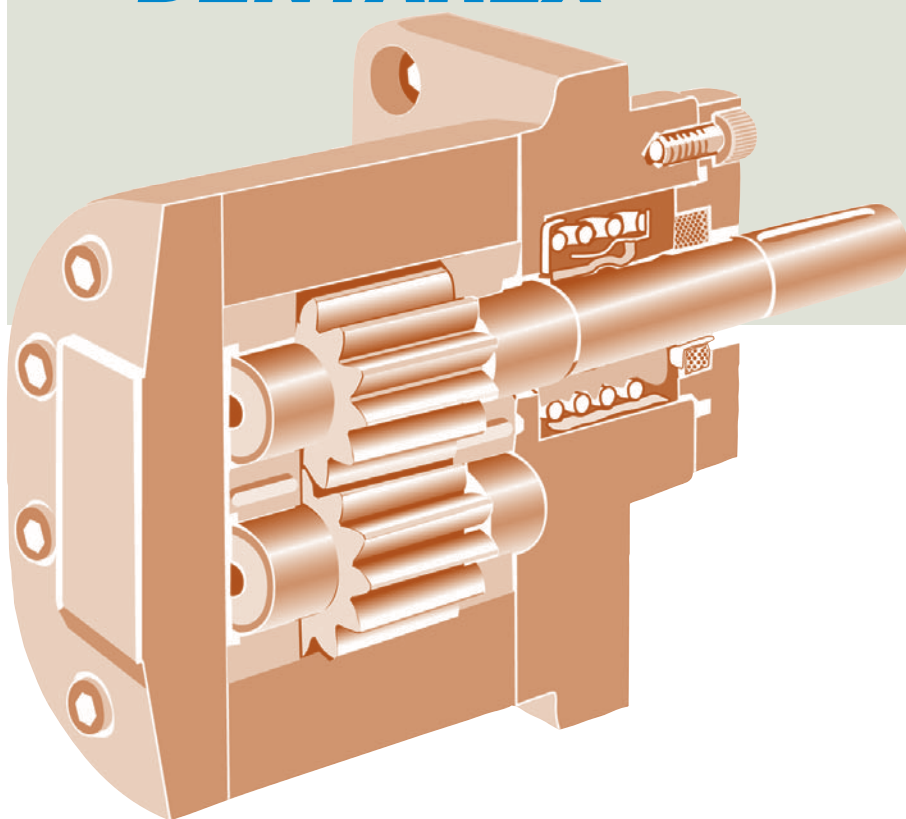


# Bombas a engranaje **DENTAREX®**



## Descripción técnica

Las bombas a engranaje **DENTAREX®** del tipo BZEB son bombas rotativas de desplazamiento positivo, con cojinetes de apoyo interno deslizantes o de rodamiento según necesidad de aplicación y presión de trabajo. Las mismas son de construcción robusta y de alto rendimiento para sistemas hidráulicos de lubricación, calefacción, frío, sellado y trasvasamiento.

## Aplicación

Las bombas **DENTAREX®** se aplican con alta eficiencia para el desplazamiento de: aceites minerales, servo fluidos, aceites siliconados, fuel oil, aceites de temple, iso-cianatos, pinturas, lacas, melazas, viscosos, etc. En general se desplazan fluidos con viscosidades dinámicas de 1 cSt hasta 10<sup>5</sup> cSt, observando la regla general de funcionamiento: a mayor viscosidad menor número de revoluciones.

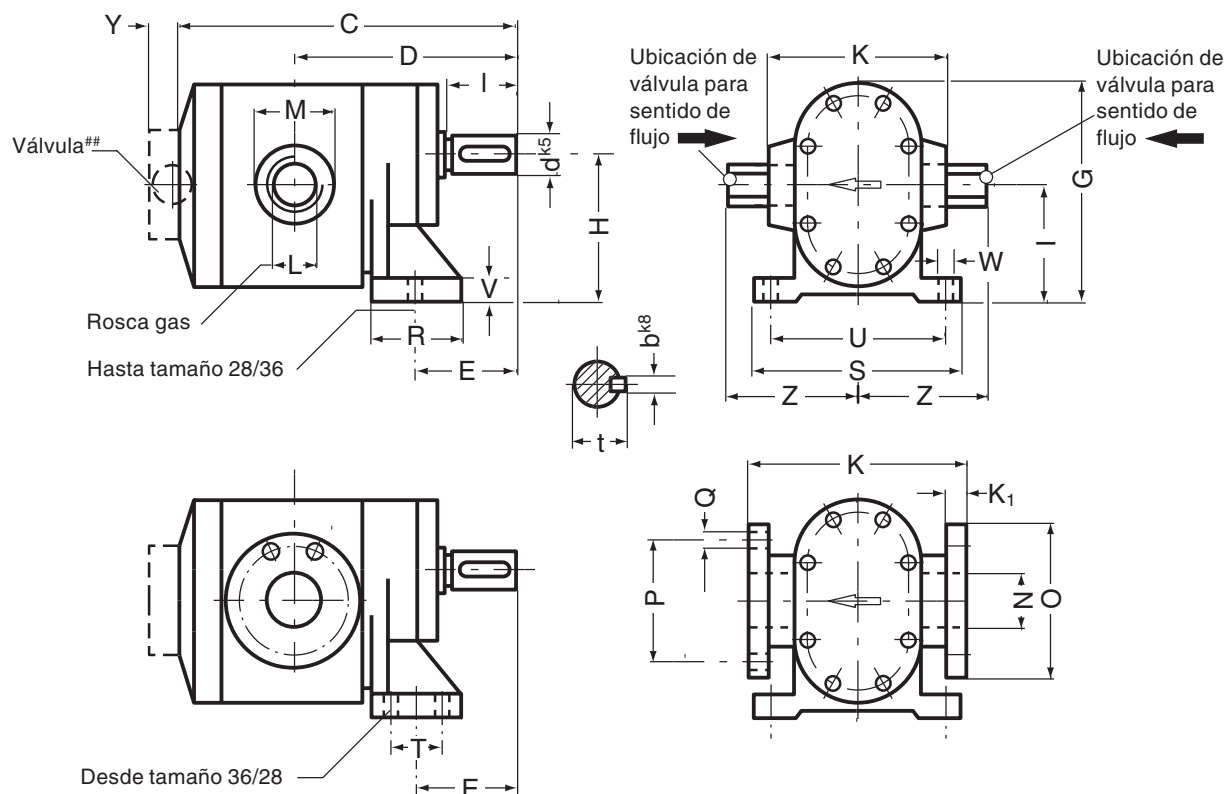
## Materiales constructivos

Los materiales se especifican acordes al medio a elevar. Siendo su carcasa básicamente de fundición gris y su engranaje de acero, pueden realizarse en los más diversos materiales y ejecuciones, en función del fluido a desplazar y su presión de trabajo.

El eje de accionamiento, según aplicación de la bomba, va provisto o no de un retén deslizante, simple o doble o sello mecánico de variadas características.

## Atributos relevantes

- Bomba autocebante, con buenas cualidades de succión.
- Amplia gama de caudales y presiones.
- Amplia gama de fluidos y viscosidades.
- Diseño robusto y compacto, de fácil instalación y mantenimiento.
- Desgaste reducido, larga vida útil.



| Tamaño   | Dimensiones |       |       |     |     |      |     |                | Conexión rosca-brida |    |     |     |     |    | Eje |     |    |      | Pie |     |     |     |    |    | Válvula |     |
|----------|-------------|-------|-------|-----|-----|------|-----|----------------|----------------------|----|-----|-----|-----|----|-----|-----|----|------|-----|-----|-----|-----|----|----|---------|-----|
|          | C           | D     | E     | G   | H   | I    | K   | K <sub>1</sub> | L                    | M  | N   | O   | P   | Q  | d   | l   | b  | t    | R   | S   | T   | U   | V  | W  | Y       | Z   |
| 22/6     | 90          | 59    | 19    | 91  | 62  | 51   | 64  | -              | 3/8"                 | 30 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 40  | 100 | -   | 75  | 12 | 11 | 17      | 53  |
| 22/18    | 102         | 65    | 19    | 91  | 62  | 51   | 64  | -              | 3/8"                 | 30 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 40  | 100 | -   | 75  | 12 | 11 | 17      | 53  |
| 22/22    | 106         | 67    | 19    | 91  | 62  | 51   | 64  | -              | 3/8"                 | 30 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 40  | 100 | -   | 75  | 12 | 11 | 17      | 53  |
| 22/28    | 112         | 70    | 19    | 91  | 62  | 51   | 64  | -              | 3/8"                 | 30 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 40  | 100 | -   | 75  | 12 | 11 | 17      | 53  |
| 28/22    | 153         | 110   | 58    | 106 | 70  | 56   | 80  | -              | 1/2"                 | 38 | -   | -   | -   | -  | 16  | 35  | 5  | 18   | 44  | 120 | -   | 95  | 12 | 11 | 31      | 73  |
| 28/28    | 159         | 113   | 58    | 106 | 70  | 56   | 80  | -              | 1/2"                 | 38 | -   | -   | -   | -  | 16  | 35  | 5  | 18   | 44  | 120 | -   | 95  | 12 | 11 | 31      | 73  |
| 28/36    | 167         | 117   | 58    | 106 | 70  | 56   | 80  | -              | 1/2"                 | 38 | -   | -   | -   | -  | 16  | 35  | 5  | 18   | 44  | 120 | -   | 95  | 12 | 11 | 31      | 73  |
| 36/28    | 194         | 138   | 69.5  | 125 | 85  | 67   | 100 | -              | 3/4"                 | 50 | -   | -   | -   | -  | 19  | 40  | 6  | 21.5 | 60  | 130 | 35  | 105 | 14 | 11 | 32      | 108 |
| 36/36    | 202         | 142   | 69.5  | 125 | 85  | 67   | 100 | -              | 3/4"                 | 50 | -   | -   | -   | -  | 19  | 40  | 6  | 21.5 | 60  | 130 | 35  | 105 | 14 | 11 | 32      | 108 |
| 36/45    | 211         | 146.5 | 69.5  | 125 | 85  | 67   | 100 | -              | 3/4"                 | 50 | -   | -   | -   | -  | 19  | 40  | 6  | 21.5 | 60  | 130 | 35  | 105 | 14 | 11 | 32      | 108 |
| 45/36    | 224         | 155   | 70    | 153 | 105 | 82.5 | 120 | -              | 1"                   | 65 | -   | -   | -   | -  | 24  | 50  | 8  | 27   | 75  | 150 | 45  | 120 | 18 | 14 | 36      | 88  |
| 45/45    | 233         | 159.5 | 70    | 153 | 105 | 82.5 | 120 | -              | 1"                   | 65 | -   | -   | -   | -  | 24  | 50  | 8  | 27   | 75  | 150 | 45  | 120 | 18 | 14 | 36      | 88  |
| 45/56    | 244         | 165   | 70    | 153 | 105 | 82.5 | 120 | -              | 1 1/4"               | 65 | -   | -   | -   | -  | 24  | 50  | 8  | 27   | 75  | 150 | 45  | 120 | 18 | 14 | 36      | 88  |
| 56/45    | 299         | 214.5 | 115.5 | 189 | 130 | 102  | 150 | -              | 1 1/4"               | 85 | -   | -   | -   | -  | 32  | 80  | 10 | 35.5 | 85  | 175 | 55  | 145 | 20 | 14 | 45      | 103 |
| 56/56    | 310         | 220   | 115.5 | 189 | 130 | 102  | 150 | -              | 1 1/2"               | 85 | -   | -   | -   | -  | 32  | 80  | 10 | 35.5 | 85  | 175 | 55  | 145 | 20 | 14 | 45      | 103 |
| 56/70    | 324         | 227   | 115.5 | 189 | 130 | 102  | 150 | -              | 1 1/2"               | 85 | -   | -   | -   | -  | 32  | 80  | 10 | 35.5 | 85  | 175 | 55  | 145 | 20 | 14 | 45      | 10  |
| 70/56*   | 327         | 225   | 99.5  | 235 | 160 | 125  | 250 | 20             | -                    | -  | 50  | 150 | 110 | 18 | 38  | 80  | 10 | 41.5 | 105 | 230 | 65  | 190 | 25 | 17 | 81      | 167 |
| 70/70    | 341         | 232   | 99.5  | 235 | 160 | 125  | 250 | 20             | -                    | -  | 52  | 150 | 110 | 18 | 38  | 80  | 10 | 41.5 | 105 | 230 | 65  | 190 | 25 | 17 | 81      | 167 |
| 70/90    | 361         | 242   | 99.5  | 235 | 160 | 125  | 250 | 20             | -                    | -  | 65  | 165 | 125 | 18 | 38  | 80  | 10 | 41.5 | 105 | 230 | 65  | 190 | 25 | 17 | 81      | 167 |
| 90/70    | 410         | 285   | 132   | 295 | 200 | 155  | 320 | 25             | -                    | -  | 50  | 165 | 125 | 18 | 48  | 110 | 14 | 52   | 130 | 280 | 80  | 230 | 28 | 21 | 108     | 203 |
| 90/90**  | 430         | 295   | 132   | 295 | 200 | 155  | 320 | 25             | -                    | -  | 65  | 185 | 145 | 18 | 48  | 110 | 14 | 52   | 130 | 280 | 80  | 230 | 28 | 21 | 108     | 203 |
| 90/110   | 450         | 305   | 132   | 295 | 200 | 155  | 320 | 25             | -                    | -  | 80  | 200 | 160 | 18 | 48  | 110 | 14 | 52   | 130 | 280 | 80  | 230 | 28 | 21 | 108     | 203 |
| 110/90   | 495         | 350   | 162   | 360 | 250 | 195  | 350 | 25             | -                    | -  | 80  | 200 | 160 | 18 | 60  | 140 | 18 | 65   | 160 | 340 | 100 | 280 | 35 | 25 | 100     | 210 |
| 110/110  | 515         | 360   | 162   | 360 | 250 | 195  | 350 | 25             | -                    | -  | 90  | 225 | 180 | 22 | 60  | 140 | 18 | 65   | 160 | 340 | 100 | 280 | 35 | 25 | 100     | 210 |
| 110/140  | 545         | 375   | 162   | 360 | 250 | 195  | 350 | 25             | -                    | -  | 110 | 245 | 200 | 22 | 60  | 140 | 18 | 65   | 160 | 340 | 100 | 280 | 35 | 25 | 100     | 210 |
| 140/110  | 590         | 395   | 155   | 440 | 300 | 230  | 390 | 25             | -                    | -  | 125 | 250 | 210 | 18 | 70  | 140 | 20 | 76   | 195 | 400 | 125 | 340 | 45 | 27 | 119     | 250 |
| 140/140  | 620         | 410   | 155   | 440 | 300 | 230  | 390 | 25             | -                    | -  | 150 | 285 | 240 | 22 | 70  | 140 | 20 | 76   | 195 | 400 | 125 | 340 | 45 | 27 | 119     | 250 |
| 140/180# | 660         | 430   | 155   | 440 | 300 | 230  | 390 | 25             | -                    | -  | 200 | 340 | 295 | 22 | 70  | 140 | 20 | 76   | 195 | 400 | 125 | 340 | 45 | 27 | 119     | 250 |

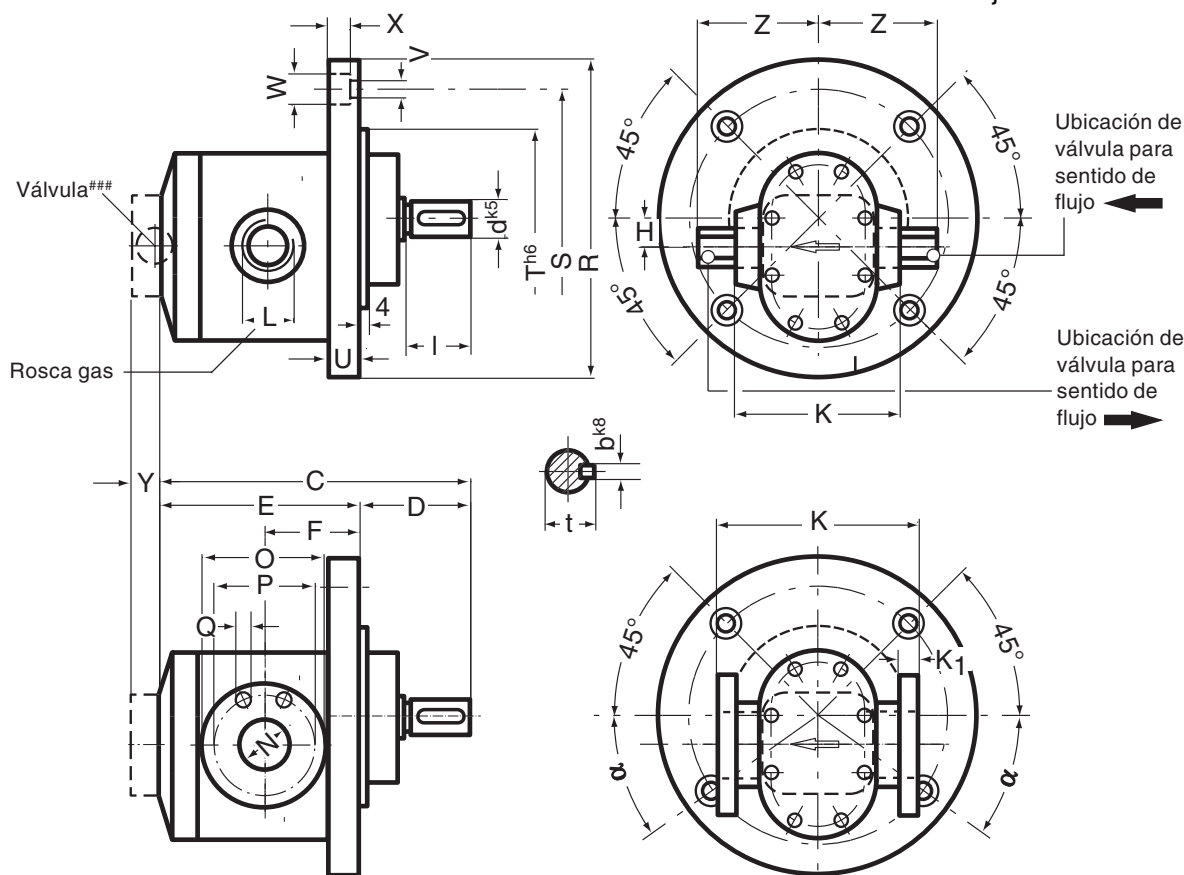
\* Brida de conexión desde tamaño 70/56 hasta 90/70 4 agujeros.

\*\* Brida de conexión desde tamaño 90/90 hasta 140/140 8 agujeros.

# Brida de conexión para tamaño 140/180 12 agujeros.

## Todas las bombas pueden ser provistas con válvula de seguridad.

Montaje horizontal con brida



| Tamaño          | Dimensiones |      |      |      |      |     |                | Conexión rosca-brida |     |     |     |    | Eje |     |    |      | Brida##                     |     |     |    |      |      |    |     | Válvula |     |
|-----------------|-------------|------|------|------|------|-----|----------------|----------------------|-----|-----|-----|----|-----|-----|----|------|-----------------------------|-----|-----|----|------|------|----|-----|---------|-----|
|                 | C           | D    | E    | F    | H    | K   | K <sub>1</sub> | L                    | N   | O   | P   | Q  | d   | l   | b  | t    | R                           | S   | T   | U  | V    | W    | X  | α   | Y       | Z   |
| <b>22/6</b>     | 90          | 28.5 | 61.5 | 30.5 | 11   | 64  | -              | 3/8"                 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 140                         | 115 | 95  | 11 | 9.5  | 14.5 | 7  | -   | 17      | 53  |
| <b>22/18</b>    | 102         | 28.5 | 73.5 | 36.5 | 11   | 64  | -              | 3/8"                 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 160                         | 150 | 110 | 11 | 9.5  | 14.5 | 7  | -   | 17      | 53  |
| <b>22/22</b>    | 106         | 28.5 | 77.5 | 38.5 | 11   | 64  | -              | 3/8"                 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 200                         | 165 | 130 | 11 | 11.5 | 18   | 9  | -   | 17      | 53  |
| <b>22/28</b>    | 112         | 28.5 | 83.5 | 41.5 | 11   | 64  | -              | 3/8"                 | -   | -   | -   | -  | 11  | 23  | 4  | 12.5 | 200                         | 165 | 130 | 11 | 11.5 | 18   | 9  | -   | 17      | 53  |
| <b>28/22</b>    | 153         | 67   | 86   | 43   | 14   | 80  | -              | 1/2"                 | -   | -   | -   | -  | 16  | 35  | 5  | 18   | 150                         | 130 | 110 | 13 | 9.5  | 14.5 | 7  | -   | 31      | 73  |
| <b>28/28</b>    | 159         | 67   | 92   | 46   | 14   | 80  | -              | 1/2"                 | -   | -   | -   | -  | 16  | 35  | 5  | 18   | 200                         | 165 | 130 | 13 | 11.5 | 18   | 9  | -   | 31      | 73  |
| <b>28/36</b>    | 167         | 67   | 100  | 50   | 14   | 80  | -              | 1/2"                 | -   | -   | -   | -  | 16  | 35  | 5  | 18   | 250                         | 215 | 180 | 13 | 14   | 20   | 11 | -   | 31      | 73  |
| <b>36/28</b>    | 194         | 82   | 112  | 56   | 18   | 100 | -              | 3/4"                 | -   | -   | -   | -  | 19  | 40  | 6  | 21.5 | 160                         | 130 | 110 | 11 | 9.5  | 14.5 | 7  | -   | 32      | 108 |
| <b>36/36</b>    | 202         | 82   | 120  | 60   | 18   | 100 | -              | 3/4"                 | -   | -   | -   | -  | 19  | 40  | 6  | 21.5 | 200                         | 165 | 130 | 18 | 11.5 | 18   | 9  | -   | 32      | 108 |
| <b>36/45</b>    | 211         | 82   | 129  | 64.5 | 18   | 100 | -              | 3/4"                 | -   | -   | -   | -  | 19  | 40  | 6  | 21.5 | 250                         | 215 | 180 | 18 | 14   | 20   | 11 | -   | 32      | 108 |
| <b>45/36</b>    | 224         | 90   | 134  | 65   | 22.5 | 120 | -              | 1"                   | -   | -   | -   | -  | 24  | 50  | 8  | 27   | 200                         | 165 | 130 | 18 | 11.5 | 18   | 9  | -   | 36      | 88  |
| <b>45/45</b>    | 233         | 90   | 143  | 69.5 | 22.5 | 120 | -              | 1"                   | -   | -   | -   | -  | 24  | 50  | 8  | 27   | 250                         | 215 | 180 | 18 | 14   | 20   | 11 | -   | 36      | 88  |
| <b>45/56</b>    | 244         | 90   | 154  | 75   | 22.5 | 120 | -              | 1 1/4"               | -   | -   | -   | -  | 24  | 50  | 8  | 27   | 300                         | 265 | 230 | 18 | 14   | 20   | 11 | -   | 36      | 88  |
| <b>56/45</b>    | 299         | 140  | 159  | 74.5 | 28   | 150 | -              | 1 1/4"               | -   | -   | -   | -  | 32  | 80  | 10 | 35.5 | 250                         | 215 | 180 | 18 | 14   | 20   | 11 | -   | 45      | 103 |
| <b>56/56</b>    | 310         | 140  | 170  | 80   | 28   | 150 | -              | 1 1/2"               | -   | -   | -   | -  | 32  | 80  | 10 | 35.5 | 300                         | 265 | 230 | 18 | 14   | 20   | 11 | -   | 45      | 103 |
| <b>56/70</b>    | 324         | 140  | 184  | 87   | 28   | 150 | -              | 1 1/2"               | -   | -   | -   | -  | 32  | 80  | 10 | 35.5 | 350                         | 300 | 250 | 18 | 18   | 26   | 14 | -   | 45      | 103 |
| <b>70/56*</b>   | 327         | 134  | 193  | 91   | 35   | 250 | 20             | -                    | 50  | 150 | 110 | 18 | 38  | 80  | 10 | 41.5 | 250                         | 215 | 180 | 18 | 14   | 20   | 11 | 30° | 81      | 167 |
| <b>70/70</b>    | 341         | 134  | 207  | 98   | 35   | 250 | 20             | -                    | 52  | 150 | 110 | 18 | 38  | 80  | 10 | 41.5 | 300                         | 265 | 230 | 18 | 14   | 20   | 11 | 45° | 81      | 167 |
| <b>70/90</b>    | 361         | 134  | 227  | 108  | 35   | 250 | 20             | -                    | 65  | 165 | 125 | 18 | 38  | 80  | 10 | 41.5 | 350                         | 300 | 250 | 18 | 18   | 26   | 14 | 45° | 81      | 167 |
| <b>90/70</b>    | 410         | 170  | 240  | 115  | 45   | 320 | 25             | -                    | 50  | 165 | 125 | 18 | 48  | 110 | 14 | 52   | 300                         | 265 | 230 | 20 | 14   | 20   | 11 | 30° | 108     | 203 |
| <b>90/90**</b>  | 430         | 170  | 260  | 125  | 45   | 320 | 25             | -                    | 65  | 185 | 145 | 18 | 48  | 110 | 14 | 52   | 350                         | 300 | 250 | 20 | 18   | 26   | 14 | 40° | 108     | 203 |
| <b>90/110</b>   | 450         | 170  | 280  | 135  | 45   | 320 | 25             | -                    | 80  | 200 | 160 | 18 | 48  | 110 | 14 | 52   | 450                         | 400 | 350 | 20 | 18   | 26   | 14 | 45° | 108     | 203 |
| <b>110/90</b>   | 495         | 205  | 290  | 145  | 55   | 350 | 25             | -                    | 80  | 200 | 160 | 18 | 60  | 140 | 18 | 65   | 350                         | 300 | 250 | 25 | 18   | 26   | 14 | 30° | 100     | 210 |
| <b>110/110</b>  | 515         | 205  | 310  | 155  | 55   | 350 | 25             | -                    | 90  | 225 | 180 | 22 | 60  | 140 | 18 | 65   | 450                         | 400 | 350 | 25 | 18   | 26   | 14 | 45° | 100     | 210 |
| <b>110/140</b>  | 545         | 205  | 340  | 170  | 55   | 350 | 25             | -                    | 110 | 245 | 200 | 22 | 60  | 140 | 18 | 65   | 450                         | 400 | 350 | 25 | 18   | 26   | 14 | 45° | 100     | 210 |
| <b>140/110</b>  | 590         | 220  | 370  | 175  | 70   | 390 | 25             | -                    | 125 | 250 | 210 | 18 | 70  | 140 | 22 | 76   | 550 500 450 25 18 26 14 30° |     |     |    |      |      |    |     |         |     |
| <b>140/140</b>  | 620         | 220  | 400  | 190  | 70   | 390 | 25             | -                    | 150 | 285 | 240 | 22 | 70  | 140 | 22 | 76   |                             |     |     |    |      |      |    |     |         |     |
| <b>140/180#</b> | 660         | 220  | 440  | 210  | 70   | 390 | 25             | -                    | 200 | 340 | 295 | 22 | 70  | 140 | 22 | 76   |                             |     |     |    |      |      |    |     |         |     |

\* Brida de conexión desde tamaño 70/56 hasta 90/76 4 agujeros.

\*\* Brida de conexión desde tamaño 90/90 hasta 140/140 8 agujeros.

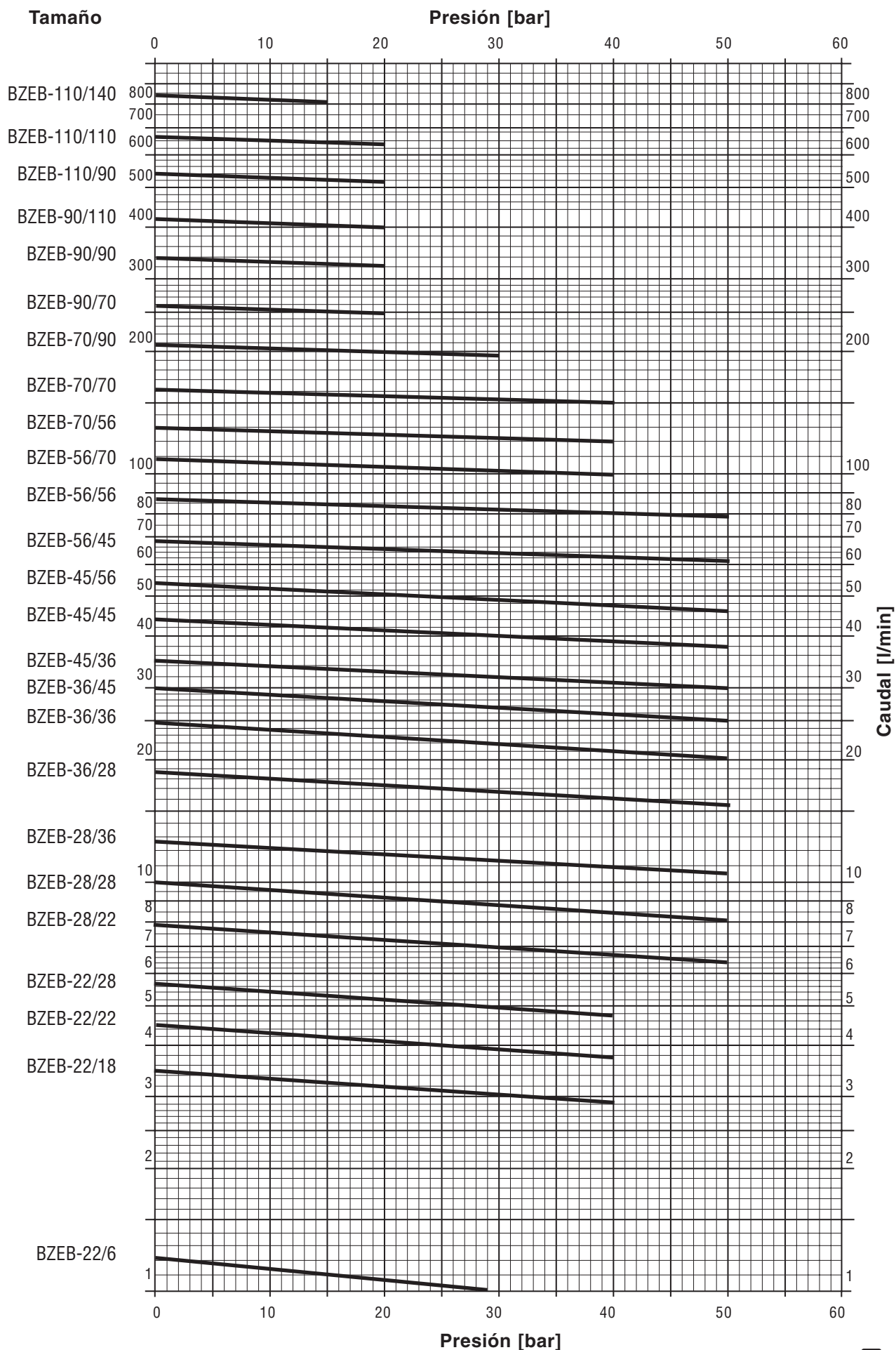
# Brida de conexión para tamaño 140/180 12 agujeros.

## Para cada tamaño existen 3 tamaños de brida.

### Todas las bombas pueden ser provistas con válvula de seguridad.

**Caudal de bomba baja presión**

Viscosidad: 45 cSt; n= 960 min<sup>-1</sup>

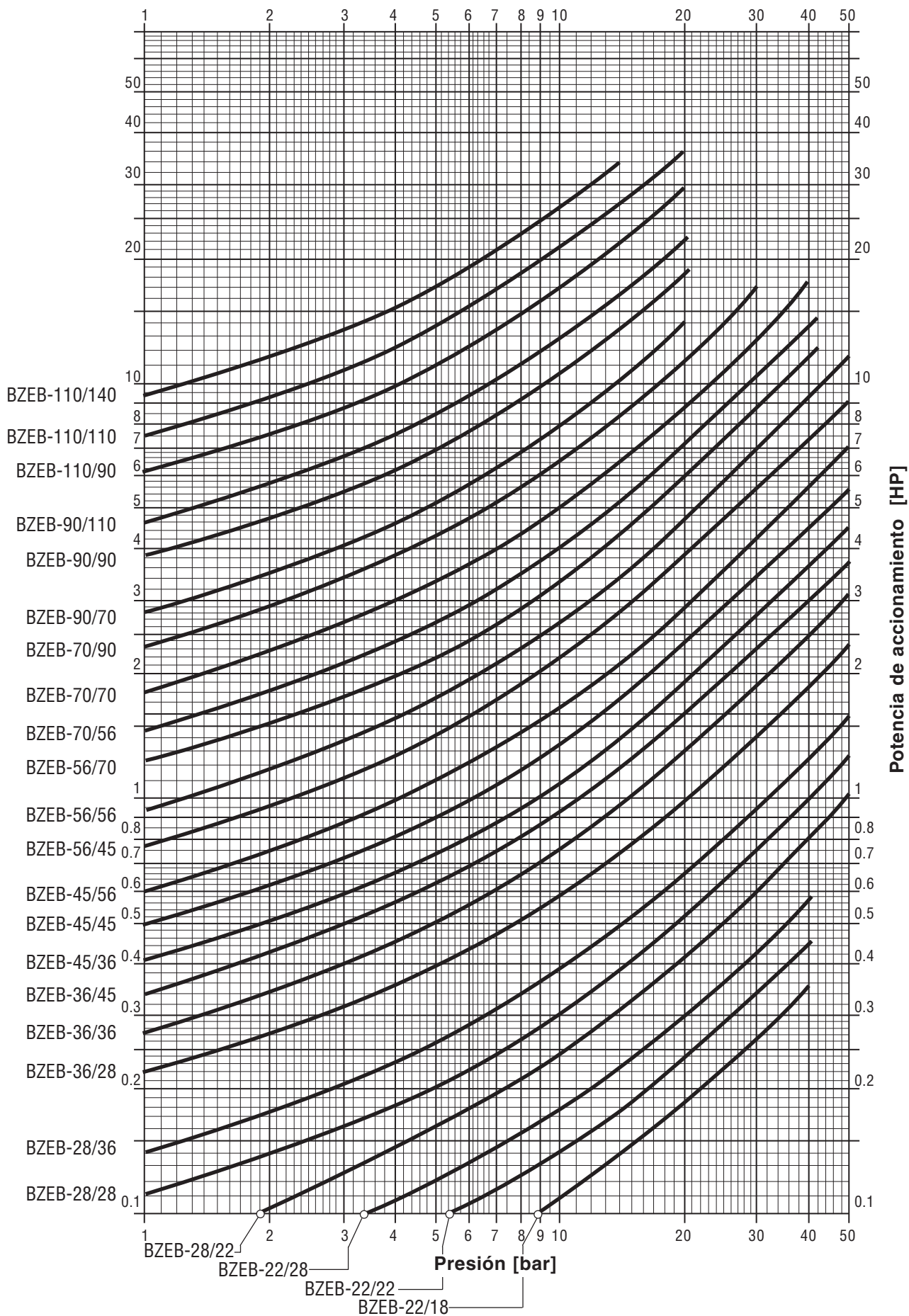


**Potencia de accionamiento de bomba baja presión**

Viscosidad: 45 cSt;  $n = 960 \text{ min}^{-1}$

Tamaño

Presión [bar]

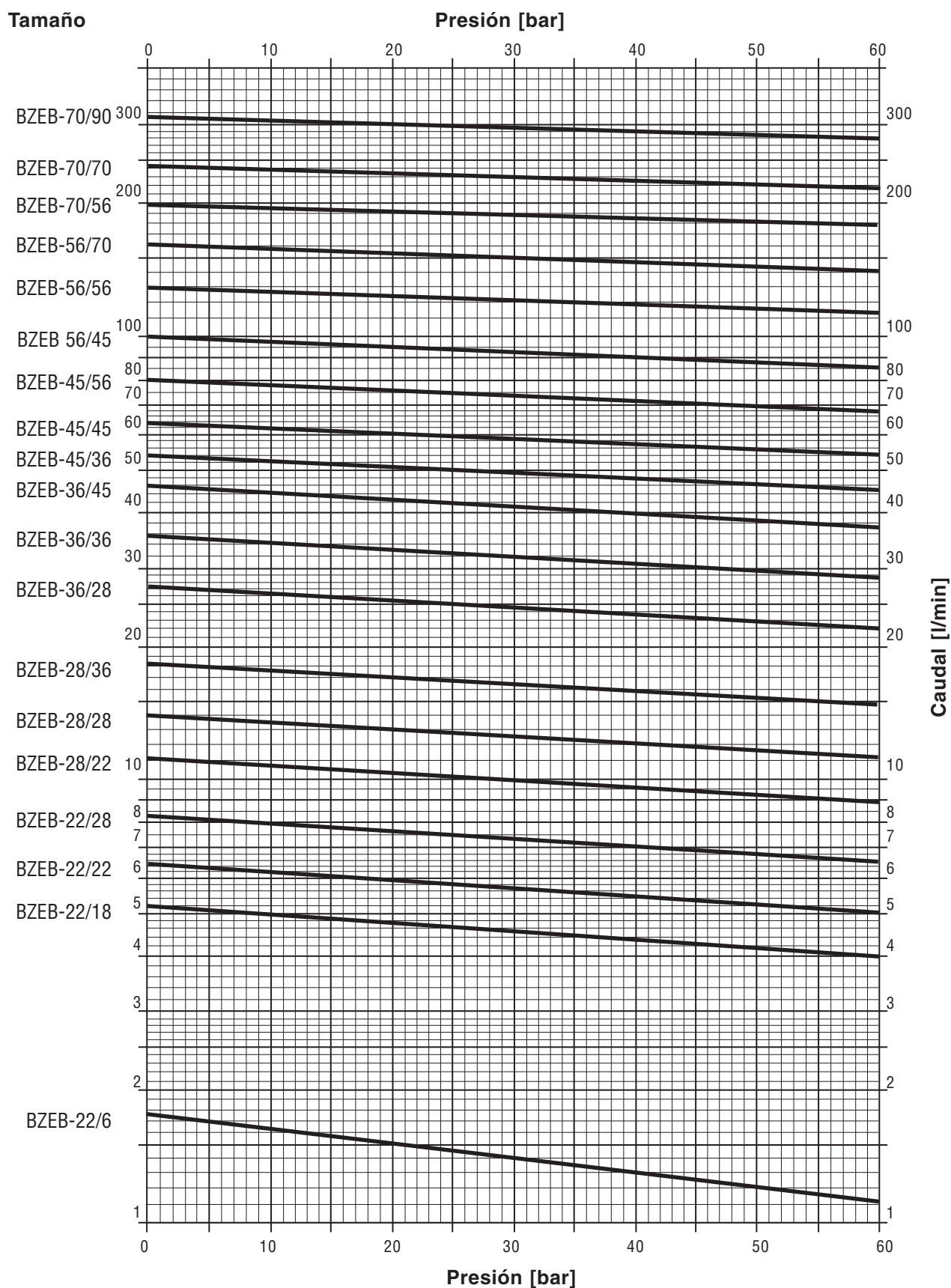


Potencia de accionamiento [HP]

Presión [bar]

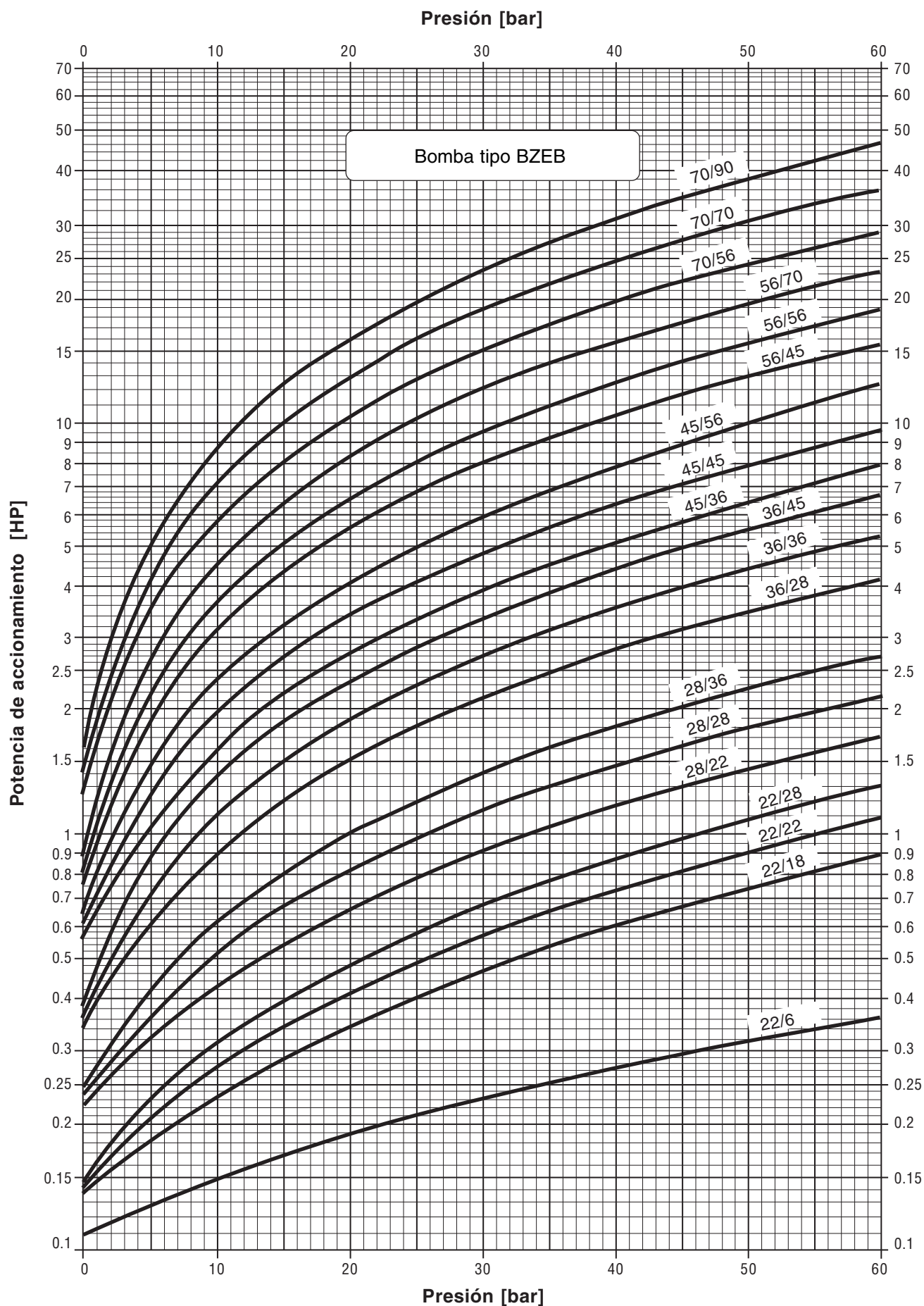


**Caudal de bomba baja presión**  
Viscosidad: 21 cSt;  $n = 1450 \text{ min}^{-1}$

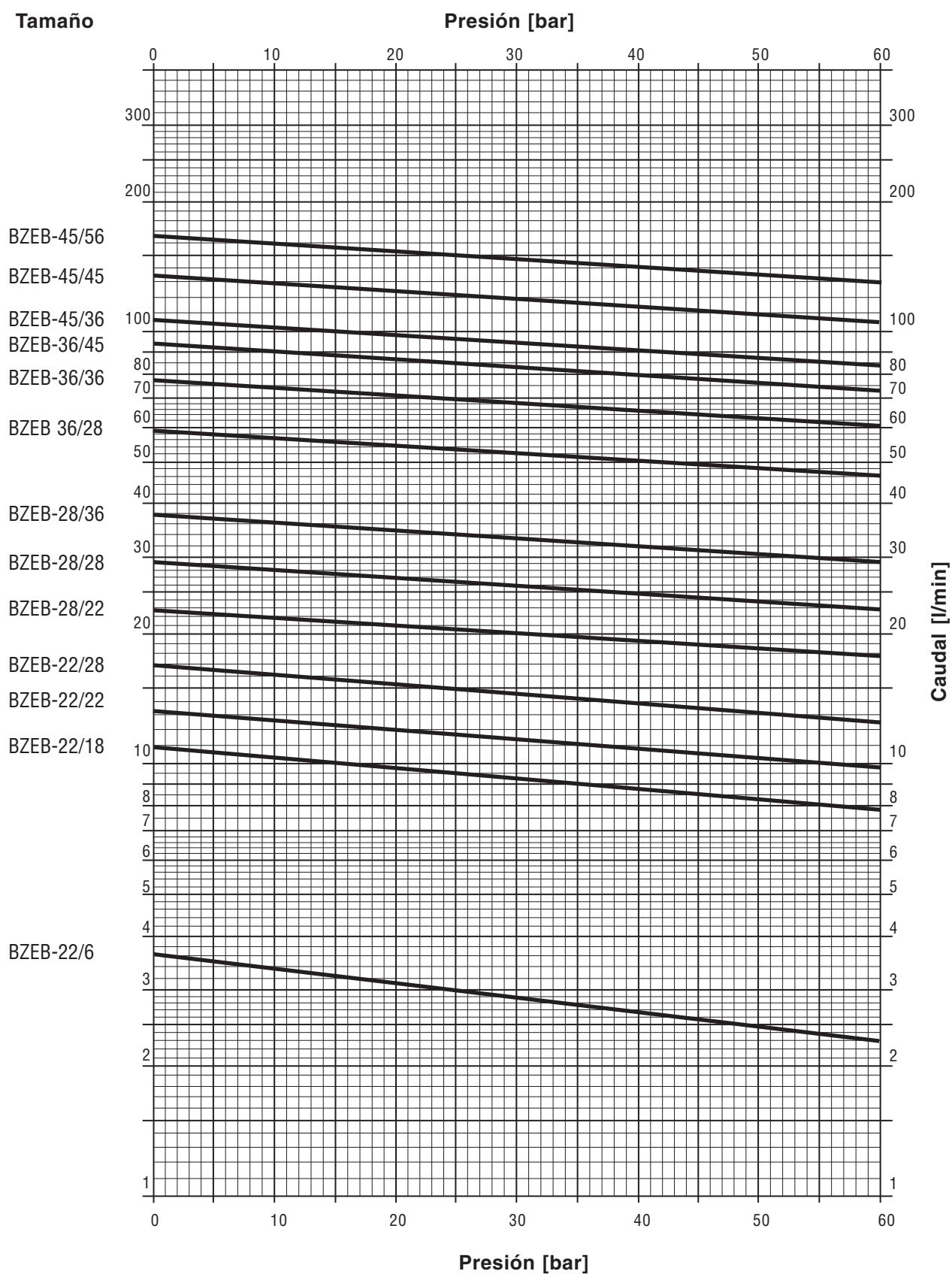


**Potencia de accionamiento de bomba baja presión**

Viscosidad: 21 cSt;  $n = 1450 \text{ min}^{-1}$



**Caudal de bomba baja presión**  
Viscosidad: 45 cSt;  $n = 2900 \text{ min}^{-1}$



**Potencia de accionamiento de bomba baja presión**

Viscosidad: 45 cSt;  $n = 2900 \text{ min}^{-1}$

