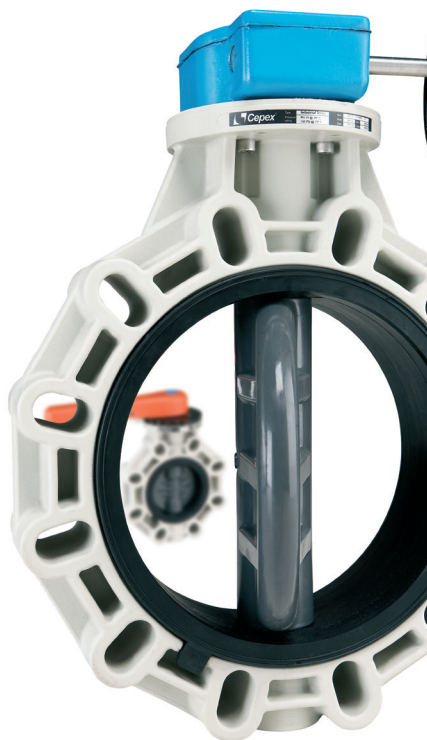


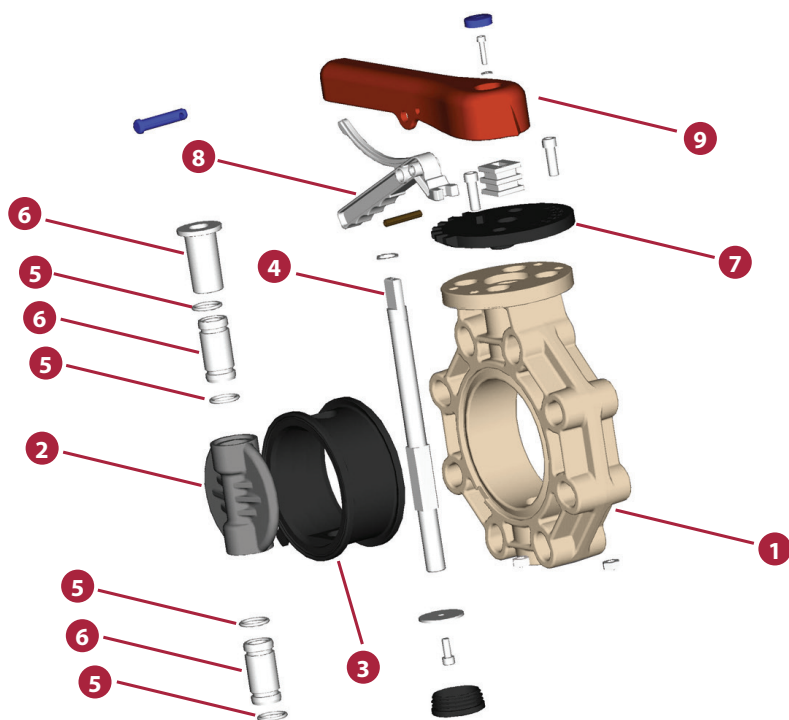
## PVC-U BUTTERFLY VALVES - INDUSTRIAL SERIES

### VÁLVULAS DE MARIPOSA PVC-U - SERIE INDUSTRIAL



|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sizes                        | D63 - D315 (DN50 - DN300)<br>2" - 12" (DN50 - DN300)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Standards                    | ISO/DIN,<br>British Standard,<br>ANSI/ASTM,<br>JIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | EN 558-1<br>BS EN 1092-1<br>ANSI B.16.5 class 150<br>JIS B 2220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Working pressure             | @ 20°C (73°F)<br><br>D63-D225 (2" - 8"): PN 10 (150 psi)<br>D250 - D315 (10" - 12"): PN 6 (90 psi)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Materials                    | Gasket: EPDM perox. / FPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Shaft: Stainless steel (AISI 630)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Characteristics              | <ul style="list-style-type: none"> <li>• <b>One piece PP - GR body.</b></li> <li>• <b>Disc available in different materials (PVC-U, PVC-C).</b></li> <li>• Ideally suited for flow control using minimal piping space.</li> <li>• 100% factory tested.</li> <li>• Minimal pressure drop.</li> <li>• Low maintenance.</li> <li>• Resistance to many inorganic chemicals.</li> <li>• Regulable opening every 15° with position holding.</li> <li>• Good mechanical strength.</li> <li>• Built in lockout feature to prevent undesired operations.</li> <li>• Electric and pneumatic actuators available, and with gear box.</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Cuerpo de una sola pieza en PP - GR.</b></li> <li>• <b>Compuerta disponible en diversos materiales (PVC-U, PVC-C).</b></li> <li>• Ideal para el control del fluido usando poco espacio.</li> <li>• Testadas al 100% en fábrica.</li> <li>• Mínima pérdida de carga.</li> <li>• Resistencia a múltiples sustancias químicas inorgánicas.</li> <li>• Apertura regulable cada 15° con fijación de posición.</li> <li>• Buena resistencia mecánica.</li> <li>• Seguro incorporado en la maneta para evitar operaciones no deseadas.</li> <li>• Motorizaciones eléctricas, neumáticas y reductor manual disponibles.</li> </ul> |
| Certifications / regulations | Butterfly valve design regulation - ISO 16136                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |





| FIG. | Parts               | Despiece                   | Material                 |
|------|---------------------|----------------------------|--------------------------|
| 1    | Body                | Cuerpo                     | PP - GR                  |
| 2    | Valve disc          | Compuerta                  | PVC-U                    |
| 3    | Rubber seal         | Junta compuerta            | EPDM perox. / FPM        |
| 4    | Shaft               | Eje                        | AISI 630 stainless steel |
| 5    | O-ring seal         | Junta eje                  | EPDM perox. / FPM        |
| 6    | Top bearing         | Casquillo guía             | PP - GR                  |
| 7    | Throttle plate      | Conjunto divisor           | PP - GR                  |
| 8    | Lever-lock          | Gatillo de la maneta       | POM                      |
| 9    | Handle              | Maneta                     | PP - GR                  |
| 10   | Gear box (optional) | Reductor manual (opcional) | Aluminium                |

#### GEAR BOX

It facilitates the maneuver of the valve by reducing the manual actuation torque by means of a handwheel, in addition to achieving greater precision in the case of regulation.  
Reduction: 40:1

#### MATERIALS

- Case: Aluminium
- Shaft: Stainless steel
- Handwheel: Stainless steel

Protection: IP65

#### REDUCTOR MANUAL

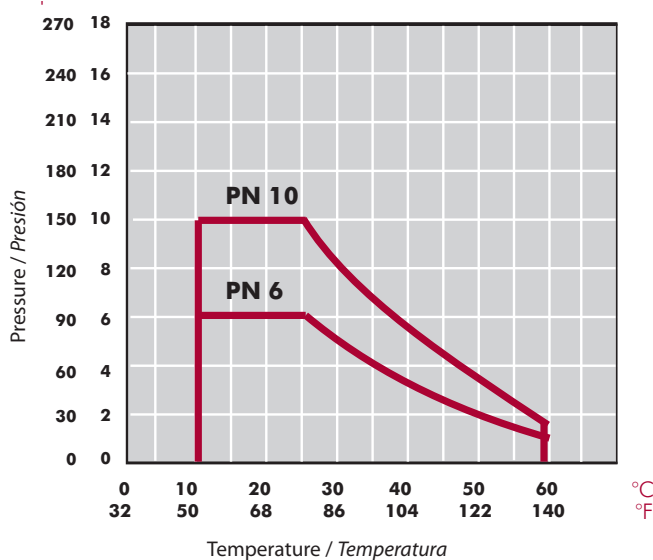
Facilita la maniobra de la válvula reduciendo el par de accionamiento manual mediante un volante, además de conseguir mayor precisión en caso de regulación.  
Reducción: 40:1

#### MATERIALES

- Carcasa: Aluminio
- Eje: Acero inoxidable
- Volante: Acero inoxidable

Protección: IP65

## PRESSURE / TEMPERATURE GRAPH DIAGRAMA PRESIÓN / TEMPERATURA



Life: 25 years

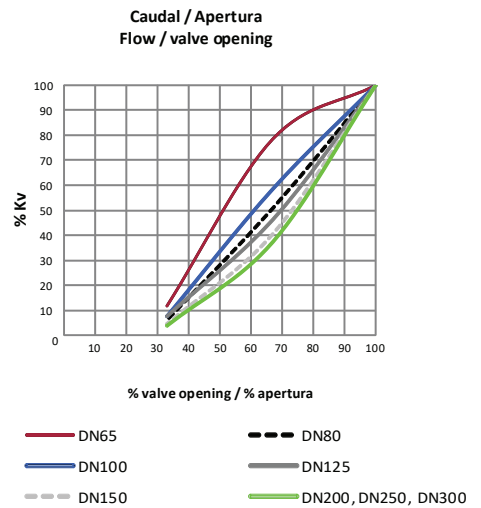
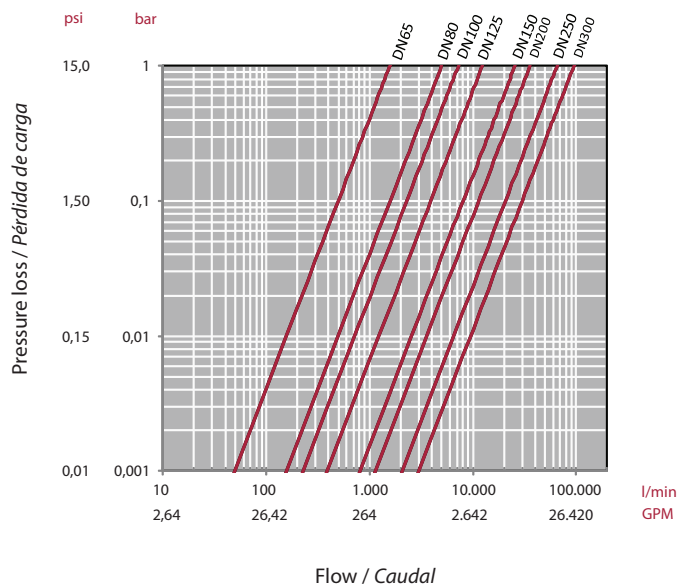
Hydrostatic maximum pressure a component may withstand in continuous service (without overpressure)

Vida útil: 25 años

Presión hidrostática máxima que un componente es capaz de soportar en servicio continuo (sin sobrepresión)

## PRESSURE LOSS DIAGRAM

## DIAGRAMA DE PÉRDIDAS DE CARGA



## RELATIVE FLOW

## FLUJO RELATIVO

| D     | 63-75<br>(2½") | 90 (3") | 110 (4") | 125-140<br>(5") | 160 (6") | 200-225<br>(8") | 250-280<br>(10") | 315 (12") |
|-------|----------------|---------|----------|-----------------|----------|-----------------|------------------|-----------|
| DN    | 50 - 65        | 80      | 100      | 125             | 150      | 200             | 250              | 300       |
| Kv100 | 1.568          | 4.980   | 7.212    | 12.320          | 25.447   | 35.778          | 65.222           | 94.660    |
| Cv    | 110            | 349     | 505      | 863             | 1.134    | 2.505           | 4.567            | 6.629     |

$$Cv = Kv_{100} / 14,28$$

$$Kv_{100} (l/min, \Delta p = 1 \text{ bar})$$

$$Cv (GPM, \Delta p = 1 \text{ psi})$$

## OPERATIONAL TORQUE CHART

## TABLA DE PAR DE MANIOBRA

| D       | 63-75 (2½") | 90 (3") | 110 (4") | 125-140 (5") | 160 (6") | 200-225 (8") | 250-280 (10") | 315 (12") |
|---------|-------------|---------|----------|--------------|----------|--------------|---------------|-----------|
| DN      | 50 - 65     | 80      | 100      | 125          | 150      | 200          | 250           | 300       |
| Nm      | 25          | 28      | 35       | 85           | 110      | 110          | 180           | 250       |
| lb*inch | 221         | 248     | 310      | 752          | 974      | 974          | 1593          | 2213      |

Operating torque values at rated pressure (PN) and 20 °C in as new direct from the factory condition. Installation and operating conditions (pressure and temperature) will affect these values. The actuator that is required for an automatic operation must be calculated according to some safety factors that were determined in life tests carried out in the factory.

Los valores de par de giro se determinan a presión nominal (PN) y a 20 °C, en condiciones de salida de fábrica. Las condiciones de instalación y operación (presión y temperatura) afectarán a estos valores. El actuador requerido para automatizar el giro debe ser calculado teniendo en cuenta ciertos coeficientes de seguridad que han sido determinados en pruebas de fatiga realizadas en fábrica.

## TIGHTENING TORQUE (INSTALLATION)

## PAR DE APRIETE (INSTALACIÓN)

| D          | 63-75 (2½") | 90 (3")   | 110 (4")  | 125-140 (5") | 160 (6")  | 200-225 (8") | 250-280 (10") | 315 (12")  |
|------------|-------------|-----------|-----------|--------------|-----------|--------------|---------------|------------|
| DN         | 50 - 65     | 80        | 100       | 125          | 150       | 200          | 250           | 300        |
| Screws     | 4xM16x120   | 8xM16x150 | 8xM16x160 | 8xM16x170    | 8xM20x200 | 8xM20x210    | 12xM20x270    | 12xM20x310 |
| (N-m)      | 25          | 25        | 30        | 35           | 40        | 50           | 80            | 80         |
| (inch-lbs) | 221         | 221       | 265       | 310          | 354       | 442          | 708           | 708        |

# DIMENSIONS

## DIMENSIONES

63 - 75

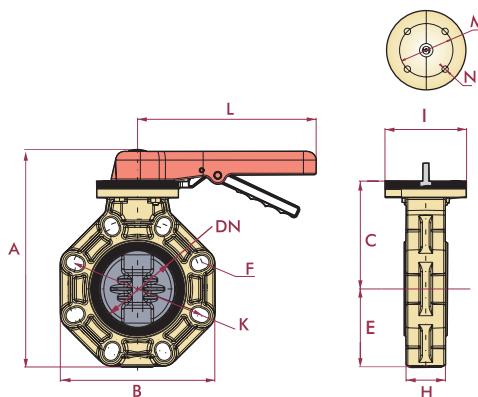
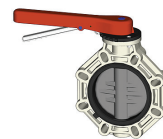
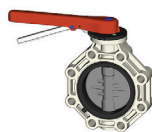
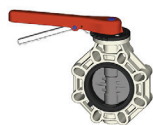
90

110

125 - 140

160

200 - 225



| D       | inch | DN      | A   | B   | C   | E   | F  | H  | I   | K       | L   | M   | N  | holes |
|---------|------|---------|-----|-----|-----|-----|----|----|-----|---------|-----|-----|----|-------|
| 63-75   | 2½"  | 50 - 65 | 241 | 156 | 120 | 81  | 18 | 45 | 112 | 125-145 | 220 | 70  | 9  | 4     |
| 90      | 3"   | 80      | 272 | 190 | 136 | 95  | 19 | 48 | 112 | 150-170 | 245 | 70  | 9  | 8     |
| 110     | 4"   | 100     | 294 | 212 | 148 | 106 | 19 | 54 | 112 | 180-192 | 245 | 70  | 9  | 8     |
| 125-140 | 5"   | 125     | 326 | 238 | 164 | 119 | 22 | 64 | 112 | 190-215 | 320 | 70  | 9  | 8     |
| 160     | 6"   | 150     | 355 | 265 | 180 | 133 | 24 | 70 | 112 | 240     | 320 | 70  | 9  | 8     |
| 200-225 | 8"   | 200     | 427 | 320 | 217 | 161 | 23 | 71 | 136 | 270-298 | 391 | 102 | 11 | 8     |

63 - 75

90

110

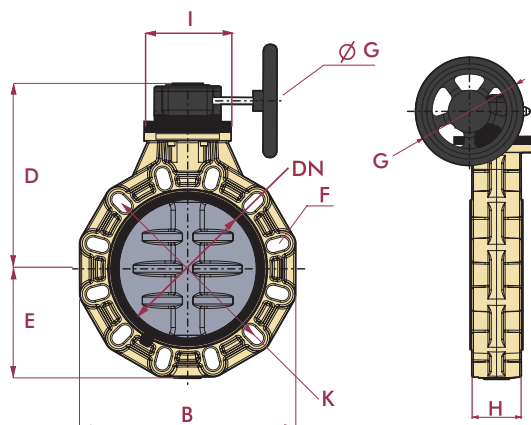
125 - 140

160

200 - 225

250 - 280

315



| D       | inch | DN      | B   | D   | E   | F  | G   | H   | K       | M   | N  | holes |
|---------|------|---------|-----|-----|-----|----|-----|-----|---------|-----|----|-------|
| 63-75   | 2½"  | 50 - 65 | 156 | 203 | 81  | 18 | 125 | 45  | 125-145 | 70  | 9  | 4     |
| 90      | 3"   | 80      | 190 | 220 | 95  | 19 | 125 | 48  | 150-170 | 70  | 9  | 8     |
| 110     | 4"   | 100     | 212 | 231 | 106 | 19 | 125 | 54  | 180-192 | 70  | 9  | 8     |
| 125-140 | 5"   | 125     | 238 | 254 | 119 | 22 | 160 | 64  | 190-215 | 70  | 9  | 8     |
| 160     | 6"   | 150     | 265 | 270 | 133 | 24 | 160 | 70  | 240     | 70  | 9  | 8     |
| 200-225 | 8"   | 200     | 320 | 320 | 161 | 23 | 160 | 71  | 270-298 | 102 | 11 | 8     |
| 250-280 | 10"  | 250     | 392 | 402 | 199 | 24 | 200 | 112 | 329-355 | -   | -  | 12    |
| 315     | 12"  | 300     | 470 | 421 | 238 | 28 | 200 | 114 | 384-427 | -   | -  | 12    |

## UP. 84. SS. FGEP - INDUSTRIAL BUTTERFLY VALVES

### Butterfly valve

- PP - GR body
- Blue dot
- Joints in EPDM perox.
- Stainless steel shaft (AISI 630)
- Disc in PVC-U
- PP-GR handle



### Válvula de mariposa

- Cuerpo en PP - GR
- Distintivo azul
- Juntas EPDM perox.
- Eje en acero inoxidable (AISI 630)
- Compuerta de PVC-U
- Maneta en PP-GR

| D         | DN      | PN | REF.      | CODE         |
|-----------|---------|----|-----------|--------------|
| 63 - 75   | 50 - 65 | 10 | 05 84 075 | <b>32620</b> |
| 90        | 80      | 10 | 05 84 090 | <b>32621</b> |
| 110       | 100     | 10 | 05 84 110 | <b>32622</b> |
| 125 - 140 | 125     | 10 | 05 84 140 | <b>32623</b> |
| 160       | 150     | 10 | 05 84 160 | <b>32624</b> |
| 200 - 225 | 200     | 10 | 05 84 200 | <b>32625</b> |

## UP. 84. SS. VI - INDUSTRIAL BUTTERFLY VALVES

### Butterfly valve

- PP - GR body
- Green dot
- Joints in FPM
- Stainless steel shaft (AISI 630)
- Disc in PVC-U
- PP-GR handle



### Válvula de mariposa

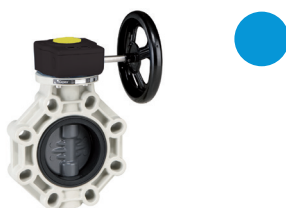
- Cuerpo en PP - GR
- Distintivo verde
- Juntas FPM
- Eje en acero inoxidable (AISI 630)
- Compuerta de PVC-U
- Maneta en PP-GR

| D         | DN      | PN | REF.         | CODE         |
|-----------|---------|----|--------------|--------------|
| 63 - 75   | 50 - 65 | 10 | 05 84 075 VI | <b>32628</b> |
| 90        | 80      | 10 | 05 84 090 VI | <b>32629</b> |
| 110       | 100     | 10 | 05 84 110 VI | <b>32630</b> |
| 125 - 140 | 125     | 10 | 05 84 140 VI | <b>32631</b> |
| 160       | 150     | 10 | 05 84 160 VI | <b>32632</b> |
| 200 - 225 | 200     | 10 | 05 84 200 VI | <b>32633</b> |

## UP. 84. SS. FGEP. RM - INDUSTRIAL BUTTERFLY VALVES

### Butterfly valve

- PP - GR body
- Joints in EPDM perox.
- Stainless steel shaft (AISI 630)
- Disc in PVC-U
- Gear box



### Válvula de mariposa

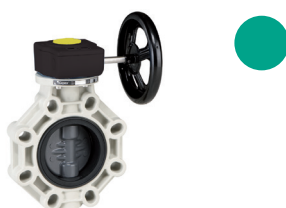
- Cuerpo en PP - GR
- Juntas EPDM perox.
- Eje en acero inoxidable (AISI 630)
- Compuerta de PVC-U
- Reductor manual

| D         | DN      | PN | REF.         | CODE         |
|-----------|---------|----|--------------|--------------|
| 63 - 75   | 50 - 65 | 10 | 05 84 075 RM | <b>34466</b> |
| 90        | 80      | 10 | 05 84 090 RM | <b>34467</b> |
| 110       | 100     | 10 | 05 84 110 RM | <b>34468</b> |
| 125 - 140 | 125     | 10 | 05 84 140 RM | <b>34469</b> |
| 160       | 150     | 10 | 05 84 160 RM | <b>34470</b> |
| 200 - 225 | 200     | 10 | 05 84 200 RM | <b>34471</b> |
| 250 - 280 | 250     | 6  | 05 84 250 RM | <b>34472</b> |
| 315       | 300     | 6  | 05 84 315 RM | <b>32738</b> |

## UP. 84. SS. VI. RM - INDUSTRIAL BUTTERFLY VALVES

### Butterfly valve

- PP - GR body
- Joints in FPM
- Stainless steel shaft (AISI 630)
- Disc in PVC-U
- Gear box



### Válvula de mariposa

- Cuerpo en PP - GR
- Juntas FPM
- Eje en acero inoxidable (AISI 630)
- Compuerta de PVC-U
- Reductor manual

| D         | DN      | PN. | REF.          | CODE         |
|-----------|---------|-----|---------------|--------------|
| 63 - 75   | 50 - 65 | 10  | 05 84 075 VRM | <b>34473</b> |
| 90        | 80      | 10  | 05 84 090 VRM | <b>34474</b> |
| 110       | 100     | 10  | 05 84 110 VRM | <b>34475</b> |
| 125 - 140 | 125     | 10  | 05 84 140 VRM | <b>34476</b> |
| 160       | 150     | 10  | 05 84 160 VRM | <b>34477</b> |
| 200 - 225 | 200     | 10  | 05 84 200 VRM | <b>34478</b> |
| 250 - 280 | 250     | 6   | 05 84 250 VRM | <b>34479</b> |
| 315       | 300     | 6   | 05 84 315 VRM | <b>32739</b> |

## COMPOSITION OF BUTTERFLY VALVE SET

Butterfly valve + Kit (movable flange or fixed flange)

## COMPOSICIÓN DEL CONJUNTO VÁLVULA DE MARIPOSA

Válvula de mariposa + Kit accesorios (brida móvil o brida fija)

|            |          |         | Fig. 81                                                                           |              | Fig. 82                                                                             |              |
|------------|----------|---------|-----------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|--------------|
|            |          |         |  |              |  |              |
| Industrial | Standard | Classic | Loose flange<br>Brida móvil                                                       |              | Fix flange<br>Brida fija                                                            |              |
|            |          |         | REF.                                                                              | CODE         | REF.                                                                                | CODE         |
| D63        | D63      | D63     | 05 81 063 RA                                                                      | <b>09119</b> | -                                                                                   | -            |
| D75        | D75      | D75     | 05 81 075 RA                                                                      | <b>09120</b> | 05 82 075 RA                                                                        | <b>09128</b> |
| D90        | D90      | D90     | 05 81 090 RA                                                                      | <b>09121</b> | 05 82 090 RA                                                                        | <b>09129</b> |
| D110       | D110     | D110    | 05 81 110 RA                                                                      | <b>09122</b> | 05 82 110 RA                                                                        | <b>09130</b> |
| D125       | D125     | D125    | 05 81 125 RA                                                                      | <b>09123</b> | 05 82 125 RA                                                                        | <b>09131</b> |
| D140       | D140     | D140    | 05 81 140 RA                                                                      | <b>09124</b> | 05 82 140 RA                                                                        | <b>09132</b> |
| D160       | D160     | D160    | 05 81 160 RA                                                                      | <b>09125</b> | 05 82 160 RA                                                                        | <b>09133</b> |
| D200       | D200     | D200    | 05 81 200 RA                                                                      | <b>09126</b> | 05 82 200 RA                                                                        | <b>09134</b> |
| D225       | D225     | D225    | 05 81 225 RA                                                                      | <b>09127</b> | 05 82 225 RA                                                                        | <b>09135</b> |
| D250       |          | D250    | 05 81 250 RA                                                                      | <b>16060</b> | -                                                                                   | -            |
| D315       |          |         | *                                                                                 | *            | -                                                                                   | -            |

\* For the D315 industrial butterfly valve, there's no exist a kit for the flange mounting; the flanges, the bolts and the union nuts must be acquire separately, could find it in the PVC fittings section of this catalogue.

\* Para la válvula de mariposa industrial D315, no existe un kit de montaje con bridas, deben adquirirse por separado bridas, manguitos y tornillería que podrán encontrarse en la sección de accesorios en PVC.

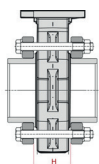
## UP. 81. RA - FLANGE KIT

### Butterfly valve kit

- Loose flange

### Kit accesorios para válvula de mariposa

- Manguito portabridas + brida móvil



| D   | DN  | REF.         | CODE         |
|-----|-----|--------------|--------------|
| 63  | 50  | 05 81 063 RA | <b>09119</b> |
| 75  | 65  | 05 81 075 RA | <b>09120</b> |
| 90  | 80  | 05 81 090 RA | <b>09121</b> |
| 110 | 100 | 05 81 110 RA | <b>09122</b> |
| 125 | 110 | 05 81 125 RA | <b>09123</b> |
| 140 | 125 | 05 81 140 RA | <b>09124</b> |
| 160 | 150 | 05 81 160 RA | <b>09125</b> |
| 200 | 175 | 05 81 200 RA | <b>09126</b> |
| 225 | 200 | 05 81 225 RA | <b>09127</b> |
| 250 | 225 | 05 81 250 RA | <b>16060</b> |
| 315 | 300 |              |              |

| H (Industrial) | H (Standard) | H (Classic) |
|----------------|--------------|-------------|
| 54             | 54           | 54          |
| 54             | 54           | 54          |
| 62             | 62           | 63          |
| 69             | 69           | 70          |
| 76             | 76           | 76          |
| 76             | 76           | 76          |
| 82             | 82           | 82          |
| 85             | 85           | 85          |
| 85             | 85           | 85          |
| 130            | 130          | 124         |
| 130            | 130          |             |

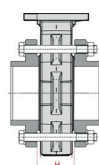
## UP. 82. RA - FLANGE KIT

### Butterfly valve kit

- Fixed flange

### Kit accesorios para válvula de mariposa

- Brida fija



| D   | DN  | REF.         | CODE         |
|-----|-----|--------------|--------------|
| 63  | 50  |              |              |
| 75  | 65  | 05 82 075 RA | <b>09128</b> |
| 90  | 80  | 05 82 090 RA | <b>09129</b> |
| 110 | 100 | 05 82 110 RA | <b>09130</b> |
| 125 | 110 | 05 82 125 RA | <b>09131</b> |
| 140 | 125 | 05 82 140 RA | <b>09132</b> |
| 160 | 150 | 05 82 160 RA | <b>09133</b> |
| 200 | 175 | 05 82 200 RA | <b>09134</b> |
| 225 | 200 | 05 82 225 RA | <b>09135</b> |

| H (Industrial) | H (Standard) | H (Classic) |
|----------------|--------------|-------------|
| 56             | 56           | 56          |
| 54             | 54           | 54          |
| 62             | 62           | 63          |
| 69             | 69           | 70          |
| 76             | 76           | 76          |
| 76             | 76           | 76          |
| 82             | 82           | 82          |
| 85             | 85           | 85          |
| 85             | 85           | 85          |