



Manual flanged connection ball valves in stainless steel, automation ready

- Two piece body configuration
- Blow-out proof stem design
- Body & end caps quality investment casting
- ISO pad standard for direct actuator mount
- Fire Safe API607-5th Edition optional

Flanged Type 2654 can be combined with...



Rack & pinion

Rilsan coated pneumatic actuator



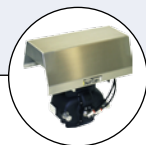
Type 3005

Electric actuator for quarter turn



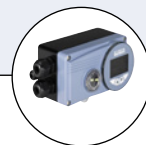
Type 2050

Vertical pneumatic actuator



Vane actuator & protective hood

For field deployment



Type 8792 Digital Positioner

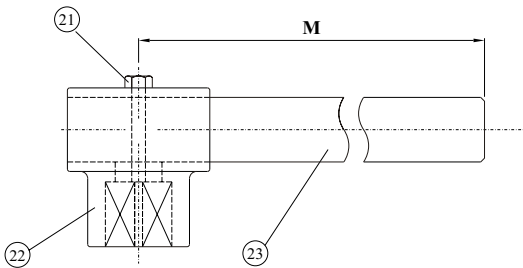
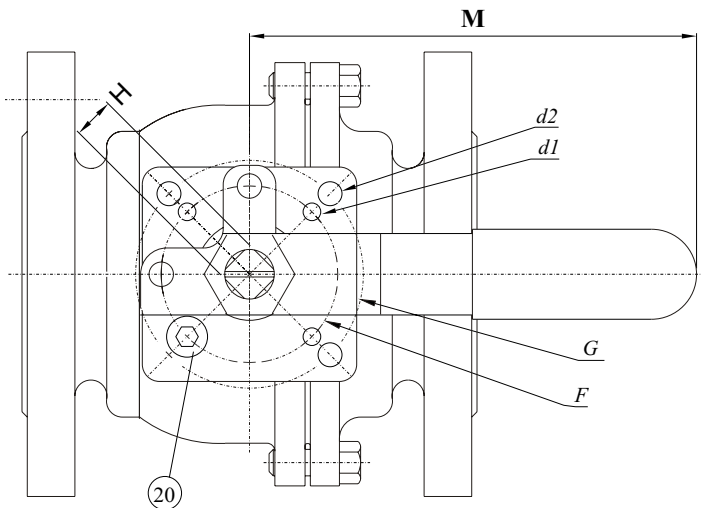
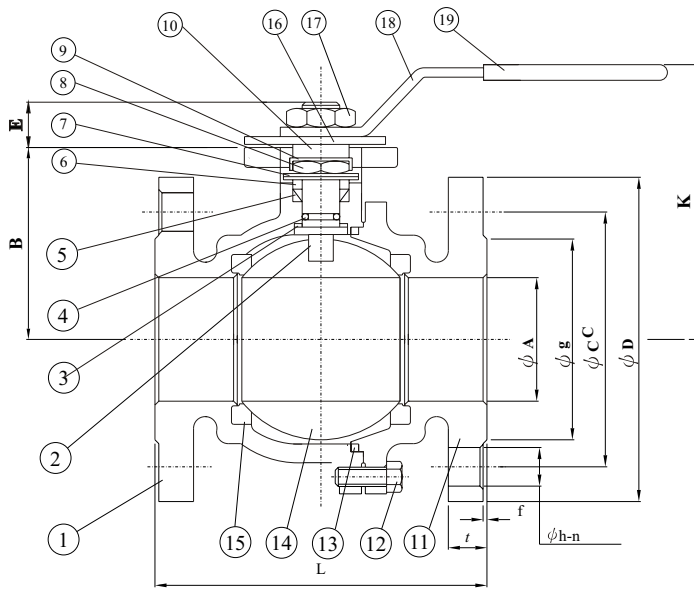
IP65/67 positioner

This datasheet is for the flanged version of Bürkert's stainless steel ball valve. This valve is manually actuated and has ISO pad standard for direct mount actuation (pneumatic or electric). Bürkert ball valves are suited to arduous applications and . It includes a two piece construction, specifically equipped with a dual sealing system to get superior tightness in the stem during temperature and pressure variations. Features include:

- Maintenance, changes of seals and seat can be made without removal of valve from piping.
- The heavy duty valve includes a lockable, insulated handle for manual operation
- Fire Safe API607-5th Edition Certified versions available for units to 4"
- Valve with ISO 5211 mounting pad (for automation available) standard; with a complete package of actuators, digital positioners and modular accessories

| Technical data | |
|--|---|
| Port size | ½" to 4" standard range (5" to 12" versions included at end of datasheet) |
| Orifice | 15mm to 100mm standard range (125mm to 300mm versions included at end of DS) |
| Body material | Stainless steel Body materials also available include carbon steel, Hastalloy C, Super duplex, Alloy 20, Monel, more |
| Ball material | Stainless steel |
| Seat material | PTFE standard RPTFE (PTFE + 15% glass), TFM1600 options |
| O-ring | Viton |
| Media | Universal application; tough materials and construction |
| Media temperature Valves with PTFE seal | -30°C to +200°C (see pressure/temp diagram for other materials) |
| Port connections | Flanged connections, ANSI standard (see separate DS for threaded/weld) |
| Actuation | Lockable handle for manual control (ISO pad top mount on request) |
| Operating pressure Valves with PTFE seal | 0 to 25 bar (see pressure/temp diagram for other materials) |
| Installation | Any direction |

Dimensions [mm] & Materials, ANSI flange to 4"

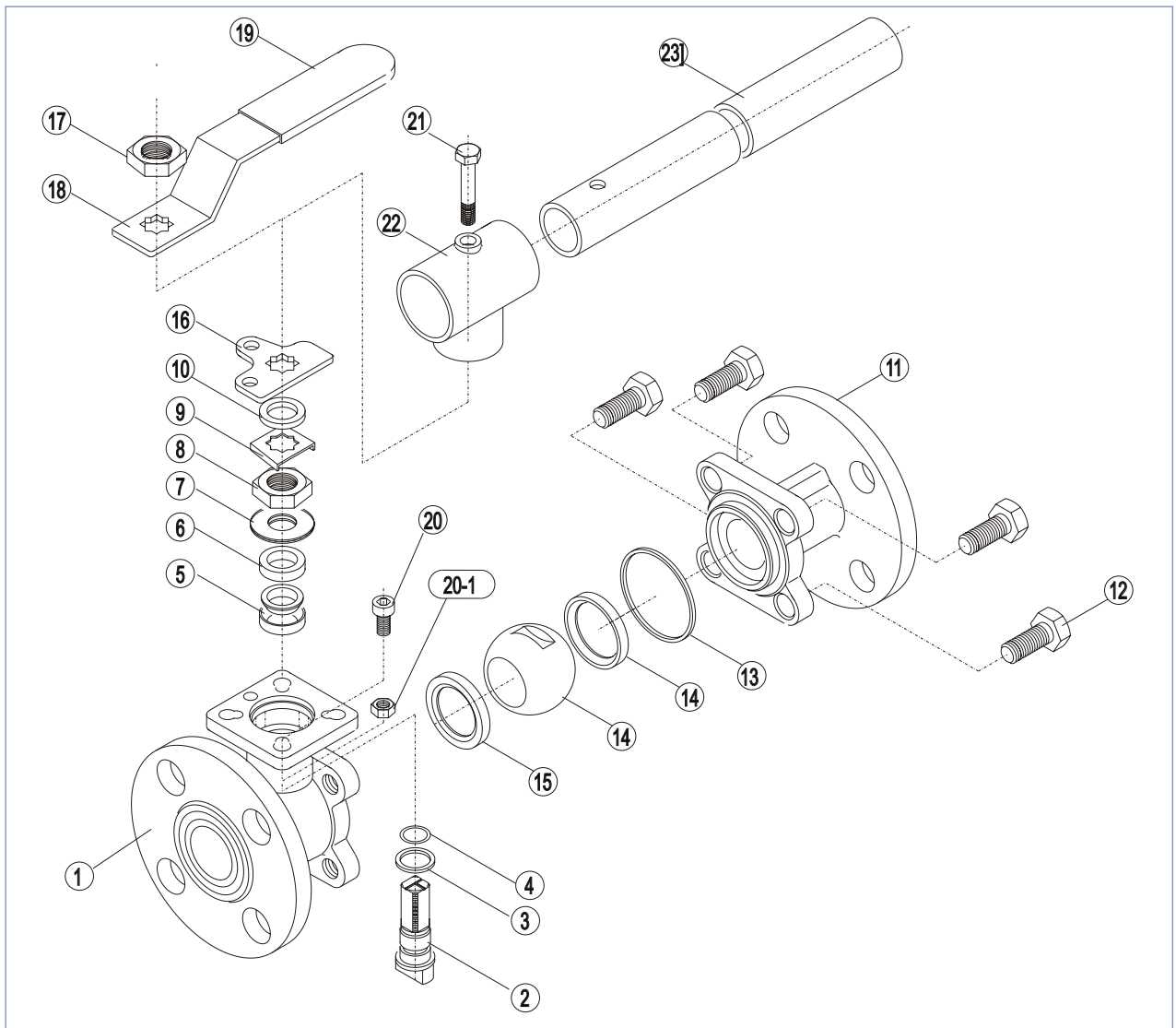


| Item | Part Name | Materials |
|------|---------------|---|
| 1 | Body | Stainless steel 316 Cast [CF8M/ WCB] |
| 2 | Stem | SS 316/ SS 304 |
| 3 | Thrust Washer | RPTFE |
| 4 | O-Ring | Viton |
| 5 | Stem Packing | PTFE |
| 6 | Gland | SS 304 |
| 7 | Disk Washer | SS 301 |
| 8 | Stem Nut | SS 304 |
| 9 | Nut Stop | SS 304 |
| 10 | Washer | SS 304 |
| 11 | Flanged End | Stainless steel 316 Cast [CF8M/ WCB] |
| 12 | Bolt | SS 304 |
| 13 | Gasket | PTFE |
| 14 | Ball | SS 316/ SS 304 |
| 15 | Ball Seat | PTFE/RPTFE |
| 16 | Stopper Plate | SS 304 |
| 17 | Handle Nut | SS 304 |
| 18 | Handle | SS 304 |
| 19 | Sleeve | Plastic |
| 20 | Stop Pin | SS 304 |
| 21 | Set Bolt | SS 304 |
| 22 | Lever Head | CF8 |
| 23 | Pipe Handle | Steel Pipe |

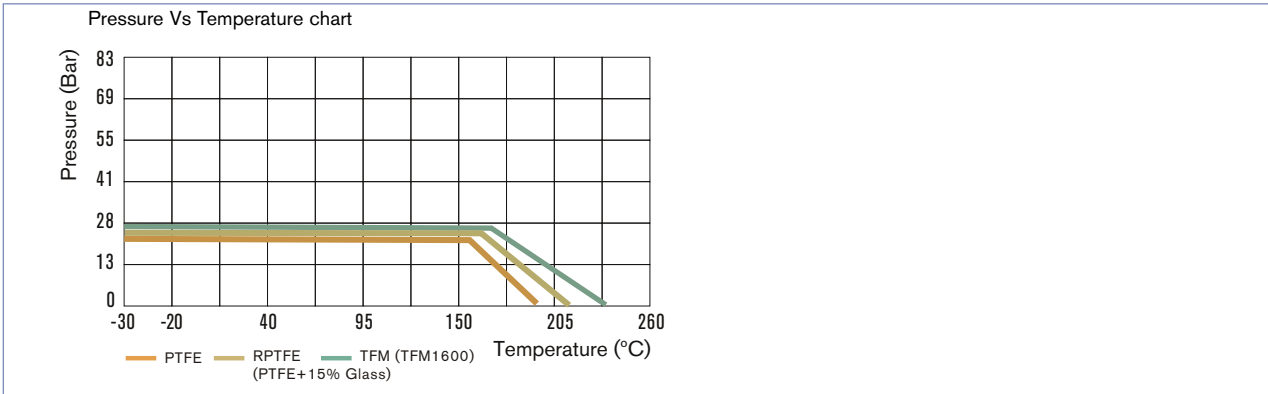
Dimensions [mm], ANSI flange to 4"

| Size | A | B | E | L | H | K | M | F | G | d1 | d2 | D | C | h | N | t | g | f | W [kg] |
|--------|-----|------|----|-----|----|-----|-----|-----|-----|------|------|-----|-------|----|---|------|-----|-----|--------|
| 1/2" | 15 | 48 | 11 | 108 | 9 | 80 | 130 | 36 | 42 | 6 | 6 | 89 | 60.5 | 16 | 4 | 11.5 | 35 | 1.6 | 1.73 |
| 3/4" | 20 | 53 | 11 | 117 | 9 | 80 | 130 | 36 | 42 | 6 | 6 | 98 | 70 | 16 | 4 | 11.5 | 43 | 1.6 | 2.13 |
| 1" | 25 | 59 | 14 | 127 | 11 | 90 | 165 | 42 | 50 | 6 | 7 | 108 | 79.5 | 16 | 4 | 11.5 | 51 | 1.6 | 2.92 |
| 1 1/4" | 32 | 71 | 14 | 140 | 11 | 102 | 165 | 42 | 50 | 6 | 7 | 117 | 89 | 16 | 4 | 12.7 | 64 | 1.6 | 4.02 |
| 1 1/2" | 38 | 76 | 18 | 165 | 14 | 110 | 205 | 50 | 70 | 7 | 9.2 | 127 | 98.5 | 16 | 4 | 14.3 | 73 | 1.6 | 5.9 |
| 2" | 50 | 85 | 18 | 178 | 14 | 120 | 205 | 50 | 70 | 7 | 9.2 | 152 | 120.5 | 19 | 4 | 15.9 | 92 | 1.6 | 8.72 |
| 2 1/2" | 65 | 93.5 | 23 | 190 | 17 | 140 | 300 | 70 | 102 | 9.2 | 11.4 | 178 | 139.5 | 19 | 4 | 17.8 | 105 | 1.6 | 13.33 |
| 3" | 80 | 103 | 23 | 203 | 17 | 150 | 340 | 70 | 102 | 9.2 | 11.4 | 190 | 152.5 | 19 | 4 | 19.1 | 127 | 1.6 | 17.03 |
| 4" | 100 | 132 | 25 | 229 | 22 | 180 | 420 | 102 | 125 | 11.4 | 13.5 | 229 | 190.5 | 19 | 8 | 24 | 157 | 1.6 | 28.98 |

Exploded view, ANSI flange to 4"



Pressure chart



Break-Torque value [Nm/ at 0 bar]

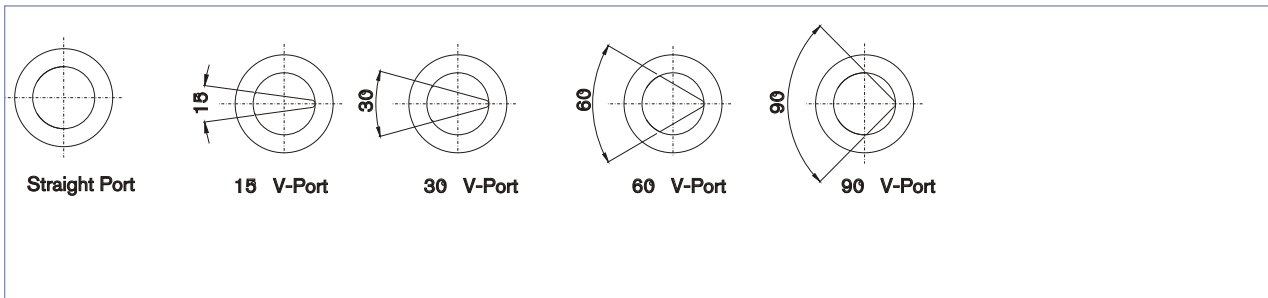
Greases used including lubricant & anti-seize grease both Silicone free

Break-torque for ball valve with ANSI flanges

| Size | ½" | ¾" | 1" | 1¼" | 1½" | 2" | 2½" | 3" | 4" |
|------------|-----|-----|------|------|-----|----|-----|-----|-----|
| grease | 5.5 | 7.2 | 8.8 | 13 | 20 | 24 | 54 | 62 | 124 |
| Non-Grease | 7.2 | 9.4 | 13.2 | 18.2 | 30 | 36 | 95 | 132 | 245 |

V-Notch ball option

Option for modulating ball valves; 30 & 60 deg standard




Fire Safe certified option

API607-5th Edition Certified







- TFM1600/ TFM4215/ PEEK/ UPE soft kits
- Automation application
- PTFE/ PFA coating (40-70 um)
- Hastalloy C/ Super duplex/ Alloy 20/ Monel
- Anti-static devices
- V-ball for control valve in 15 , 30 , 60 , 90 slot
- Flange with Table D, Table E drilling

Ordering chart

|  | Orifice Diameter [mm] | Flange ANSI 150 | Pressure range (bar) | Handle material | Body material | Seal material | ID No. |
|---|-----------------------|-----------------|----------------------|-----------------|---------------|---------------|---------|
| 2/2 Way, Flanged ports [ANSI 150] | 15 | 1/2" | 21 bar | SS-304 | SS-316 | PTFE | AU34109 |
| | 25 | 1" | 21 bar | SS-304 | SS-316 | PTFE | AU44209 |
| | 40 | 1 1/2" | 21 bar | SS-304 | SS-316 | PTFE | AU44293 |
| | 50 | 2" | 21 bar | SS-304 | SS-316 | PTFE | AU44146 |
| | 65 | 2 1/2" | 21 bar | SS-304 | SS-316 | PTFE | AU44295 |
| | 80 | 3" | 21 bar | SS-304 | SS-316 | PTFE | AU44147 |
| | 100 | 4" | 21 bar | SS-304 | SS-316 | PTFE | AU44148 |

Ordering chart for accessories for Type 2654

Actuators direct mount to ISO pad on the ball valve. Other accessories for pneumatically actuated valves with assembly acc. to NAMUR/IEC 534-6 and VDI/VDE 3845.

| Item description | ID No |
|---|--|
|  <p>Industrial strength electric actuator for quarter turn valves, Type 3005 (Type 3004 is available for explosive areas). Manual override handwheel for higher torque ratings (geared manual override for low torques). Available in on/off and modulating (4..20mA etc). Prominent visual positioner indicator.</p> <p>For quarter turn valves.</p> | Various sizes, contact Bürkert for ordering information |
|  <p>Pneumatic actuator for quarter turn valves, rack & pinion type. This actuator from Bürkert has a rilsan/cataphoresis coating inside and out which makes it exceptionally hard wearing.</p> <p>NB: All units below are to build on top of this or another Bürkert pneumatic actuator.</p> | Various sizes, contact Bürkert for ordering information |
|  <p>Top mounted switch box, Size 1. For visual position indication. Aluminium die cast, polycarb.</p> | AU50858 |
| <p>Top mounted switch box, Size 2. For visual position indication. Aluminium die cast, polycarb.</p> | AU50606 |
| <p>Top mounted switch box, Size 3. For visual position indication. Aluminium die cast, polycarb.</p> <p>*NB All units on ordering chart indicate which size switch box suits with 'Optional Accessory Size' - see Select Price List</p> | AU50607 |
|  <p>Type 8793 electropneumatic positioner with integral PID controller. For Spring Return & Double Acting actuator type. Operating voltage 24V DC.</p> <p>Type 8792 electropneumatic positioner. For Spring Return & Double Acting actuator type. Operating voltage 24V DC.</p> | Various feedback, input, output options - see datasheets |

Examples of ISO pad equipped stainless steel ball valves with actuators and accessories



Type 2655 valve, comprising SS ball valve with rilsan coated pneumatic actuator

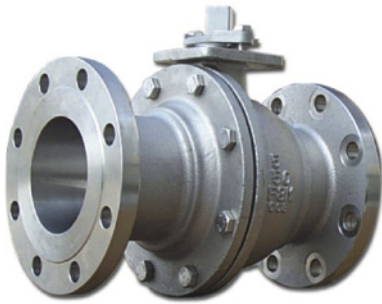


Type 2655 valve, with Type 8792 positioner



Type 2656 electrically actuated ball valve, valve with industrial strength Type 3004 modulating actuator for Ex areas

Flanged ball valve, 5" to 12" size



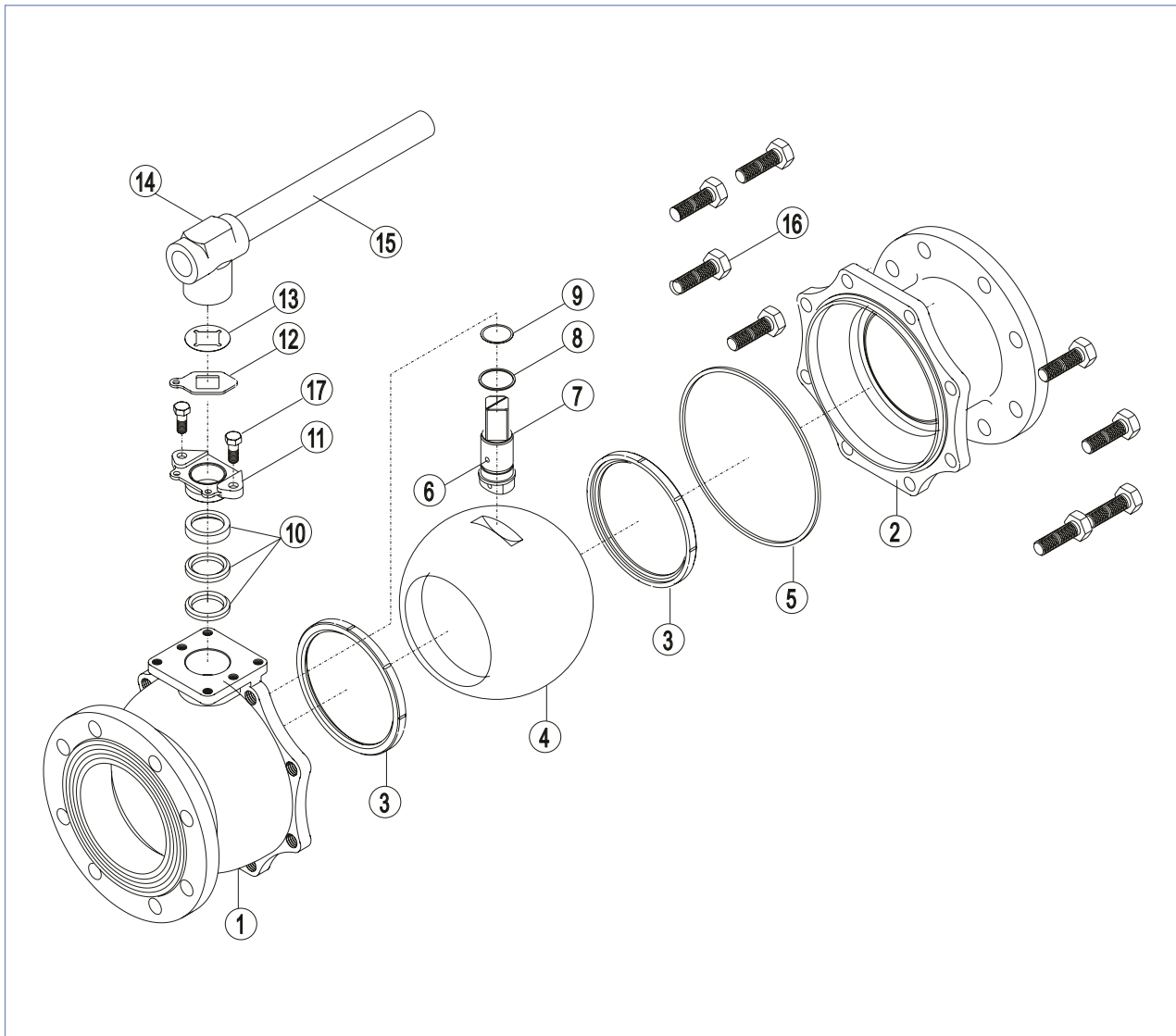
Bürkert offers two piece flanged ball valves in sizes 5" .. 12". These valves are typically actuated however the manual unit comes with a steel pipe-style handle. Specifications:

- Temp -30°C to 200°C [235°C with TFM seat]
- Pressure to 25 bar standard [70 bar HP opt]
- Cast body & end materials; 5" & 6" units investment cast; 8" .. 12" versions sand cast
- Blow-out proof stem
- ISO mounting pad standard

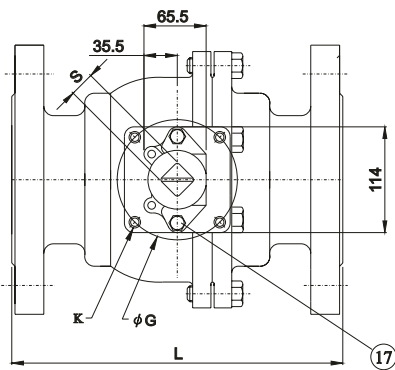
Features include:

- Maintenance, changes of seals and seat can be made without removal of valve from piping.
- The heavy duty valve includes a lockable, insulated handle for manual operation
- Fire Safe API607-5th Edition Certified versions available
- Other body materials on request, including Hastalloy C, super duplex, Alloy 20, Monel
- Valve with ISO 5211 mounting pad (for automation available) standard; with a complete package of actuators, digital positioners and modular accessories

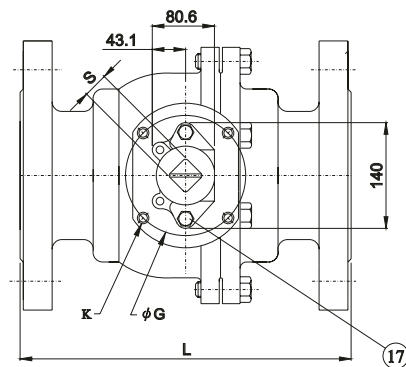
Dimensions [mm], ANSI flange 5" to 12"



Dimensions [mm], ANSI flange 5" to 12"

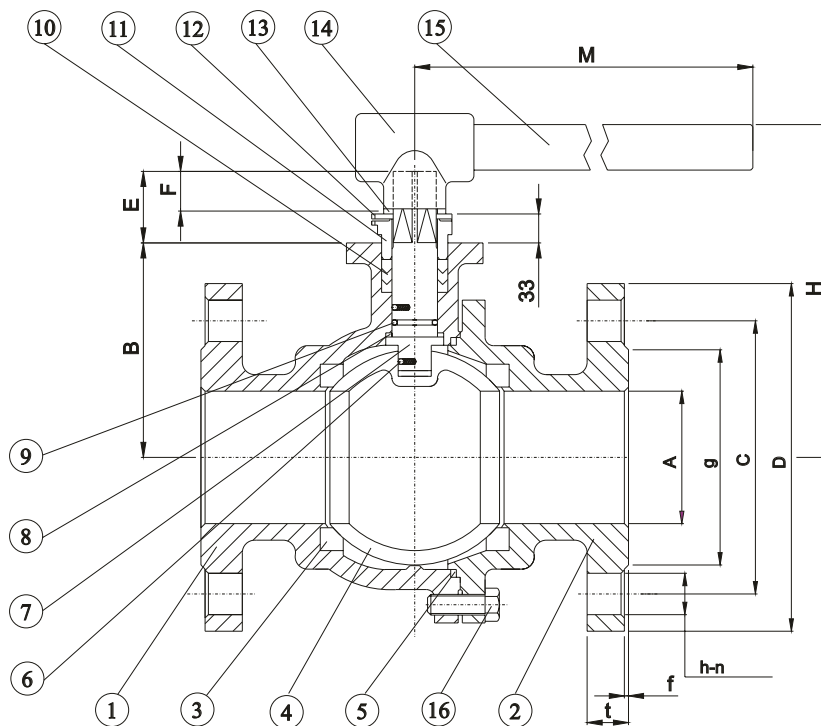


Flanged ball valve, 5" .. 6"



Flanged ball valve, 8" .. 12"

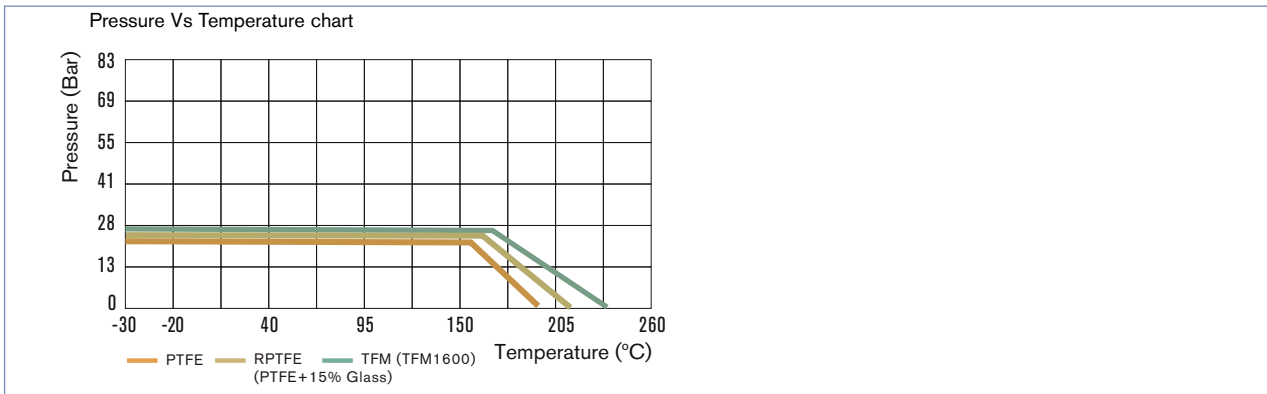
| Item | Part Name | Materials |
|------|---------------|--------------------------------------|
| 1 | Body | Stainless steel 316 Cast [CF8M/ WCB] |
| 2 | Flanged End | Stainless steel 316 Cast [CF8M/ WCB] |
| 3 | Ball Seat | PTFE/RPTFE |
| 4 | Ball | SS 316/ SS 304 |
| 5 | Gasket | PTFE |
| 6 | Anti-Static | SS 316 |
| 7 | Stem | SS 316/ SS 304 |
| 8 | Thrust Washer | RPTFE |
| 9 | O-Ring | Viton |
| 10 | Stem Packing | PTFE |
| 11 | Gland | SS 304 |
| 12 | Stopper | SS 304 |
| 13 | Stopper Plate | SS 304 |
| 14 | Lever Head | FCD45 |
| 15 | Pipe Handle | Steel Pipe |
| 16 | Bolt | SS 304 |
| 17 | Gland Bolt | SS 304 |



Dimensions [mm], ANSI flange 5" to 12"

| Size | A | B | E | F | G | H | M | L | K | S | D | C | n | h | g | t | f |
|------|-----|-----|----|----|-----|-----|------|-----|-----|----|-----|-------|----|----|-----|------|-----|
| 5" | 125 | 150 | 58 | 34 | 125 | 265 | 700 | 356 | M12 | 28 | 254 | 190.5 | 8 | 22 | 186 | 23.9 | 1.6 |
| 6" | 150 | 170 | 58 | 34 | 125 | 285 | 850 | 394 | M12 | 28 | 279 | 241.5 | 8 | 22 | 216 | 25.4 | 1.6 |
| 8" | 200 | 219 | 64 | 38 | 125 | 354 | 1100 | 457 | M12 | 36 | 343 | 398.5 | 8 | 22 | 270 | 28.6 | 1.6 |
| 10" | 250 | 255 | 64 | 38 | 125 | 390 | 1200 | 533 | M12 | 36 | 406 | 362 | 12 | 25 | 324 | 30.2 | 1.6 |
| 12" | 300 | 307 | 79 | 46 | 140 | 442 | 1500 | 610 | M16 | 36 | 483 | 432 | 12 | 25 | 381 | 31.8 | 1.6 |

Pressure chart, ANSI flange to 4"



Break-Torque value [Nm/ at 0 bar]

Greases used including lubricant & anti-seize grease both Silicone free

Break-torque for ball valve with ANSI flanges

| Size | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 5" | 6" | 8" | 10" | 12" |
|------------|------|------|------|--------|--------|----|--------|-----|-----|-----|-----|-----|-----|-----|
| grease | 5.5 | 7.2 | 8.8 | 13 | 20 | 24 | 54 | 62 | 124 | 230 | 250 | 360 | 605 | 880 |
| Non-Grease | 7.2 | 9.4 | 13.2 | 18.2 | 30 | 36 | 95 | 132 | 245 | - | - | - | - | - |

Fire Safe certified option

API607-5th Edition Certified



- TFM1600/ TFM4215/ PEEK/ UPE soft kits
- Automation application
- PTFE/ PFA coating (40-70 um)
- Hastalloy C/ Super duplex/ Alloy 20/ Monel
- Anti-static devices
- V-ball for control valve in 15 , 30 , 60 , 90 slot
- Flange with Table D, Table E drilling

Ordering information

Contact Bürkert

Call 1300 888 868 (Australia)

Call 0800 BURKERT (New Zealand)

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.
© Christian Bürkert GmbH & Co. KG

201009_AU-en_2654_2way_FL