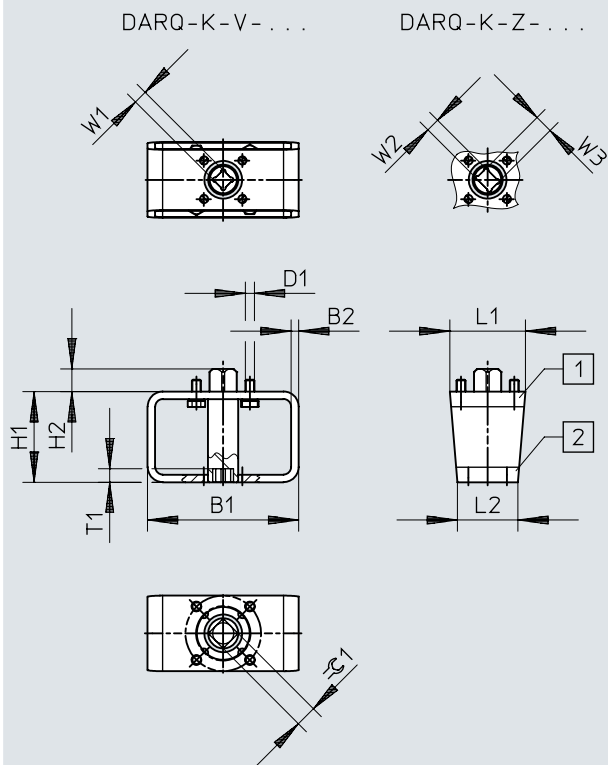
|                        | D2<br>ø | D3<br>ø | D4<br>ø | D5<br>ø | D6<br>ø | D7<br>ø | D8<br>ø | D9<br>ø | D10<br>ø | D11<br>ø |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|
| DARQ-B-F0405-F0304-... | 25,9    | 25,9    | 42      | 36      | 5,1     | 6,1     | 6,1     | 9,4     | 50       | 42       |
| DARQ-B-F0507-F0405-... | 30,5    | 36,8    | 50      | 42      | 5,1     | 7,6     | 6,6     | 10,9    | 70       | 50       |
| DARQ-B-F0710-F0507-... | 38,6    | 50      | 70      | 50      | 5,1     | 8,9     | 7,1     | 14      | 102      | 70       |
| DARQ-B-F1012-F10-...   | 69,9    | 76,2    | –       | 102     | 5,1     | –       | 11,2    | 17,3    | 125      | 102      |

|                        | D12<br>ø | D13<br>ø | H1   | H3  | H4  | H5   | H6  | H7  | L1    | L3   | W1  |
|------------------------|----------|----------|------|-----|-----|------|-----|-----|-------|------|-----|
| DARQ-B-F0405-F0304-... | 6,1      | 7,6      | 39,9 | 3,2 | 5   | 28,2 | 3,8 | 7,1 | 46    | 22,9 | 45° |
| DARQ-B-F0507-F0405-... | 7,6      | 10,2     | 50   | 6   | 6   | 36,3 | 3,8 | 7,1 | 66    | 30,5 | 45° |
| DARQ-B-F0710-F0507-... | 8,9      | 10,9     | 74,9 | 9,5 | 9,5 | 50,5 | 3,8 | 7,1 | 102,1 | 39,1 | 45° |
| DARQ-B-F1012-F10-...   | 11,2     | 13       | 80   | 10  | 9,5 | 58,4 | 3,8 | 7,1 | 132,1 | 63   | 45° |

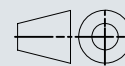
## Dimensions

### Dimensions – Mounting kit DARQ

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- [1] Connection 1, drive output
- [2] Connection 2, reducing outlet



## Dimensions

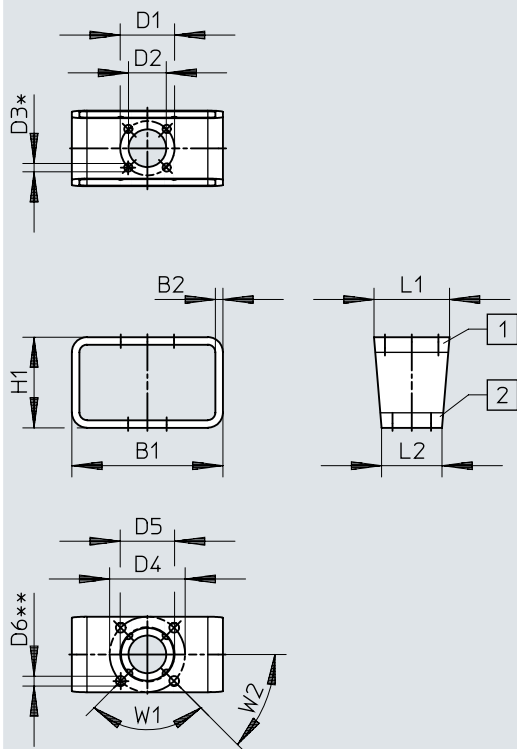
|                            | B1  | B2 | D1  | H1 | H2   | L1  | L2  | T1   | W1<br>H11 | ≈ 1<br>h11 |
|----------------------------|-----|----|-----|----|------|-----|-----|------|-----------|------------|
| DARQ-K-V-F03S9-F03S9-...   | 80  | 4  | M5  | 50 | 9    | 40  | 40  | 9    | 9         | 9          |
| DARQ-K-V-F04S11-F03S9-...  | 80  | 4  | M5  | 50 | 11   | 45  | 40  | 9    | 9         | 11         |
| DARQ-K-V-F04S11-F04S11-... | 80  | 4  | M5  | 50 | 11   | 45  | 45  | 11   | 11        | 11         |
| DARQ-K-V-F05S14-F03S9-...  | 100 | 5  | M6  | 60 | 15   | 50  | 40  | 9    | 9         | 14         |
| DARQ-K-V-F05S14-F04S11-... | 100 | 5  | M6  | 60 | 15   | 50  | 45  | 11   | 11        | 14         |
| DARQ-K-V-F05S14-F05S14-... | 100 | 5  | M6  | 60 | 15   | 50  | 50  | 15   | 14        | 14         |
| DARQ-K-V-F07S17-F03S9      | 100 | 5  | M8  | 60 | 18   | 70  | 45  | 9    | 9         | 17         |
| DARQ-K-V-F07S17-F04S11-... | 100 | 5  | M8  | 60 | 18   | 70  | 45  | 11   | 11        | 17         |
| DARQ-K-V-F07S17-F05S14-... | 100 | 5  | M8  | 60 | 18   | 70  | 50  | 15   | 14        | 17         |
| DARQ-K-V-F07S17-F07S14-... | 100 | 5  | M8  | 60 | 18   | 70  | 70  | 15   | 14        | 17         |
| DARQ-K-V-F07S22-F05S11-... | 100 | 5  | M8  | 60 | 23   | 70  | 50  | 11   | 11        | 22         |
| DARQ-K-V-F10S22-F04S11     | 120 | 5  | M10 | 80 | 22   | 95  | 50  | 11   | 11        | 22         |
| DARQ-K-V-F10S22-F05S14-... | 120 | 5  | M10 | 80 | 22,5 | 95  | 50  | 15   | 14        | 22         |
| DARQ-K-V-F10S22-F07S17-... | 120 | 5  | M10 | 80 | 22,5 | 95  | 70  | 18   | 17        | 22         |
| DARQ-K-V-F10S22-F10S22-... | 120 | 5  | M10 | 80 | 22,5 | 95  | 95  | 22,5 | 22        | 22         |
| DARQ-K-V-F10S27-F05S14-... | 120 | 5  | M10 | 80 | 27,5 | 95  | 50  | 15   | 14        | 27         |
| DARQ-K-V-F10S27-F07S14-... | 120 | 5  | M10 | 80 | 27,5 | 95  | 70  | 15   | 14        | 27         |
| DARQ-K-V-F10S27-F07S17-... | 120 | 5  | M10 | 80 | 27,5 | 95  | 70  | 18   | 17        | 27         |
| DARQ-K-V-F12S27-F05S14     | 160 | 6  | M12 | 80 | 27   | 115 | 70  | 15   | 14        | 27         |
| DARQ-K-V-F12S27-F07S14     | 160 | 6  | M12 | 80 | 27   | 115 | 70  | 15   | 14        | 27         |
| DARQ-K-V-F12S27-F07S17-... | 160 | 6  | M12 | 80 | 27   | 115 | 70  | 18   | 17        | 27         |
| DARQ-K-V-F12S27-F10S22-... | 160 | 6  | M12 | 80 | 27   | 115 | 95  | 22,5 | 22        | 27         |
| DARQ-K-V-F12S27-F12S27-... | 160 | 6  | M12 | 80 | 27   | 115 | 115 | 27,5 | 27        | 27         |

|                            | B1  | B2 | D1  | H1 | H2   | L1 | L2 | T1 | W2<br>-0,1 | W3<br>H11 | ≈ 1<br>h11 |
|----------------------------|-----|----|-----|----|------|----|----|----|------------|-----------|------------|
| DARQ-K-Z-F03S9-F03S9-...   | 80  | 4  | M5  | 50 | 9    | 40 | 40 | 14 | 9          | 12,1      | 9          |
| DARQ-K-Z-F04S11-F03S9-...  | 80  | 4  | M5  | 50 | 11   | 45 | 40 | 14 | 9          | 12,1      | 11         |
| DARQ-K-Z-F04S11-F04S11-... | 80  | 4  | M5  | 50 | 11   | 45 | 45 | 17 | 11         | 14,1      | 11         |
| DARQ-K-Z-F05S14-F03S9-...  | 100 | 5  | M6  | 60 | 15   | 50 | 40 | 14 | 9          | 12,1      | 14         |
| DARQ-K-Z-F05S14-F04S11-... | 100 | 5  | M6  | 60 | 15   | 50 | 45 | 17 | 11         | 14,1      | 14         |
| DARQ-K-Z-F05S14-F05S14-... | 100 | 5  | M6  | 60 | 15   | 50 | 50 | 21 | 14         | 18,1      | 14         |
| DARQ-K-Z-F07S17-F04S11-... | 100 | 5  | M8  | 60 | 18   | 70 | 45 | 17 | 11         | 14,1      | 17         |
| DARQ-K-Z-F07S17-F05S14-... | 100 | 5  | M8  | 60 | 18   | 70 | 50 | 21 | 14         | 18,1      | 17         |
| DARQ-K-Z-F07S17-F07S14-... | 100 | 5  | M8  | 60 | 18   | 70 | 70 | 21 | 14         | 18,1      | 17         |
| DARQ-K-Z-F10S22-F05S14-... | 120 | 5  | M10 | 80 | 22,5 | 95 | 50 | 21 | 14         | 18,1      | 22         |
| DARQ-K-Z-F10S22-F07S17-... | 120 | 5  | M10 | 80 | 22,5 | 95 | 70 | 26 | 17         | 22,2      | 22         |
| DARQ-K-Z-F10S22-F10S22-... | 120 | 5  | M10 | 80 | 22,5 | 95 | 95 | 33 | 22         | 28,2      | 22         |

## Dimensions

### Dimensions – Mounting adapter DARQ

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- [1] Drive outlet flange 1
- [2] Reducing outlet flange 2
- [3] \* = N1 (number of holes flange 1)
- [4] \*\* = N2 (number of holes flange 2)

## Dimensions

|                    | B1  | B2 | D1<br>Ø | D2<br>Ø | D3<br>Ø | D4<br>Ø | D5<br>Ø | D6<br>Ø | H1  | L1  | L2  | *N1 | **N2 | W1  | W2    |
|--------------------|-----|----|---------|---------|---------|---------|---------|---------|-----|-----|-----|-----|------|-----|-------|
| DARQ-B-F03-F03-... | 80  | 4  | 36      | 25      | 5,5     | 36      | 25      | 5,5     | 50  | 40  | 40  | 4   | 4    | 90° | 45°   |
| DARQ-B-F04-F03-... | 80  | 4  | 36      | 25      | 5,5     | 42      | 30      | 5,5     | 50  | 45  | 40  | 4   | 4    | 90° | 45°   |
| DARQ-B-F04-F04-... | 80  | 4  | 42      | 30      | 5,5     | 42      | 30      | 5,5     | 50  | 45  | 45  | 4   | 4    | 90° | 45°   |
| DARQ-B-F05-F03-... | 100 | 5  | 36      | 25      | 5,5     | 50      | 35      | 6,5     | 60  | 50  | 40  | 4   | 4    | 90° | 45°   |
| DARQ-B-F05-F04-... | 100 | 5  | 42      | 30      | 5,5     | 50      | 35      | 6,5     | 60  | 50  | 45  | 4   | 4    | 90° | 45°   |
| DARQ-B-F05-F05-... | 100 | 5  | 50      | 35      | 6,5     | 50      | 35      | 6,5     | 60  | 50  | 50  | 4   | 4    | 90° | 45°   |
| DARQ-B-F07-F04-... | 100 | 5  | 42      | 30      | 5,5     | 70      | 55      | 9       | 60  | 70  | 45  | 4   | 4    | 90° | 45°   |
| DARQ-B-F07-F05-... | 100 | 5  | 50      | 35      | 6,5     | 70      | 55      | 9       | 60  | 70  | 50  | 4   | 4    | 90° | 45°   |
| DARQ-B-F07-F07-... | 100 | 5  | 70      | 55      | 9       | 70      | 55      | 9       | 60  | 70  | 70  | 4   | 4    | 90° | 45°   |
| DARQ-B-F10-F05-... | 120 | 5  | 50      | 35      | 6,5     | 102     | 70      | 11      | 80  | 95  | 50  | 4   | 4    | 90° | 45°   |
| DARQ-B-F10-F07-... | 120 | 5  | 70      | 55      | 9       | 102     | 70      | 11      | 80  | 95  | 70  | 4   | 4    | 90° | 45°   |
| DARQ-B-F12-F10-... | 120 | 5  | 102     | 70      | 11      | 102     | 70      | 11      | 80  | 95  | 95  | 4   | 4    | 90° | 45°   |
| DARQ-B-F12-F07-... | 160 | 6  | 70      | 55      | 9       | 125     | 85      | 13      | 80  | 115 | 70  | 4   | 4    | 90° | 45°   |
| DARQ-B-F12-F10-... | 160 | 6  | 102     | 70      | 11      | 125     | 85      | 13      | 80  | 115 | 95  | 4   | 4    | 90° | 45°   |
| DARQ-B-F12-F12-... | 160 | 6  | 125     | 85      | 13      | 125     | 85      | 13      | 80  | 115 | 115 | 4   | 4    | 90° | 45°   |
|                    |     |    |         |         |         |         |         |         |     |     |     |     |      |     |       |
|                    | B1  | B2 | D1<br>Ø | D2<br>Ø | D3<br>Ø | D4<br>Ø | D5<br>Ø | D6<br>Ø | H1  | L1  | L2  | *N1 | **N2 | W1  | W2    |
| DARQ-B-F14-F10-... | 160 | 6  | 102     | 70      | 11      | 140     | 100     | 17      | 80  | 135 | 95  | 4   | 4    | 90° | 45°   |
| DARQ-B-F14-F12-... | 160 | 6  | 125     | 85      | 13      | 140     | 100     | 17      | 80  | 135 | 115 | 4   | 4    | 90° | 45°   |
| DARQ-B-F14-F14-... | 160 | 6  | 140     | 100     | 17      | 140     | 100     | 17      | 80  | 135 | 135 | 4   | 4    | 90° | 45°   |
| DARQ-B-F16-F12-... | 200 | 6  | 125     | 85      | 13      | 165     | 130     | 21      | 100 | 160 | 115 | 4   | 4    | 90° | 45°   |
| DARQ-B-F16-F14-... | 200 | 6  | 140     | 100     | 17      | 165     | 130     | 21      | 100 | 160 | 135 | 4   | 4    | 90° | 45°   |
| DARQ-B-F16-F16-... | 200 | 6  | 165     | 130     | 21      | 165     | 130     | 21      | 100 | 160 | 160 | 4   | 4    | 90° | 45°   |
| DARQ-B-F25-F14-... | 400 | 10 | 140     | 100     | 17      | 254     | 200     | 17      | 200 | 270 | 135 | 8   | 4    | 45° | 22,5° |
| DARQ-B-F25-F16-... | 400 | 10 | 165     | 130     | 21      | 254     | 200     | 17      | 200 | 270 | 160 | 8   | 4    | 45° | 22,5° |
| DARQ-B-F25-F25-... | 400 | 10 | 254     | 200     | 17      | 254     | 200     | 17      | 200 | 270 | 270 | 8   | 4    | 45° | 22,5° |
| DARQ-B-F30-F16-... | 400 | 10 | 165     | 130     | 21      | 298     | 230     | 21      | 200 | 320 | 160 | 8   | 4    | 45° | 22,5° |
| DARQ-B-F30-F25-... | 400 | 10 | 254     | 200     | 17      | 298     | 230     | 21      | 200 | 320 | 270 | 8   | 4    | 45° | 22,5° |
| DARQ-B-F30-F30-... | 400 | 10 | 298     | 200     | 21      | 298     | 230     | 21      | 200 | 320 | 320 | 8   | 4    | 45° | 22,5° |

## Ordering data

| Process valve with pipe thread                                                    |                          |                |          |                                    |
|-----------------------------------------------------------------------------------|--------------------------|----------------|----------|------------------------------------|
|                                                                                   | Connection Process valve | Product weight | Part no. | Type                               |
|  | Rp1/4                    | 650 g          | 1686625  | VZBA-1/4"-GG-63-T-22-F0304-V4V4T   |
|                                                                                   | Rp3/8                    |                | 1686632  | VZBA-3/8"-GG-63-T-22-F0304-V4V4T   |
|                                                                                   | Rp1/2                    |                | 1686636  | VZBA-1/2"-GG-63-T-22-F0304-V4V4T   |
|                                                                                   | Rp3/4                    | 850 g          | 1686639  | VZBA-3/4"-GG-63-T-22-F0304-V4V4T   |
|                                                                                   | Rp1                      | 1,250 g        | 1686640  | VZBA-1"-GG-63-T-22-F0405-V4V4T     |
|                                                                                   | Rp1 1/2                  | 2,800 g        | 1686643  | VZBA-1 1/2"-GG-63-T-22-F0507-V4V4T |
|                                                                                   | Rp1 1/4                  | 1,850 g        | 1686641  | VZBA-1 1/4"-GG-63-T-22-F0405-V4V4T |
|                                                                                   | Rp2                      | 4,550 g        | 1686646  | VZBA-2"-GG-63-T-22-F0507-V4V4T     |
|                                                                                   | Rp2 1/2                  | 9,200 g        | 1686648  | VZBA-2 1/2"-GG-63-T-22-F0710-V4V4T |
|                                                                                   | Rp3                      | 13,950 g       | 1686651  | VZBA-3"-GG-63-T-22-F0710-V4V4T     |
|                                                                                   | Rp4                      | 22,300 g       | 1686654  | VZBA-4"-GG-63-T-22-F10-V4V4T       |

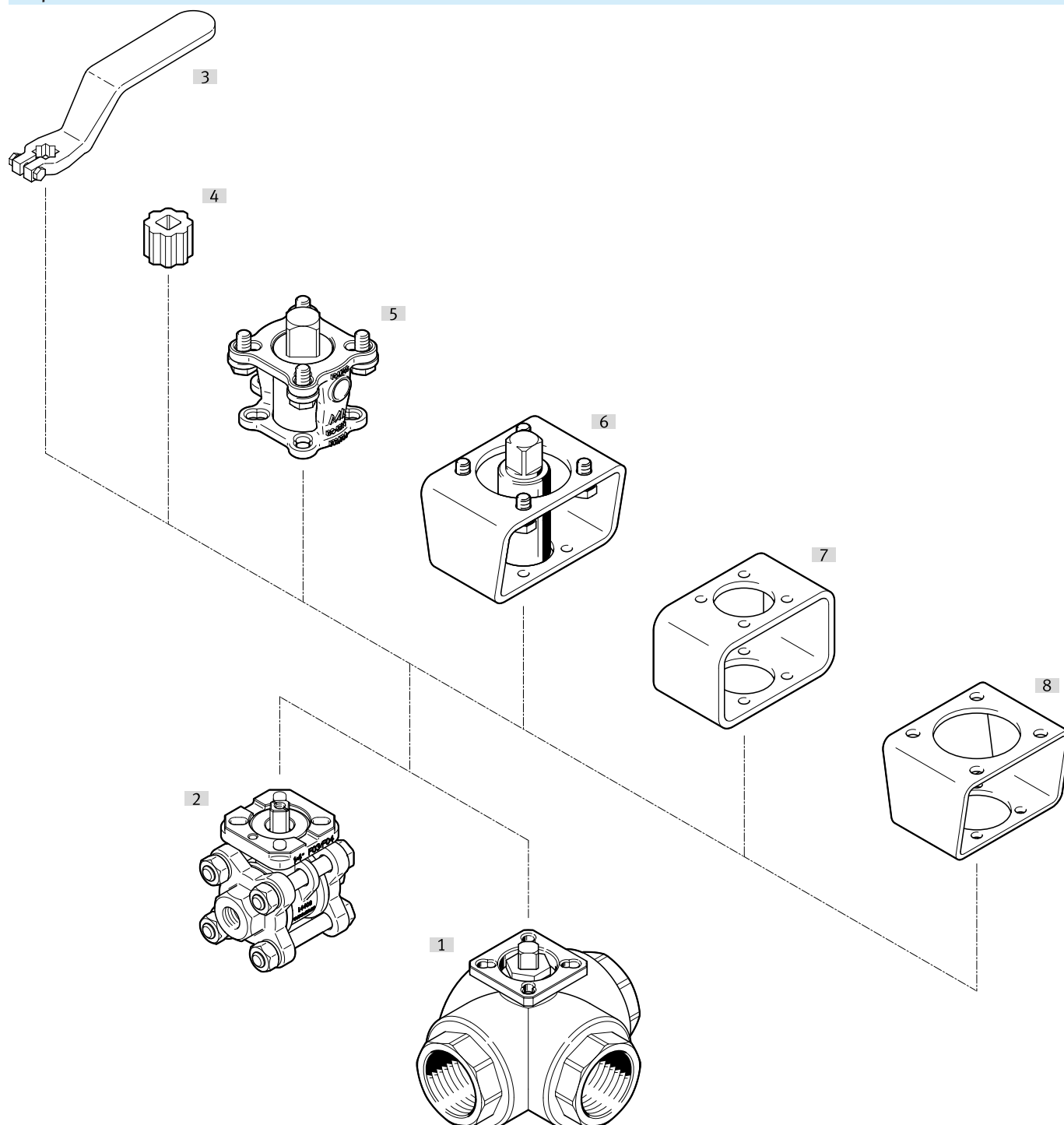
| Process valve with welding ends                                                  |                           |                |          |                                    |
|----------------------------------------------------------------------------------|---------------------------|----------------|----------|------------------------------------|
|                                                                                  | Connection Process valve  | Product weight | Part no. | Type                               |
|  | Weld-on ends/weld-on ends | 650 g          | 1686656  | VZBA-1/4"-WW-63-T-22-F0304-V4V4T   |
|                                                                                  |                           |                | 1686662  | VZBA-3/8"-WW-63-T-22-F0304-V4V4T   |
|                                                                                  |                           |                | 1686663  | VZBA-1/2"-WW-63-T-22-F0304-V4V4T   |
|                                                                                  |                           | 850 g          | 1686665  | VZBA-3/4"-WW-63-T-22-F0304-V4V4T   |
|                                                                                  |                           |                | 1686689  | VZBA-1"-WW-63-T-22-F0405-V4V4T     |
|                                                                                  |                           |                | 1686696  | VZBA-1 1/4"-WW-63-T-22-F0405-V4V4T |
|                                                                                  |                           |                | 1686697  | VZBA-1 1/2"-WW-63-T-22-F0507-V4V4T |
|                                                                                  |                           |                | 1686699  | VZBA-2"-WW-63-T-22-F0507-V4V4T     |
|                                                                                  |                           |                | 1686702  | VZBA-2 1/2"-WW-63-T-22-F0710-V4V4T |
|                                                                                  |                           |                | 1686704  | VZBA-3"-WW-63-T-22-F0710-V4V4T     |
|                                                                                  |                           | 22,300 g       | 1686705  | VZBA-4"-WW-63-T-22-F10-V4V4T       |

| Process valve with pipe thread, L-shaped drilled hole                              |                          |                |          |                                    |
|------------------------------------------------------------------------------------|--------------------------|----------------|----------|------------------------------------|
|                                                                                    | Connection Process valve | Product weight | Part no. | Type                               |
|  | Rp1/4                    | 700 g          | 1692210  | VZBA-1/4"-GGG-63-32L-F0304-V4V4T   |
|                                                                                    | Rp3/8                    |                | 1692211  | VZBA-3/8"-GGG-63-32L-F0304-V4V4T   |
|                                                                                    | Rp1/2                    |                | 1692212  | VZBA-1/2"-GGG-63-32L-F0304-V4V4T   |
|                                                                                    | Rp3/4                    | 1,000 g        | 1692214  | VZBA-3/4"-GGG-63-32L-F0405-V4V4T   |
|                                                                                    | Rp1                      | 1,600 g        | 1692215  | VZBA-1"-GGG-63-32L-F0405-V4V4T     |
|                                                                                    | Rp1 1/2                  | 3,800 g        | 1692218  | VZBA-1 1/2"-GGG-63-32L-F0405-V4V4T |
|                                                                                    | Rp1 1/4                  | 2,800 g        | 1692217  | VZBA-1 1/4"-GGG-63-32L-F0405-V4V4T |
|                                                                                    | Rp2                      | 7,400 g        | 1692219  | VZBA-2"-GGG-63-32L-F0507-V4V4T     |

| Process valve with pipe thread, T-shaped drilled hole                              |                          |                |          |                                    |
|------------------------------------------------------------------------------------|--------------------------|----------------|----------|------------------------------------|
|                                                                                    | Connection Process valve | Product weight | Part no. | Type                               |
|  | Rp1/4                    | 700 g          | 1692220  | VZBA-1/4"-GGG-63-32T-F0304-V4V4T   |
|                                                                                    | Rp3/8                    |                | 1692221  | VZBA-3/8"-GGG-63-32T-F0304-V4V4T   |
|                                                                                    | Rp1/2                    |                | 1692224  | VZBA-1/2"-GGG-63-32T-F0304-V4V4T   |
|                                                                                    | Rp3/4                    | 1,000 g        | 1692226  | VZBA-3/4"-GGG-63-32T-F0405-V4V4T   |
|                                                                                    | Rp1                      | 1,600 g        | 1692227  | VZBA-1"-GGG-63-32T-F0405-V4V4T     |
|                                                                                    | Rp1 1/2                  | 3,800 g        | 1692229  | VZBA-1 1/2"-GGG-63-32T-F0405-V4V4T |
|                                                                                    | Rp1 1/4                  | 2,800 g        | 1692228  | VZBA-1 1/4"-GGG-63-32T-F0405-V4V4T |
|                                                                                    | Rp2                      | 7,400 g        | 1692230  | VZBA-2"-GGG-63-32T-F0507-V4V4T     |

## Peripherals

### Peripherals overview

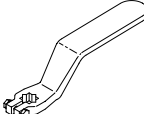


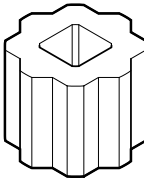
| Accessories                      |                                                                                                                                                    |  | → Link               |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------|
| Type/order code                  | Description                                                                                                                                        |  |                      |
| [1] Ball valve VZBA              | Ball valve, 3-way, brass, L-bore or T-bore design                                                                                                  |  | <a href="#">vzba</a> |
| [2] Ball valve VZBA              | Ball valve, 2-way, brass                                                                                                                           |  | <a href="#">vzba</a> |
| [3] Hand lever VAOH              | High-alloy stainless steel                                                                                                                         |  | 21                   |
| [4] Reducing sleeve DARQ         | <ul style="list-style-type: none"> <li>• Connection 1, drive outlet function</li> <li>• Connection 2, reducing outlet function</li> </ul>          |  | 21                   |
| [5] Mounting kit DARQ            | <ul style="list-style-type: none"> <li>• Connection 1, drive outlet function</li> <li>• Connection 2, reducing outlet function</li> </ul>          |  | 22                   |
| [6] Mounting kit DARQ-K...R13    | <ul style="list-style-type: none"> <li>• DARQ-K-V... (female square and male square)</li> <li>• DARQ-K-V... (two-flats and male square)</li> </ul> |  | 23                   |
| [7] Mounting flange adapter DARQ | Drive outlet function                                                                                                                              |  | 23                   |

Peripherals

| Accessories                      |                         | → Link             |
|----------------------------------|-------------------------|--------------------|
| Type/order code                  | Description             |                    |
| [8] Mounting flange adapter DARQ | Reducing outletfunction | <a href="#">23</a> |

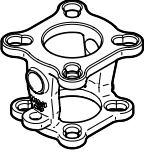
## Accessories

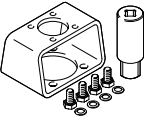
| Hand lever VAOH                                                                   |                              |                |          |            |
|-----------------------------------------------------------------------------------|------------------------------|----------------|----------|------------|
|                                                                                   | Description                  | Product weight | Part no. | Type       |
|  | For connection Rp1/4...Rp3/4 | 100 g          | 542702   | VAOH-9-H9  |
|                                                                                   | For connection Rp1...Rp1 1/4 | 200 g          | 542703   | VAOH-11-H9 |
|                                                                                   | For connection Rp1 1/2...2   | 300 g          | 542704   | VAOH-14-H9 |
|                                                                                   | For connection Rp2 1/2...Rp3 | 450 g          | 542705   | VAOH-17-H9 |
|                                                                                   | For connection Rp4           | 750 g          | 542706   | VAOH-22-H9 |

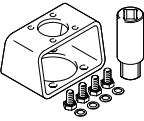
| Reducing sleeve DARQ                                                              |        |          |                         |
|-----------------------------------------------------------------------------------|--------|----------|-------------------------|
|                                                                                   | Length | Part no. | Type                    |
|  | 11 mm  | 8082140  | DARQ-R-A-S11-S9-11-P10  |
|                                                                                   |        | 8082131  | DARQ-R-A-S11-S9-11-P5   |
|                                                                                   |        | 8082117  | DARQ-R-A-S11-S9-11      |
|                                                                                   |        | 8082145  | DARQ-R-A-S11-S9-11-P50  |
|                                                                                   | 12 mm  | 8082130  | DARQ-R-A-S11-S8-12-P5   |
|                                                                                   |        | 8082116  | DARQ-R-A-S11-S8-12      |
|                                                                                   | 16 mm  | 8086383  | DARQ-R-A-S14-S8-16      |
|                                                                                   |        | 8082120  | DARQ-R-A-S14-S11-16     |
|                                                                                   |        | 8082121  | DARQ-R-A-S14-S12-16     |
|                                                                                   |        | 8082147  | DARQ-R-A-S14-S11-16-P50 |
|                                                                                   |        | 8082142  | DARQ-R-A-S14-S11-16-P10 |
|                                                                                   |        | 8082132  | DARQ-R-A-S14-S9-16-P5   |
|                                                                                   |        | 8082133  | DARQ-R-A-S14-S11-16-P5  |
|                                                                                   |        | 8086388  | DARQ-R-A-S14-S8-16-P5   |
|                                                                                   |        | 8082118  | DARQ-R-A-S14-S9-16      |
|                                                                                   |        | 8082146  | DARQ-R-A-S14-S9-16-P50  |
|                                                                                   |        | 8082141  | DARQ-R-A-S14-S9-16-P10  |
|                                                                                   |        | 8082119  | DARQ-R-A-S14-S10-16     |
|                                                                                   | 17 mm  | 8086384  | DARQ-R-A-S17-S8-17      |
|                                                                                   |        | 8086385  | DARQ-R-A-S17-S12-17     |
|                                                                                   |        | 8082122  | DARQ-R-A-S17-S11-17     |
|                                                                                   |        | 8082148  | DARQ-R-A-S17-S11-17-P50 |
|                                                                                   |        | 8096914  | DARQ-R-A-S17-S9-17      |
|                                                                                   |        | 8082134  | DARQ-R-A-S17-S11-17-P5  |
|                                                                                   |        | 8082135  | DARQ-R-A-S17-S14-17-P5  |
|                                                                                   |        | 8082143  | DARQ-R-A-S17-S14-17-P10 |
|                                                                                   |        | 8086389  | DARQ-R-A-S17-S12-17-P5  |
|                                                                                   |        | 8082123  | DARQ-R-A-S17-S14-17     |
|                                                                                   | 22 mm  | 8086386  | DARQ-R-A-S22-S11-22     |
|                                                                                   |        | 8082149  | DARQ-R-A-S22-S17-22-P50 |
|                                                                                   |        | 8082144  | DARQ-R-A-S22-S17-22-P10 |
|                                                                                   |        | 8082126  | DARQ-R-A-S22-S17-22     |
|                                                                                   |        | 8082125  | DARQ-R-A-S22-S16-22     |
|                                                                                   |        | 8082136  | DARQ-R-A-S22-S14-22-P5  |
|                                                                                   |        | 8082137  | DARQ-R-A-S22-S17-22-P5  |
|                                                                                   | 27 mm  | 8082124  | DARQ-R-A-S22-S14-22     |
|                                                                                   |        | 8082127  | DARQ-R-A-S27-S22-27     |
|                                                                                   |        | 8082138  | DARQ-R-A-S27-S22-27-P5  |
|                                                                                   | 36 mm  | 8086387  | DARQ-R-A-S27-S17-27     |
|                                                                                   |        | 8082139  | DARQ-R-A-S36-S27-36-P5  |
|                                                                                   |        | 8082128  | DARQ-R-A-S36-S27-36     |
|                                                                                   |        | 8096913  | DARQ-R-A-S27-S14-27     |
|                                                                                   |        | 8096915  | DARQ-R-A-S36-S22-36     |
|                                                                                   | 46 mm  | 8082129  | DARQ-R-A-S46-S36-46     |

## Accessories

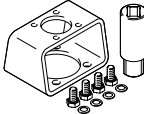
| Mounting kit DARQ                                                                |                |          |                           |
|----------------------------------------------------------------------------------|----------------|----------|---------------------------|
|                                                                                  | Product weight | Part no. | Type                      |
|  | 232 g          | 8088299  | DARQ-K-V-F04S11-F03S9-R1  |
|                                                                                  | 255 g          | 8088301  | DARQ-K-V-F05S14-F03S9-R1  |
|                                                                                  | 342 g          | 8088297  | DARQ-K-V-F05S14-F04S11-R1 |
|                                                                                  | 563 g          | 8088302  | DARQ-K-V-F07S17-F04S11-R1 |
|                                                                                  | 771 g          | 8088303  | DARQ-K-V-F07S17-F05S14-R1 |
|                                                                                  | 1,515 g        | 8088300  | DARQ-K-V-F10S22-F05S14-R1 |
|                                                                                  | 2,010 g        | 8088298  | DARQ-K-V-F10S22-F07S17-R1 |

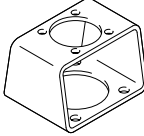
| Mounting flange adapter DARQ                                                     |                |          |                       |
|----------------------------------------------------------------------------------|----------------|----------|-----------------------|
|                                                                                  | Product weight | Part no. | Type                  |
|  | 120 g          | 8087462  | DARQ-B-F0405-F0304-R1 |
|                                                                                  | 300 g          | 8087463  | DARQ-B-F0507-F0405-R1 |
|                                                                                  | 950 g          | 8087464  | DARQ-B-F1012-F10-R1   |
|                                                                                  | 1,610 g        | 8087465  | DARQ-B-F0710-F0507-R1 |

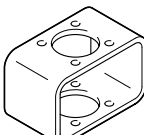
| Mounting kit DARQ-K-V-...R13                                                      |                |          |                            |
|-----------------------------------------------------------------------------------|----------------|----------|----------------------------|
|                                                                                   | Product weight | Part no. | Type                       |
|  | 392 g          | 8084186  | DARQ-K-V-F03S9-F03S9-R13   |
|                                                                                   | 410 g          | 8084187  | DARQ-K-V-F04S11-F03S9-R13  |
|                                                                                   | 480 g          | 8084188  | DARQ-K-V-F04S11-F04S11-R13 |
|                                                                                   | 630 g          | 8084189  | DARQ-K-V-F05S14-F03S9-R13  |
|                                                                                   | 725 g          | 8084190  | DARQ-K-V-F05S14-F04S11-R13 |
|                                                                                   | 823 g          | 8084192  | DARQ-K-V-F07S17-F04S11-R13 |
|                                                                                   | 830 g          | 8084191  | DARQ-K-V-F05S14-F05S14-R13 |
|                                                                                   | 866 g          | 8132814  | DARQ-K-V-F07S17-F03S9-R13  |
|                                                                                   | 926 g          | 8084193  | DARQ-K-V-F07S17-F05S14-R13 |
|                                                                                   | 980 g          | 8084194  | DARQ-K-V-F07S17-F07S14-R13 |
|                                                                                   | 986 g          | 8084195  | DARQ-K-V-F07S22-F05S11-R13 |
|                                                                                   | 1,410 g        | 8133487  | DARQ-K-V-F10S22-F04S11-R13 |
|                                                                                   | 1,432 g        | 8084196  | DARQ-K-V-F10S22-F05S14-R13 |
|                                                                                   | 1,935 g        | 8084199  | DARQ-K-V-F10S27-F05S14-R13 |
|                                                                                   | 2,045 g        | 8084197  | DARQ-K-V-F10S22-F07S17-R13 |
|                                                                                   | 2,113 g        | 8084198  | DARQ-K-V-F10S22-F10S22-R13 |
|                                                                                   | 2,116 g        | 8084200  | DARQ-K-V-F10S27-F07S17-R13 |
|                                                                                   | 2,134 g        | 8086439  | DARQ-K-V-F10S27-F07S14-R13 |
|                                                                                   | 2,615 g        | 8084201  | DARQ-K-V-F12S27-F07S17-R13 |
|                                                                                   | 2,655 g        | 8131545  | DARQ-K-V-F12S27-F07S14-R13 |
|                                                                                   | 2,728 g        | 8133486  | DARQ-K-V-F12S27-F05S14-R13 |
|                                                                                   | 2,753 g        | 8084202  | DARQ-K-V-F12S27-F10S22-R13 |
|                                                                                   | 3,552 g        | 8084203  | DARQ-K-V-F12S27-F12S27-R13 |

| Mounting kit DARQ-K-Z-...R13                                                       |                |          |                            |
|------------------------------------------------------------------------------------|----------------|----------|----------------------------|
|                                                                                    | Product weight | Part no. | Type                       |
|  | 385 g          | 8085017  | DARQ-K-Z-F03S9-F03S9-R13   |
|                                                                                    | 400 g          | 8085016  | DARQ-K-Z-F04S11-F03S9-R13  |
|                                                                                    | 465 g          | 8085018  | DARQ-K-Z-F04S11-F04S11-R13 |
|                                                                                    | 620 g          | 8085019  | DARQ-K-Z-F05S14-F03S9-R13  |
|                                                                                    | 710 g          | 8085020  | DARQ-K-Z-F05S14-F04S11-R13 |
|                                                                                    | 795 g          | 8085021  | DARQ-K-Z-F05S14-F05S14-R13 |
|                                                                                    | 810 g          | 8085022  | DARQ-K-Z-F07S17-F04S11-R13 |
|                                                                                    | 890 g          | 8085023  | DARQ-K-Z-F07S17-F05S14-R13 |
|                                                                                    | 945 g          | 8085024  | DARQ-K-Z-F07S17-F07S14-R13 |

## Accessories

| Mounting kit DARQ-K-Z-...R13                                                      |                |          |                            |
|-----------------------------------------------------------------------------------|----------------|----------|----------------------------|
|                                                                                   | Product weight | Part no. | Type                       |
|  | 1,396 g        | 8085026  | DARQ-K-Z-F10S22-F05S14-R13 |
|                                                                                   | 1,970 g        | 8085027  | DARQ-K-Z-F10S22-F07S17-R13 |
|                                                                                   | 1,980 g        | 8085025  | DARQ-K-Z-F10S22-F10S22-R13 |

| Mounting flange adapter DARQ, function drive outlet                               |                |          |                       |
|-----------------------------------------------------------------------------------|----------------|----------|-----------------------|
|                                                                                   | Product weight | Part no. | Type                  |
|  | 270 g          | 8082978  | DARQ-B-F04-F03-R13    |
|                                                                                   | 442 g          | 8082980  | DARQ-B-F05-F03-R13    |
|                                                                                   | 461 g          | 8082981  | DARQ-B-F05-F04-R13    |
|                                                                                   | 514 g          | 8082983  | DARQ-B-F07-F04-R13    |
|                                                                                   | 530 g          | 8082984  | DARQ-B-F07-F05-R13    |
|                                                                                   | 836 g          | 8082986  | DARQ-B-F10-F05-R13    |
|                                                                                   | 920 g          | 8082987  | DARQ-B-F10-F07-R13    |
|                                                                                   | 1,504 g        | 8082989  | DARQ-B-F12-F07-R13    |
|                                                                                   | 1,688 g        | 8082990  | DARQ-B-F12-F10-R13    |
|                                                                                   | 1,775 g        | 8082992  | DARQ-B-F14-F10-R13    |
|                                                                                   | 1,889 g        | 8082993  | DARQ-B-F14-F12-R13    |
|                                                                                   | 2,305 g        | 8083005  | DARQ-B-F05-F04-R13-P5 |
|                                                                                   | 2,648 g        | 8082995  | DARQ-B-F16-F12-R13    |
|                                                                                   | 2,650 g        | 8083007  | DARQ-B-F07-F05-R13-P5 |
|                                                                                   | 2,792 g        | 8082996  | DARQ-B-F16-F14-R13    |
|                                                                                   | 4,600 g        | 8083009  | DARQ-B-F10-F07-R13-P5 |
|                                                                                   | 14,734 g       | 8082998  | DARQ-B-F25-F14-R13    |
|                                                                                   | 15,384 g       | 8082999  | DARQ-B-F25-F16-R13    |
|                                                                                   | 16,740 g       | 8083001  | DARQ-B-F30-F16-R13    |
|                                                                                   | 20,250 g       | 8083002  | DARQ-B-F30-F25-R13    |

| Mounting flange adapter DARQ, function reducing outlet                              |                |          |                       |
|-------------------------------------------------------------------------------------|----------------|----------|-----------------------|
|                                                                                     | Product weight | Part no. | Type                  |
|  | 260 g          | 8082977  | DARQ-B-F03-F03-R13    |
|                                                                                     | 275 g          | 8082979  | DARQ-B-F04-F04-R13    |
|                                                                                     | 478 g          | 8082982  | DARQ-B-F05-F05-R13    |
|                                                                                     | 583 g          | 8082985  | DARQ-B-F07-F07-R13    |
|                                                                                     | 1,037 g        | 8082988  | DARQ-B-F10-F10-R13    |
|                                                                                     | 1,375 g        | 8083004  | DARQ-B-F04-F04-R13-P5 |
|                                                                                     | 1,802 g        | 8082991  | DARQ-B-F12-F12-R13    |
|                                                                                     | 1,976 g        | 8082994  | DARQ-B-F14-F14-R13    |
|                                                                                     | 2,390 g        | 8083006  | DARQ-B-F05-F05-R13-P5 |
|                                                                                     | 2,844 g        | 8082997  | DARQ-B-F16-F16-R13    |
|                                                                                     | 2,915 g        | 8083008  | DARQ-B-F07-F07-R13-P5 |
|                                                                                     | 5,185 g        | 8083010  | DARQ-B-F10-F10-R13-P5 |
|                                                                                     | 18,895 g       | 8083000  | DARQ-B-F25-F25-R13    |
|                                                                                     | 21,644 g       | 8083003  | DARQ-B-F30-F30-R13    |