

## ARTICULO: 2108

### Válvula de mariposa tipo LUG

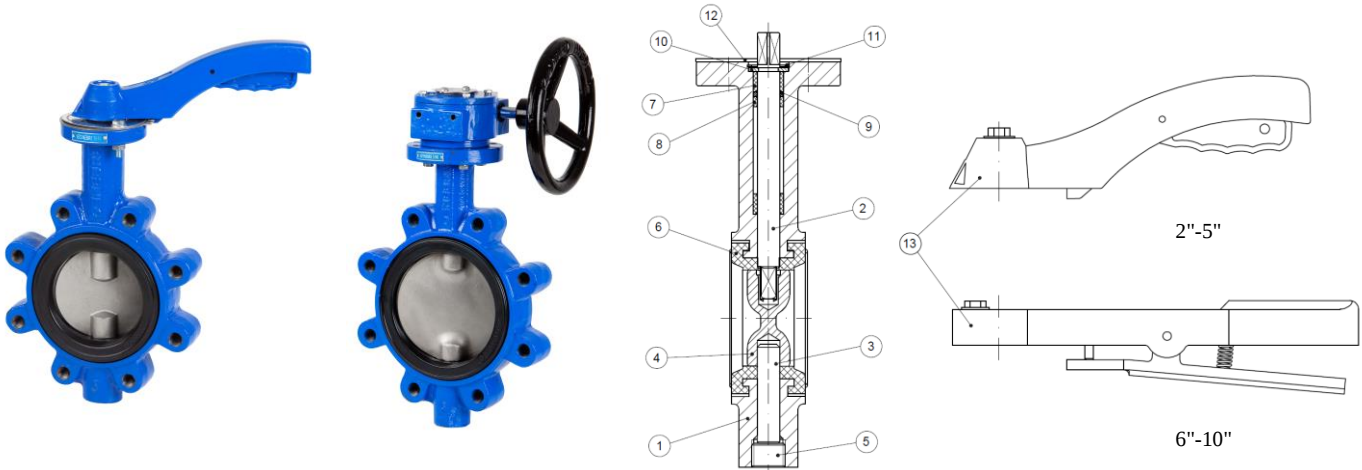
### Butterfly valve LUG type

#### Características

1. Válvula de mariposa tipo Lug.
2. Cuerpo de Fundición Nodular EN-GJS-400 (GGG-40) para montaje entre bridas EN 1092 PN 10/16.
3. Elastómero de EPDM.
4. Disco de Acero Inoxidable 1.4408 (CF8M).
5. Brida montaje actuadores según ISO 5211.
6. Longitud entre caras según EN 558-1 Serie 20 (DIN 3202 K1).
7. Pintado con pintura Epoxi.
8. Máxima presión de trabajo:  
16 bar (medidas DN50 a DN150)  
10 bar (medidas DN200 a DN300)
9. Temperatura de trabajo -20°C +120 °C.

#### Features

1. Butterfly valve Lug type.
2. Ductile Iron EN-GJS-400 (GGG-40) body allows installation between EN 1092 PN 10/16 flanges.
3. EPDM body seat.
4. Disc made of Stainless Steel 1.4408 (CF8M).
5. Actuator mounting plate according to ISO 5211.
6. Face to face according to EN 558-1 Series 20 (DIN 3202 K1).
7. Epoxy painted.
8. Maximum working pressure:  
16 bar (sizes DN50 to DN150)  
10 bar (sizes DN200 to DN300)
9. Working Temperature -20°C +120 °C.



| N. | Denominación / Name   | Material                                                                                      | Acabado Superficial / Surface Treatment | Cód. Recambio Spare Part Code |
|----|-----------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------|
| 1  | Cuerpo / Body         | Fundición nod. / Ductile Iron EN-GJS-400                                                      | Pintado Epoxi / Epoxy Painted           | -----                         |
| 2  | Eje / Stem            | Acero Inox. / Stainless Steel AISI 416                                                        | -----                                   | -----                         |
| 3  | Pivote / Pivot        | Acero Inox. / Stainless Steel AISI 416                                                        | -----                                   | -----                         |
| 4  | Disco / Disc          | Acero Inox. / Stainless Steel 1.4408                                                          | Granallado / Shot blasting              | -----                         |
| 5  | Tapón / Plug          | Acero Carbono / Carbon Steel                                                                  | Cincado / Zinc Plated                   | -----                         |
| 6* | Elastómero / Seat     | EPDM                                                                                          | -----                                   | E2109                         |
| 7  | Casquillo / Bush      | PTFE + Grafito / Graphite                                                                     | -----                                   | -----                         |
| 8  | Casquillo / Bush      | PTFE + Grafito / Graphite                                                                     | -----                                   | -----                         |
| 9  | Tórica / O' ring      | NBR                                                                                           | -----                                   | -----                         |
| 10 | Arandela / Washer     | Acero Carbono / Carbon Steel                                                                  | Cincado / Zinc Plated                   | -----                         |
| 11 | Seguro / Stop Ring    | Acero Carbono / Carbon Steel                                                                  | Cincado / Zinc Plated                   | -----                         |
| 12 | Placa dentada / Plate | Acero Carbono / Carbon Steel                                                                  | Cincado / Zinc Plated                   | -----                         |
| 13 | Palanca / Handle      | Aluminio 2"-5" o Fundición EN-GJL-200 6"-10" / Aluminium 2"-5" or Cast iron EN-GJL-200 6"-10" | Pintado Epoxi / Epoxy Painted           | -----                         |

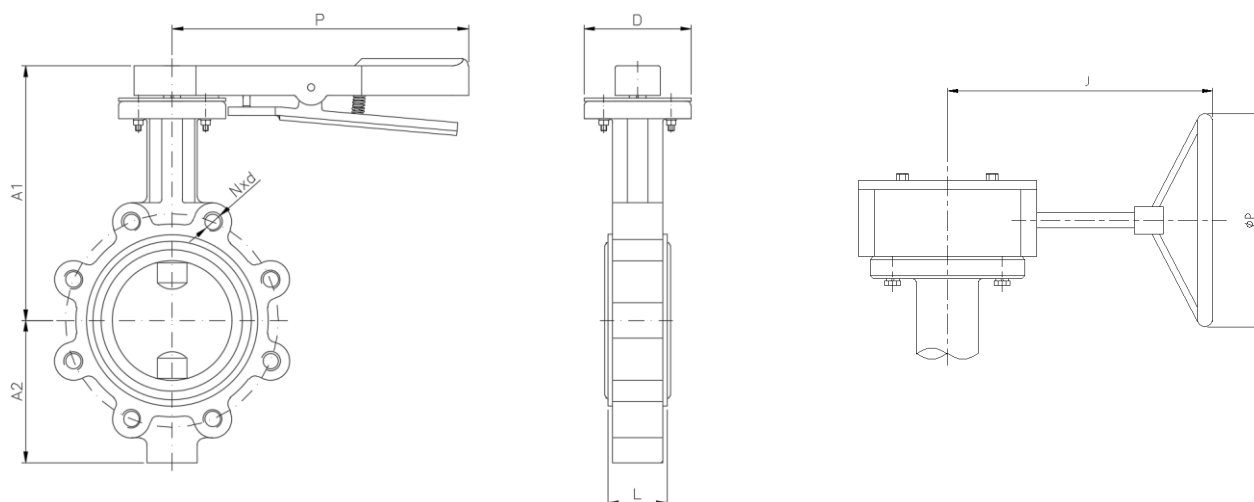
\* Piezas de recambio disponibles / Available spare parts

## DIMENSIONES GENERALES / GENERAL DIMENSIONS

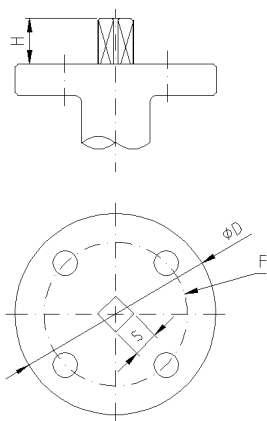
| Ref     | DN  | L  | Dimensiones / Dimensions (mm) |     |     |     |      |          | Peso / Weight (kg) |
|---------|-----|----|-------------------------------|-----|-----|-----|------|----------|--------------------|
|         |     |    | A1                            | A2  | D   | P   | J    | N x d    |                    |
| 2108 09 | 50  | 43 | 240                           | 79  | 90  | 216 | **** | 4 x M16  | 4,200              |
| 2108 10 | 65  | 46 | 240                           | 93  | 90  | 216 | **** | 4 x M16  | 4,800              |
| 2108 11 | 80  | 46 | 245                           | 103 | 90  | 216 | **** | 8 x M16  | 6,000              |
| 2108 12 | 100 | 52 | 265                           | 120 | 90  | 216 | **** | 8 x M16  | 8,100              |
| 2108 13 | 125 | 56 | 290                           | 133 | 90  | 216 | **** | 8 x M16  | 9,800              |
| 2108 14 | 150 | 56 | 240                           | 158 | 125 | 300 | **** | 8 x M20  | 13,000             |
| 2108 16 | 200 | 60 | 280                           | 180 | 125 | 300 | **** | 8 x M20  | 17,500             |
| 2108 18 | 250 | 68 | 325                           | 216 | 125 | 300 | **** | 12 x M20 | 28,500             |
| 2108 20 | 300 | 78 | 351                           | 251 | 150 | 290 | 240  | 12 x M20 | 49,600             |

\*\*\* Nota: la medida 12" (DN 300) operación mediante reductor manual

\*\*\* Note: size 12" (DN300) handling by gear operator



## Dimensiones de brida superior / Top flange dimensions:



| Dimensiones Brida Superior / Top Flange Dimensions |     |              |      |      |      |            |
|----------------------------------------------------|-----|--------------|------|------|------|------------|
| Ref.                                               | DN  | F (ISO 5211) | S mm | D mm | H mm | Torque N·m |
| 2108 09                                            | 50  | F07          | 11   | 90   | 16   | 12         |
| 2108 10                                            | 65  | F07          | 11   | 90   | 16   | 20         |
| 2108 11                                            | 80  | F07          | 11   | 90   | 16   | 27         |
| 2108 12                                            | 100 | F07          | 14   | 90   | 16   | 40         |
| 2108 13                                            | 125 | F07          | 14   | 90   | 16   | 60         |
| 2108 14                                            | 150 | F07 – F10    | 17   | 125  | 30   | 90         |
| 2108 16                                            | 200 | F07 – F10    | 17   | 125  | 30   | 130        |
| 2108 18                                            | 250 | F10          | 22   | 125  | 40   | 180        |
| 2108 20                                            | 300 | F10 – F12    | 22   | 150  | 40   | 270        |



**Pérdidas de Carga ( Kv ) según posición del disco / Head losses according to disc position:**

| DN  | Posición del Disco (grados) / Disc Position (degrees) |      |      |      |      |     |     |     |     |
|-----|-------------------------------------------------------|------|------|------|------|-----|-----|-----|-----|
|     | 90°                                                   | 80°  | 70°  | 60°  | 50°  | 40° | 30° | 20° | 10° |
| 50  | 125                                                   | 99   | 73   | 53   | 37   | 23  | 14  | 6   | 0,9 |
| 65  | 244                                                   | 193  | 141  | 93   | 58   | 37  | 21  | 10  | 1,3 |
| 80  | 399                                                   | 315  | 231  | 133  | 83   | 53  | 30  | 13  | 1,7 |
| 100 | 727                                                   | 606  | 429  | 237  | 148  | 94  | 54  | 23  | 2,6 |
| 125 | 1190                                                  | 991  | 670  | 370  | 232  | 147 | 85  | 37  | 4   |
| 150 | 1600                                                  | 1334 | 887  | 490  | 306  | 195 | 112 | 48  | 5   |
| 200 | 2868                                                  | 2458 | 1611 | 935  | 588  | 364 | 208 | 88  | 10  |
| 250 | 4697                                                  | 3914 | 2550 | 1479 | 931  | 577 | 330 | 140 | 16  |
| 300 | 6987                                                  | 5822 | 3800 | 2217 | 1379 | 869 | 480 | 203 | 23  |

**VALORES DE Kv / Kv VALUES**

Kv = Es la cantidad de metros cúbicos por hora (m<sup>3</sup>/h) que pasará a través de la válvula generando una pérdida de carga de 1 bar.

*Kv = Flow rate of water in cubic meter per hour (m<sup>3</sup>/h) that will generate a pressure drop of 1 bar across the valve.*

**VALORES DE Cv / Cv VALUES**

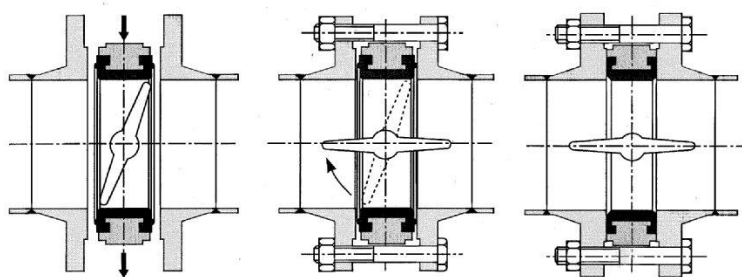
Cv = Es la cantidad de galones por minuto (gpm) que pasará a través de la válvula generando una pérdida de carga de 1 psi.

*Cv = Flow rate of water (g.p.m.) which generates a pressure drop of 1 psi across the valve.*

$$Cv = 1,156 \cdot Kv$$

**Medidas de Precaución para instalación / Caution measures for Installation:**

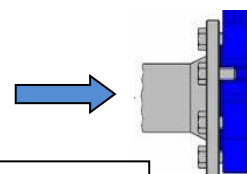
1. No instale la válvula en posición totalmente cerrada / *Do not assemble the butterfly valve in total closed position.*
2. Verifique el buen paralelismo de las bridas / *Check the good parallelism of the flanges.*
3. No coloque otras juntas entre las bridas / *Do not insert other gaskets between flange and valve.*



4. Si la válvula va a ser instalada al final de la tubería, la presión máxima de trabajo es: / *If the valve is installed at the end of the pipe, the maximum working pressure is:*

DN50 a / to DN150 .....  $16 \text{ bar} \times 0.4 = 6,4 \text{ bar}$

DN200 a / to DN300 ....  $10 \text{ bar} \times 0.4 = 4,0 \text{ bar}$



Sentido de fluido /  
Flow direction

## CURVA PRESIÓN TEMPERATURA / *PRESSURE TEMPERATURE RATING*

