

## Ball Valves in cast stainless or carbon steel 2-way, 2-piece construction



Can be combined with...



Type 205x  
Pneumatic  
actuator



879x  
Positioner



Type 3003  
Electric  
actuator



Type 3004  
Electric  
Actuator Ex



Type 3005  
Electric  
actuator

- Body & End caps quality investment casting
- Blow-out proof stem with adjustable packing
- Working Pressure: ASME150 / PN16
- Temperature range -20°C to 260°C
- Fire-safe Design API607 5<sup>th</sup> Edition
- Anti-Static device

This Bürkert ball valve design is an industry proven two piece investment cast body with PTFE/FKM sealing. It finds wide use in fluid media while offering higher cycle life with reduced torque. The self-adjusting packing gland is a dual sealing type with an alignment collar for superior tightness.

The Type 2651 is automation ready with an ISO 5211 mounting pad for direct coupling of the actuator. A full range of actuators, pilot valves, digital positioners, feedback switches and bus network options are available for integration into plant control systems.

For maintenance, this design allows removal of all seals with just four bolts. The split body provides for easy re-assembly, and is more compact than three piece bolted designs. The ball is full port style, presenting a Kv and pressure drop similar to an open line, without restriction to high flow or entrained solids.

| Technical data                                               |                             |             |
|--------------------------------------------------------------|-----------------------------|-------------|
|                                                              | ANSI150                     | PN16        |
| Valve Size                                                   | ½" – 4" (DN15 – DN100)      |             |
| Valve design                                                 | ASME B16.34                 | EN 12516-1  |
| Valve body material                                          | ASTM A351 CF8M              | DIN 1.4408  |
|                                                              | ASTM A216 WCB               | DIN 1.0619  |
| Ball Seal Material                                           | PTFE / TFM 1600/4215        |             |
| Face to face                                                 | ASME B16.10                 | DIN 3202 F4 |
| Flange connection                                            | ASME B16.50                 | DIN2633     |
| Pressure rating                                              | 275 PSI                     | 16 bar      |
| Mounting                                                     | ISO 5211 Direct Mount       |             |
| Flow Direction                                               | ASTM A351 CF8M / DIN 1.4408 |             |
|                                                              | ASTM A216 WCB / DIN 1.0619  |             |
| Seat material                                                | PTFE                        |             |
| Options                                                      |                             |             |
| Seats: RPTFE / PEEK / PTFE+50%St.St.                         |                             |             |
| PTFE / PFA Coating (40-70 um)                                |                             |             |
| V-Notch Ball for control valve in 15°, 30°, 60° and 90° slot |                             |             |
| Hastalloy C / Super duplex / Alloy 20 / Monel                |                             |             |

Ordering chart for ASTM A351 Gr. CF8M (316 SS) Fire-safe

| Flange<br>Connection | Orifice<br>[mm] | Seat<br>material | Break torque (Nm)* |             | ISO 5211<br>mounting | Stem Size<br>(mm <sup>2</sup> ) | Item no. |          |
|----------------------|-----------------|------------------|--------------------|-------------|----------------------|---------------------------------|----------|----------|
|                      |                 |                  | Greased            | Non-Greased |                      |                                 | ANSI 150 | PN16     |
| ½"                   | 15.0            | PTFE             | 5.5                | 7.2         | F03 & F04            | 9                               | 93950028 | 93950100 |
| ¾"                   | 20.0            | PTFE             | 7.2                | 9.4         | F03 & F04            | 9                               | 93950029 | 93950101 |
| 1"                   | 25.0            | PTFE             | 8.8                | 13.2        | F04 & F05            | 11                              | 93950030 | 93950102 |
| 1¼"                  | 32.0            | PTFE             | 13                 | 18.2        | F04 & F05            | 11                              | 93950031 | 93950103 |
| 1½"                  | 38.0            | PTFE             | 20                 | 30          | F05 & F07            | 14                              | 93950032 | 93950104 |
| 2"                   | 50.0            | PTFE             | 24                 | 36          | F05 & F07            | 14                              | 93950033 | 93950105 |
| 2½"                  | 65.0            | PTFE             | 54                 | 95          | F07 & F10            | 17                              | 93950034 | 93950106 |
| 3"                   | 80.0            | PTFE             | 62                 | 132         | F07 & F10            | 17                              | 93950035 | 93950107 |
| 4"                   | 100.0           | PTFE             | 124                | 245         | F10 & F12            | 22                              | 93950036 | 93950108 |

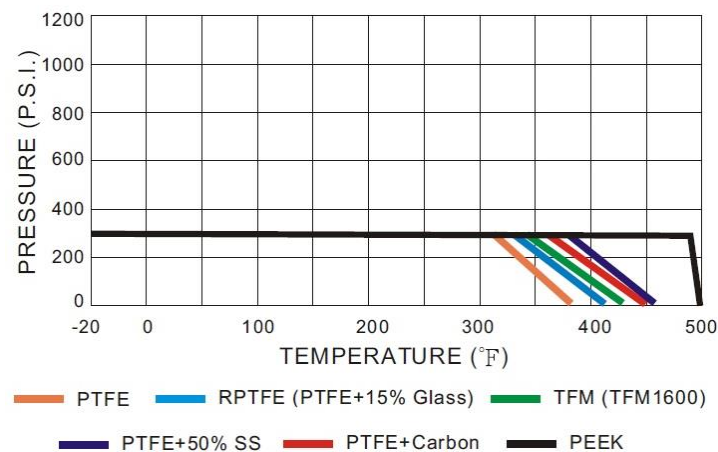
| Flange<br>Connection | Orifice<br>[mm] | Seat<br>material | Break torque (Nm)* |             | ISO 5211<br>mounting | Stem Size<br>(mm <sup>2</sup> ) | Item no. |          |
|----------------------|-----------------|------------------|--------------------|-------------|----------------------|---------------------------------|----------|----------|
|                      |                 |                  | Greased            | Non-Greased |                      |                                 | ANSI 150 | PN16     |
| ½"                   | 15.0            | TFM1600          | 5.8                | 7.6         | F03 & F04            | 9                               | 93950037 | 93950109 |
| ¾"                   | 20.0            | TFM1600          | 7.6                | 9.9         | F03 & F04            | 9                               | 93950038 | 93950110 |
| 1"                   | 25.0            | TFM1600          | 9.2                | 13.9        | F04 & F05            | 11                              | 93950039 | 93950111 |
| 1¼"                  | 32.0            | TFM1600          | 13.7               | 19.1        | F04 & F05            | 11                              | 93950040 | 93950112 |
| 1½"                  | 38.0            | TFM1600          | 21.0               | 31.5        | F05 & F07            | 14                              | 93950041 | 93950113 |
| 2"                   | 50.0            | TFM1600          | 25.2               | 37.8        | F05 & F07            | 14                              | 93950042 | 93950114 |
| 2½"                  | 65.0            | TFM1600          | 56.7               | 99.8        | F07 & F10            | 17                              | 93950043 | 93950115 |
| 3"                   | 80.0            | TFM1600          | 65.1               | 138.6       | F07 & F10            | 17                              | 93950044 | 93950116 |
| 4"                   | 100.0           | TFM1600          | 130.2              | 257.3       | F10 & F12            | 22                              | 93950045 | 93950117 |

| Flange<br>Connection | Orifice<br>[mm] | Seat<br>material | Break torque (Nm)* |             | ISO 5211<br>mounting | Stem Size<br>(mm <sup>2</sup> ) | Item no. |          |
|----------------------|-----------------|------------------|--------------------|-------------|----------------------|---------------------------------|----------|----------|
|                      |                 |                  | Greased            | Non-Greased |                      |                                 | ANSI 150 | PN16     |
| ½"                   | 15.0            | TFM4215          | 6.1                | 7.9         | F03 & F04            | 9                               | 93953612 | 93953630 |
| ¾"                   | 20.0            | TFM4215          | 7.9                | 10.3        | F03 & F04            | 9                               | 93953613 | 93953631 |
| 1"                   | 25.0            | TFM4215          | 9.7                | 14.5        | F04 & F05            | 11                              | 93953614 | 93953632 |
| 1¼"                  | 32.0            | TFM4215          | 14.3               | 20.0        | F04 & F05            | 11                              | 93953615 | 93953633 |
| 1½"                  | 38.0            | TFM4215          | 22.0               | 33.0        | F05 & F07            | 14                              | 93953616 | 93953634 |
| 2"                   | 50.0            | TFM4215          | 26.4               | 39.6        | F05 & F07            | 14                              | 93953617 | 93953635 |
| 2½"                  | 65.0            | TFM4215          | 59.4               | 104.5       | F07 & F10            | 17                              | 93953618 | 93953636 |
| 3"                   | 80.0            | TFM4215          | 68.2               | 145.2       | F07 & F10            | 17                              | 93953619 | 93953637 |
| 4"                   | 100.0           | TFM4215          | 136.4              | 269.5       | F10 & F12            | 22                              | 93953620 | 93953638 |

Ordering chart for ASTM A216 WCB (Carbon Steel) Fire-safe

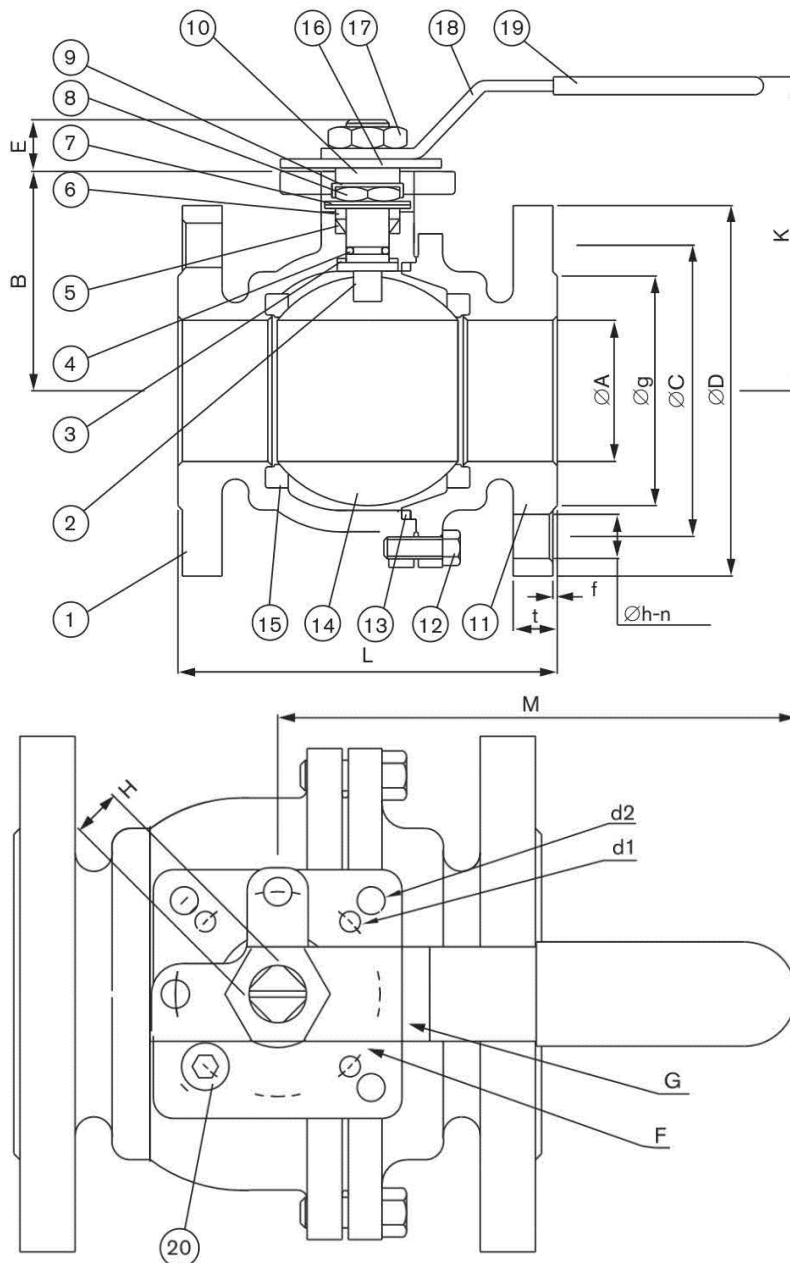
| Flange<br>Connection | Orifice<br>[mm] | Seat<br>material | Break torque (Nm)* |             | ISO 5211<br>mounting | Stem Size<br>(mm <sup>2</sup> ) | Item no. |          |
|----------------------|-----------------|------------------|--------------------|-------------|----------------------|---------------------------------|----------|----------|
|                      |                 |                  | Greased            | Non-Greased |                      |                                 | ANSI 150 | PN16     |
| ½"                   | 15.0            | PTFE             | 5.5                | 7.2         | F03 & F04            | 9                               | 93950064 | 93950136 |
| ¾"                   | 20.0            | PTFE             | 7.2                | 9.4         | F03 & F04            | 9                               | 93950065 | 93950137 |
| 1"                   | 25.0            | PTFE             | 8.8                | 13.2        | F04 & F05            | 11                              | 93950066 | 93950138 |
| 1¼"                  | 32.0            | PTFE             | 13                 | 18.2        | F04 & F05            | 11                              | 93950067 | 93950139 |
| 1½"                  | 38.0            | PTFE             | 20                 | 30          | F05 & F07            | 14                              | 93950068 | 93950140 |
| 2"                   | 50.0            | PTFE             | 24                 | 36          | F05 & F07            | 14                              | 93950069 | 93950141 |
| 2½"                  | 65.0            | PTFE             | 54                 | 95          | F07 & F10            | 17                              | 93950070 | 93950142 |
| 3"                   | 80.0            | PTFE             | 62                 | 132         | F07 & F10            | 17                              | 93950071 | 93950143 |
| 4"                   | 100.0           | PTFE             | 124                | 245         | F10 & F12            | 22                              | 93950072 | 93950144 |

Pressure-temperature limits

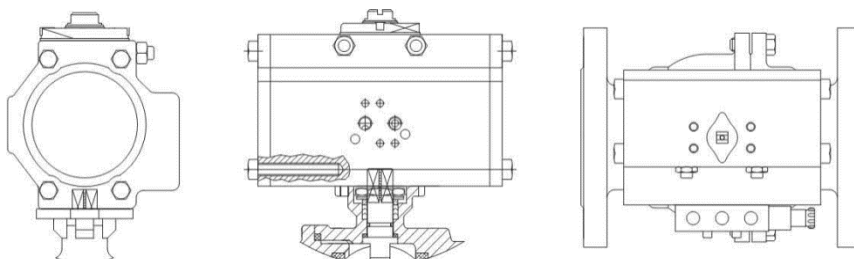
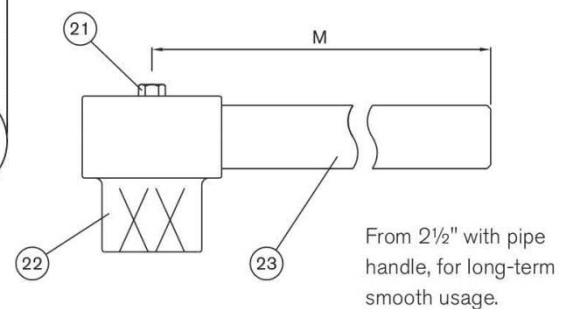


**2651**  
**direct mount flange**

**Dimensions ½" - 4" [mm]**



| Item | Part Name     | Materials       |                 |
|------|---------------|-----------------|-----------------|
|      |               | ANSI150         | PN16            |
| 1    | Body          | CF8M / WCB      | 1.4408 / 1.0619 |
| 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   | CF8M / WCB      | 1.4408 / 1.0619 |
| 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      |                 |



ISO direct mount for directly assembling actuator.

- Pneumatic (DA or SR) – Electric actuator
- Solenoid valve – Limit Switch Box – EP

**2651**  
**direct mount flange**

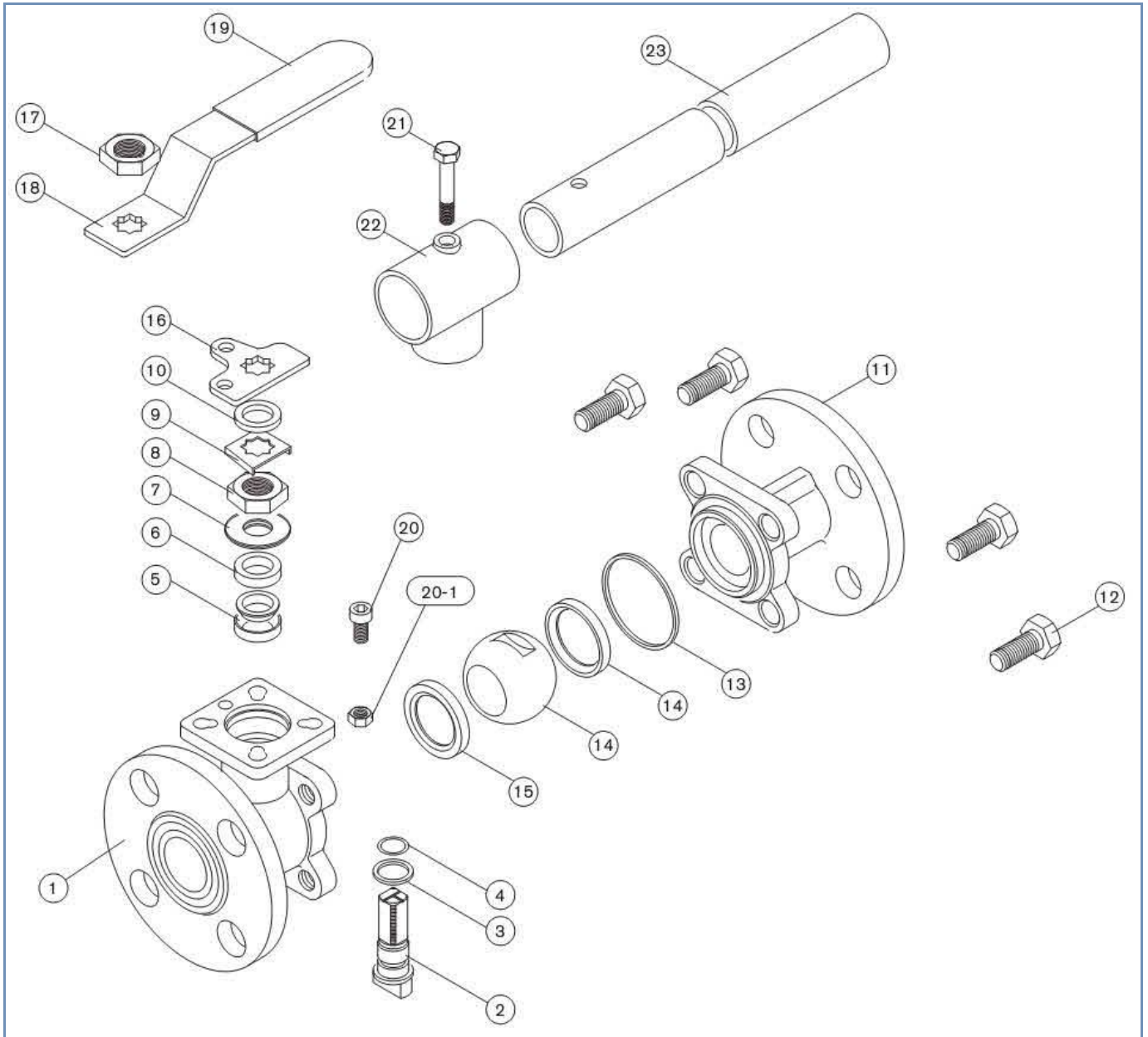
**Dimensions ANSI150 [mm]**

| Size | A   | B    | E  | L   | H  | K   | M   | F   | G   | d1   | d2   | Flange Dimensions |       |    |   |      |     |     | Wt (Kg) |
|------|-----|------|----|-----|----|-----|-----|-----|-----|------|------|-------------------|-------|----|---|------|-----|-----|---------|
|      |     |      |    |     |    |     |     |     |     |      |      | D                 | C     | h  | N | t    | g   | f   |         |
| ½"   | 15  | 48   | 11 | 108 | 9  | 80  | 130 | 36  | 42  | 6    | 6    | 89                | 60.5  | 16 | 4 | 11.5 | 35  | 1.6 | 1.73    |
| ¾"   | 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    |
| 1¼"  | 32  | 71   | 14 | 140 | 11 | 102 | 165 | 42  | 50  | 6    | 7    | 117               | 89    | 16 | 4 | 12.7 | 64  | 1.6 | 4.02    |
| 1½"  | 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    |
| 2½"  | 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 | 24.0 | 157 | 1.6 | 28.98   |

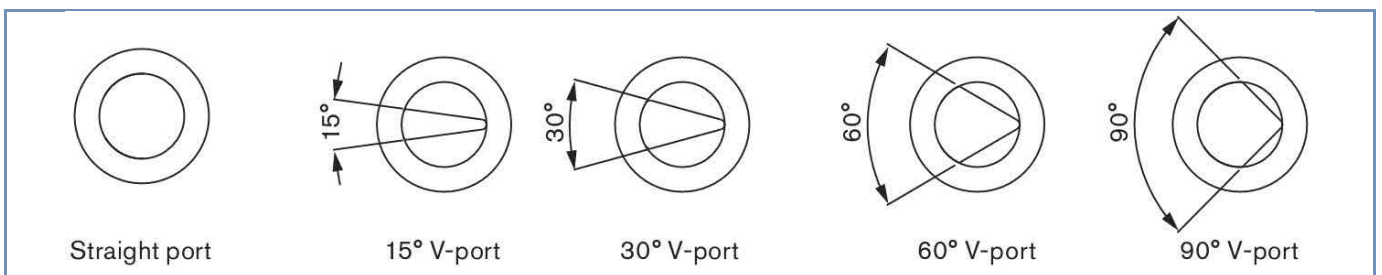
**Dimensions PN16 [mm]**

| Size | A   | B    | E  | L   | H  | K   | M   | F   | G   | d1   | d2   | Flange Dimensions |     |    |   |    |     |   | Wt (Kg) |
|------|-----|------|----|-----|----|-----|-----|-----|-----|------|------|-------------------|-----|----|---|----|-----|---|---------|
|      |     |      |    |     |    |     |     |     |     |      |      | D                 | C   | h  | N | t  | g   | f |         |
| ½"   | 15  | 48   | 11 | 115 | 9  | 80  | 130 | 36  | 42  | 6    | 6    | 95                | 65  | 14 | 4 | 14 | 45  | 2 | 2.13    |
| ¾"   | 20  | 53   | 11 | 120 | 9  | 80  | 130 | 36  | 42  | 6    | 6    | 105               | 75  | 14 | 4 | 16 | 58  | 2 | 2.85    |
| 1"   | 25  | 59   | 14 | 125 | 11 | 90  | 165 | 42  | 50  | 6    | 7    | 115               | 85  | 14 | 4 | 16 | 68  | 2 | 3.72    |
| 1¼"  | 32  | 71   | 14 | 130 | 11 | 102 | 165 | 42  | 50  | 6    | 7    | 140               | 100 | 18 | 4 | 16 | 78  | 2 | 5.32    |
| 1½"  | 38  | 76   | 18 | 140 | 14 | 110 | 205 | 50  | 70  | 7    | 9.2  | 150               | 110 | 18 | 4 | 16 | 88  | 3 | 6.96    |
| 2"   | 50  | 85   | 18 | 150 | 14 | 120 | 205 | 50  | 70  | 7    | 9.2  | 165               | 125 | 18 | 4 | 18 | 102 | 3 | 9.68    |
| 2½"  | 65  | 93.5 | 23 | 170 | 17 | 140 | 300 | 70  | 102 | 9.2  | 11.4 | 185               | 145 | 18 | 4 | 18 | 122 | 3 | 13.49   |
| 3"   | 80  | 103  | 23 | 180 | 17 | 150 | 340 | 70  | 102 | 9.2  | 11.4 | 200               | 160 | 18 | 8 | 20 | 138 | 3 | 17.53   |
| 4"   | 100 | 132  | 25 | 190 | 22 | 180 | 420 | 102 | 125 | 11.4 | 13.5 | 220               | 180 | 18 | 8 | 20 | 158 | 3 | 25.62   |

Exploded view ½" - 4"



V-ball for modulating controller



**2651**  
**direct mount flange**

**Ordering Chart for Repair Kits - complete set**

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| Size | Seat Material |          |          |          |
|------|---------------|----------|----------|----------|
|      | PTFE          | TFM1600  | TFM4215  | PEEK     |
| ½"   | 93920186      | 93920200 | 93920214 | 93920225 |
| ¾"   | 93920187      | 93920201 | 93920215 | 93920226 |
| 1"   | 93920188      | 93920202 | 93920216 | 93920227 |
| 1 ¼" | 93920189      | 93920203 | 93920217 | 93920228 |
| 1 ½" | 93920190      | 93920204 | 93920218 | 93920229 |
| 2"   | 93920191      | 93920205 | 93920219 | 93920230 |
| 2 ½" | 93920192      | 93920206 | 93920220 | 93920231 |
| 3"   | 93920193      | 93920207 | 93920221 | 93920232 |
| 4"   | 93920194      | 93920208 | 93920222 | 93920233 |