



## Main Features:-

- ◆ 2 Way ball valve to isolate or regulate flow of product
- ◆ End connection for welded, threaded and flanged joints
- ◆ PN16 Dual-Block valve body manufactured in uPVC
- ◆ Durable stem with double O-Ring and double connection key
- ◆ Integrated bracket for valve anchoring



VKD DN65/100 uPVC

Suitable Applications & Approvals:



EU MANUFACTURER:

The FIP VKD DUAL BLOCK® valve is a high quality, thermoplastic, true union ball valve with a design that meets the stringent requirements needed by modern industrial applications.

## TECHNICAL SPECIFICATIONS

|                       |                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction          | 2-way True Union ball valve with locked carrier and union nuts.                                                                                                                                                                                                                                                                                                                                         |
| Size Range            | DN 65 ÷ 100                                                                                                                                                                                                                                                                                                                                                                                             |
| Nominal Pressure      | PN 16 with water at 20 °C                                                                                                                                                                                                                                                                                                                                                                               |
| Operating Temperature | 0 °C ÷ 60 °C                                                                                                                                                                                                                                                                                                                                                                                            |
| Coupling Standards    | <b>Solvent welding:</b> EN ISO 1452, EN ISO 15493, BS 4346-1, DIN 8063, NF T54-028, ASTM D 2467, JIS K 6743. Pipe coupling as per EN ISO 1452, EN ISO 15493, DIN 8062, NF T54-016, ASTM D 1785, JIS K 6741<br><br><b>Thread:</b> ISO 228-1, DIN 2999, ASTM D 2464, JIS B 0203<br><br><b>Flanging system:</b> ISO 7005-1, EN ISO 1452, EN ISO 15493, EN 558-1, DIN 2501, ANSI B.16.5 cl. 150, JIS B 2220 |
| Reference Standards   | <b>Construction criteria:</b> EN ISO 16135, EN ISO 1452, EN ISO 15493<br><br><b>Test methods and requirements:</b> ISO 9393<br><br><b>Installation criteria:</b> DVS 2204, DVS 2221, UNI 11242<br><br><b>Actuator couplings:</b> ISO 5211                                                                                                                                                               |
| Valve Material        | PVC-U                                                                                                                                                                                                                                                                                                                                                                                                   |
| Seal Material         | EPDM, FPM (standard size O-Ring); PTFE (ball seats)                                                                                                                                                                                                                                                                                                                                                     |

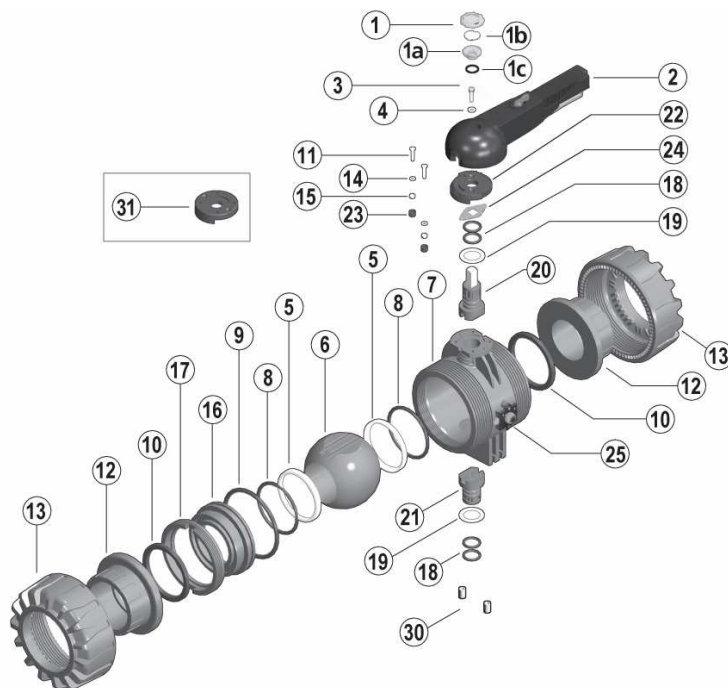
*This product is compatible for mounting with standard pneumatic or electric actuators that use standard ISO5211 profiles, when combined with the optional actuation kit accessory. AllValves can supply this product preassembled with a suitable actuator on request.*



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|    |                        |                           |
|----|------------------------|---------------------------|
| 1  | Plug upper part        | PVC                       |
| 1a | Plug lower part        | PVC                       |
| 1b | Tag holder             | PVC                       |
| 1c | Plug O-Ring            | NBR                       |
| 2  | Handle                 | HIPVC                     |
| 3  | Screw                  | Stainless steel           |
| 4  | Washer                 | Stainless steel           |
| 5  | Ball seat              | PTFE                      |
| 6  | Ball                   | PVC-U                     |
| 7  | Body                   | PVC-U                     |
| 8  | Support O-ring         | EPDM / FPM                |
| 9  | Radial seal O-ring     | EPDM / FPM                |
| 10 | Special socket seal    | EPDM / FPM                |
| 11 | Screw                  | Stainless steel           |
| 12 | End connector          | PVC-U                     |
| 13 | Union nut              | PVC-U                     |
| 14 | Washer                 | Stainless steel           |
| 15 | Nut                    | Stainless steel           |
| 16 | Support for ball seat  | PVC-U                     |
| 17 | Stop ring              | PVC-U                     |
| 18 | Stem O-ring            | EPDM / FPM                |
| 19 | Friction reducing bush | PTFE                      |
| 20 | Upper stem             | PVC-U * / Stainless steel |
| 21 | Lower stem             | PVC-U                     |
| 22 | Pad                    | PP-GR                     |
| 23 | Protection cap         | PE                        |
| 24 | Position Indicator     | ABS                       |
| 25 | Nut block              | PP-GR                     |
| 30 | Bracketing bush        | Ottone                    |
| 31 | Actuation adapter      | PP-GR                     |



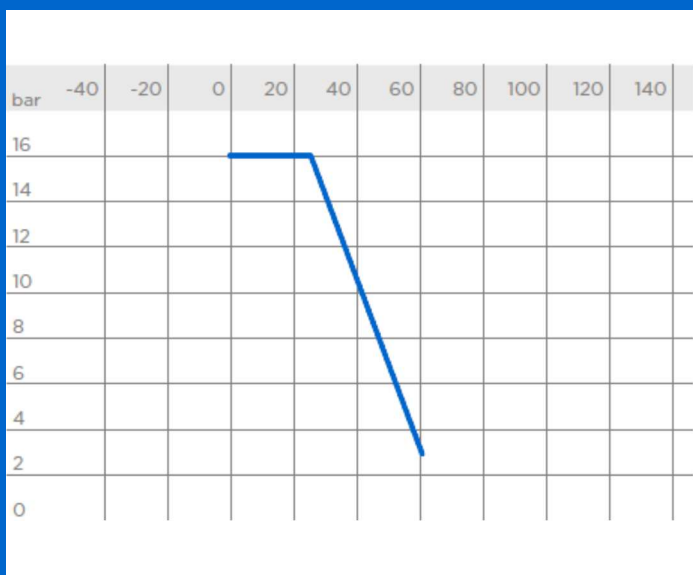
| DN          | 65   | 80   | 100  |
|-------------|------|------|------|
| Kv100 l/min | 5250 | 7100 | 9500 |

The Kv100 flow coefficient is the Q flow rate of litres per minute of water at a temperature of 20°C that will generate  $\Delta p = 1$  bar pressure drop at a certain valve position.

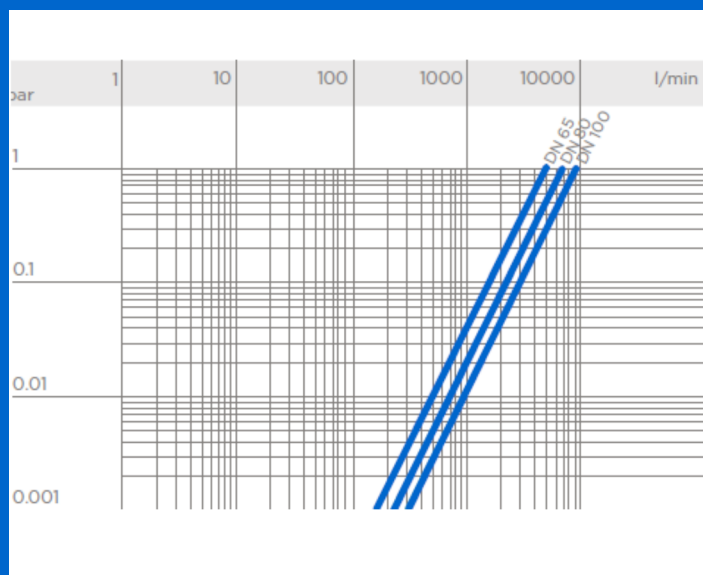
\*The Kv100 values shown in the table are calculated with the valve completely open.



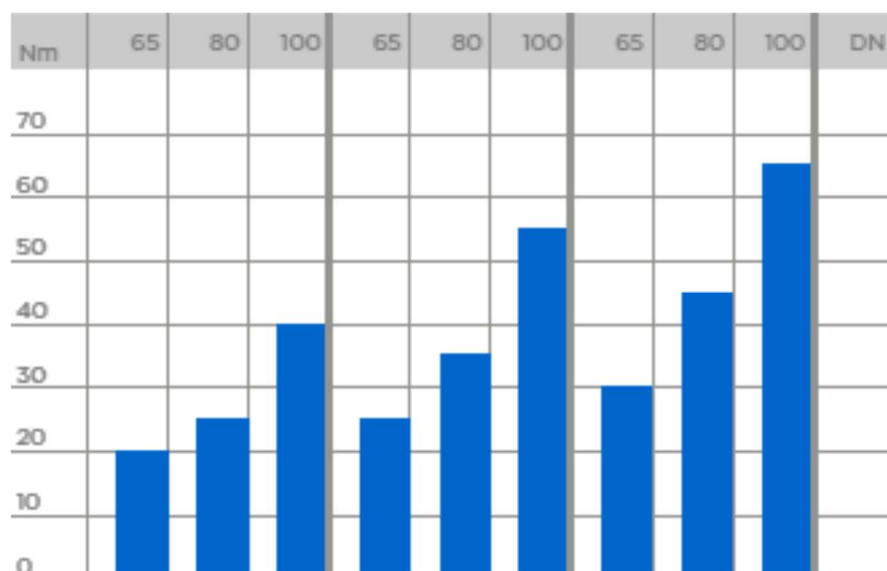
## PRESSURE v TEMP



## PRESSURE DROP



## OPERATING TORQUE

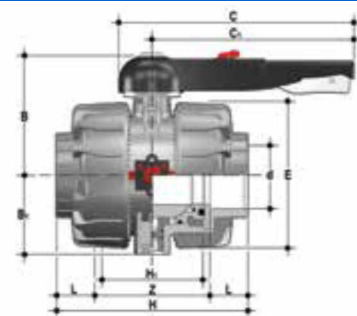


Torque at maximum working pressure.

## DIMENSIONS

VKD1V 2-way ball valve with female ends for solvent welding, metric series

| d   | DN  | PN | B   | B   | C   | G   | E   | H   | H   | L  | Z   | g     |
|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-------|
| 75  | 65  | 16 | 164 | 87  | 225 | 175 | 164 | 235 | 133 | 44 | 147 | 7380  |
| 90  | 80  | 16 | 177 | 105 | 327 | 272 | 203 | 270 | 149 | 51 | 168 | 7200  |
| 110 | 100 | 16 | 195 | 129 | 385 | 385 | 238 | 308 | 167 | 61 | 186 | 11141 |



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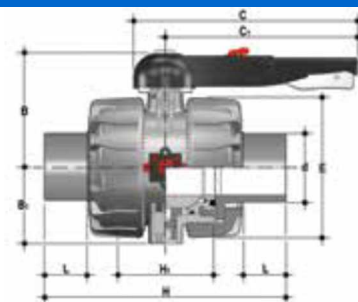
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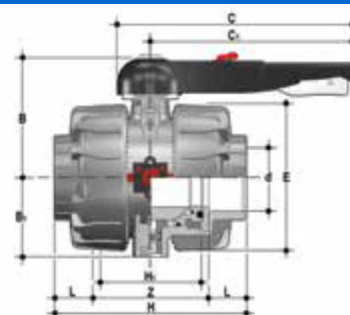
### VKDDV 2-way ball valve with male ends for solvent welding, metric series

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L  | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|----|-------|
| 75  | 65  | 16 | 164 | 87             | 225 | 175 | 164 | 284 | 284            | 44 | 4420  |
| 90  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 300 | 300            | 51 | 6930  |
| 110 | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 340 | 340            | 61 | 10950 |



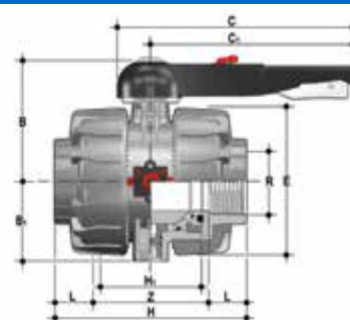
### VKDLV 2-way ball valve with female ends for solvent welding, BS series

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L  | Z   | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|----|-----|-------|
| 2½" | 65  | 16 | 164 | 87             | 225 | 175 | 164 | 235 | 133            | 44 | 147 | 4380  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 270 | 149            | 51 | 168 | 7250  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 308 | 167            | 63 | 182 | 10995 |



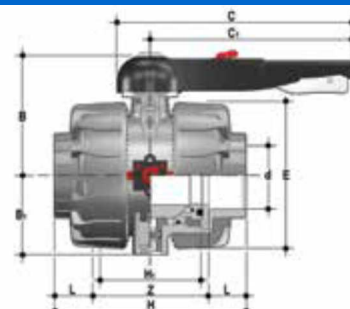
### VKDFV 2-way ball valve with BSP threaded female ends

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L  | Z   | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|----|-----|-------|
| 2½" | 65  | 16 | 164 | 87             | 225 | 175 | 164 | 235 | 133            | 30 | 175 | 4395  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 270 | 149            | 34 | 203 | 7560  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 308 | 167            | 40 | 229 | 11100 |



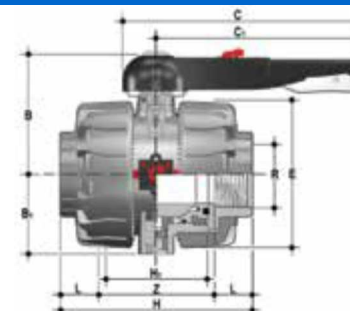
### VKDAV 2-way ball valve with female ends for solvent welding, ASTM series

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L    | Z   | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|------|-----|-------|
| 2½" | 65  | 16 | 164 | 87             | 225 | 175 | 164 | 235 | 133            | 44.5 | 146 | 4390  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 270 | 149            | 48   | 174 | 7210  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 308 | 167            | 57.5 | 193 | 11065 |



### VKDNV 2-way ball valve with female ends, NPT thread

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L    | Z     | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|------|-------|-------|
| 2½" | 65  | 16 | 164 | 87             | 225 | 175 | 164 | 235 | 133            | 33.2 | 168.6 | 4395  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 270 | 149            | 35.5 | 199   | 7260  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 308 | 167            | 37.6 | 232.8 | 11100 |



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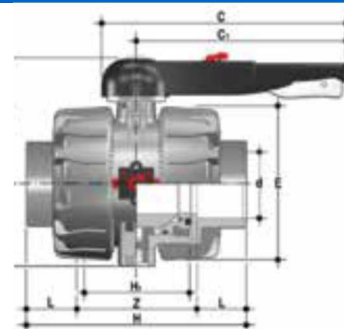


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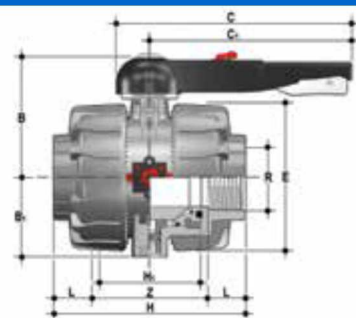
## VKDJV 2-way ball valve with female ends for solvent welding, JIS series

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L    | Z   | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|------|-----|-------|
| 2½" | 65  | 16 | 164 | 87             | 225 | 175 | 164 | 267 | 133            | 61   | 145 | 4435  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 294 | 149            | 64.5 | 165 | 7250  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 370 | 167            | 84   | 202 | 11580 |



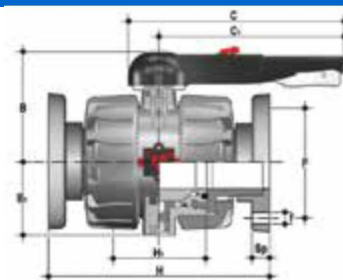
## VKDGJ 2-way ball valve with female ends, JIS thread

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L  | Z   | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|----|-----|-------|
| 2½" | 65  | 16 | 164 | 87             | 175 | 175 | 164 | 235 | 133            | 35 | 165 | 4400  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 203 | 270 | 149            | 40 | 190 | 7270  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 238 | 308 | 167            | 45 | 218 | 11115 |



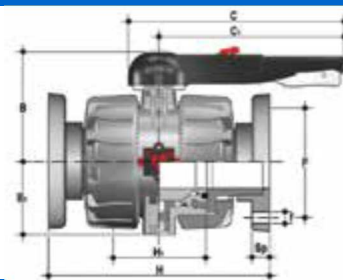
## VKDOV 2-way ball valve with EN/ISO/DIN PN10/16 fixed flanges, Face to face according to EN 558-1

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | F   | f  | H   | H <sub>1</sub> | Sp   | U | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|----|-----|----------------|------|---|-------|
| 75  | 65  | 16 | 164 | 87             | 225 | 175 | 145 | 17 | 290 | 133            | 21   | 4 | 6610  |
| 90  | 80  | 16 | 177 | 105            | 327 | 272 | 160 | 17 | 310 | 149            | 21.5 | 8 | 9330  |
| 110 | 100 | 16 | 195 | 129            | 385 | 330 | 180 | 17 | 350 | 167            | 21.5 | 8 | 13815 |



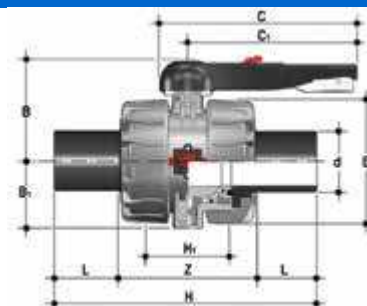
## VKDOAV 2-way ball valve with fixed flange, drilled ANSI B16.5 cl.150#FF

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | F     | f  | H   | H <sub>1</sub> | Sp   | U | g     |
|-----|-----|----|-----|----------------|-----|-----|-------|----|-----|----------------|------|---|-------|
| 2½" | 65  | 16 | 164 | 87             | 225 | 175 | 139.7 | 18 | 290 | 133            | 21   | 4 | 6610  |
| 3"  | 80  | 16 | 177 | 105            | 327 | 272 | 152.4 | 18 | 310 | 149            | 21.5 | 8 | 9330  |
| 4"  | 100 | 16 | 195 | 129            | 385 | 330 | 190.5 | 18 | 350 | 167            | 21.5 | 8 | 13815 |



## VKDBEV 2-way ball valve with PE100 SDR 11 male end connectors for butt welding or electrofusion (CVDE)

| d   | DN  | PN | B   | B <sub>1</sub> | C   | G   | E   | H   | H <sub>1</sub> | L  | Z   | g     |
|-----|-----|----|-----|----------------|-----|-----|-----|-----|----------------|----|-----|-------|
| 75  | 65  | 16 | 164 | 87             | 225 | 175 | 162 | 356 | 133            | 71 | 214 | 4400  |
| 90  | 80  | 16 | 177 | 105            | 327 | 272 | 202 | 390 | 149            | 88 | 214 | 7100  |
| 110 | 100 | 16 | 195 | 129            | 385 | 330 | 236 | 431 | 167            | 92 | 247 | 10800 |



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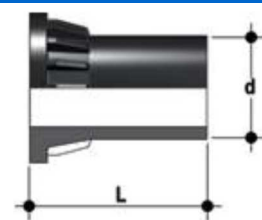
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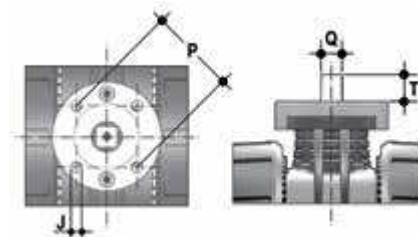
**CVDE** Long spigot PE100 end connectors for joints with electrofusion fittings or for butt welding

| d   | DN  | PN | L   | SDR |
|-----|-----|----|-----|-----|
| 75  | 65  | 16 | 111 | 11  |
| 90  | 80  | 16 | 118 | 11  |
| 110 | 100 | 16 | 132 | 11  |



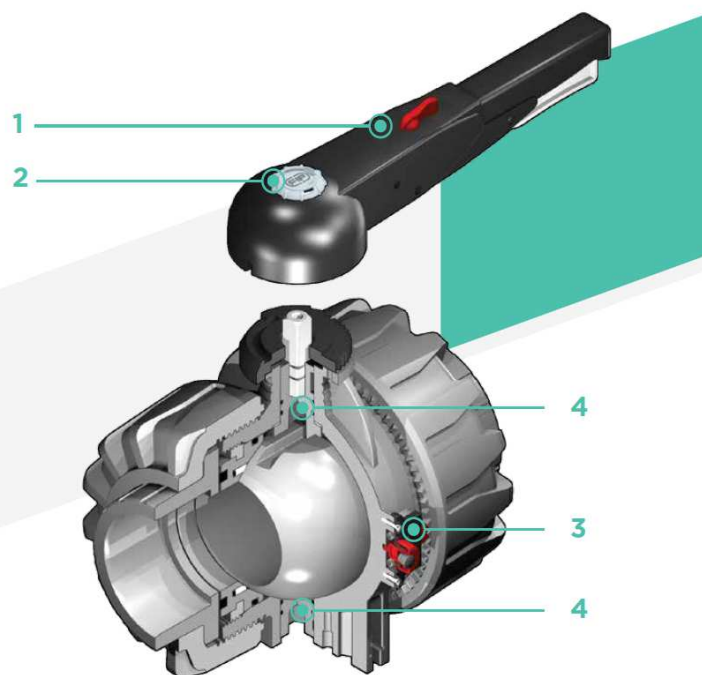
**ACTUATOR MOUNTING FLANGE** Actuator mounting kit for FIP VKD & TKD ball valves

| d   | DN  | PxJ     | T  | Q  |
|-----|-----|---------|----|----|
| 75  | 65  | F07 x 9 | 16 | 14 |
| 90  | 80  | F07 x 9 | 16 | 14 |
| 110 | 100 | F07 x 9 | 19 | 17 |



*The valve can be equipped with pneumatic or electric standard actuators and handwheel reduces for heavy-duty operations, using the PP-GR module reproducing the drilling pattern foreseen by ISO 5211 F07.*

## FEATURES



- 1** HIPVC ergonomic multifunctional handle for quick operation, **lock and graduated adjustment in 10 positions**. Possibility of inhibiting rotation with a lock
- 2** Customisable Labelling System: LCE module made of a transparent protection plug and **customisable tag holder** using the LSE set (available as accessory). The customisation lets you identify the valve on the system according to specific needs
- 3** **DUAL BLOCK®** patented lock system that ensures union nut tightening hold even in severe conditions such as vibrations or heat dilation
- 4** **Double stem** with double O-Rings for ball centring and operating torque reduction