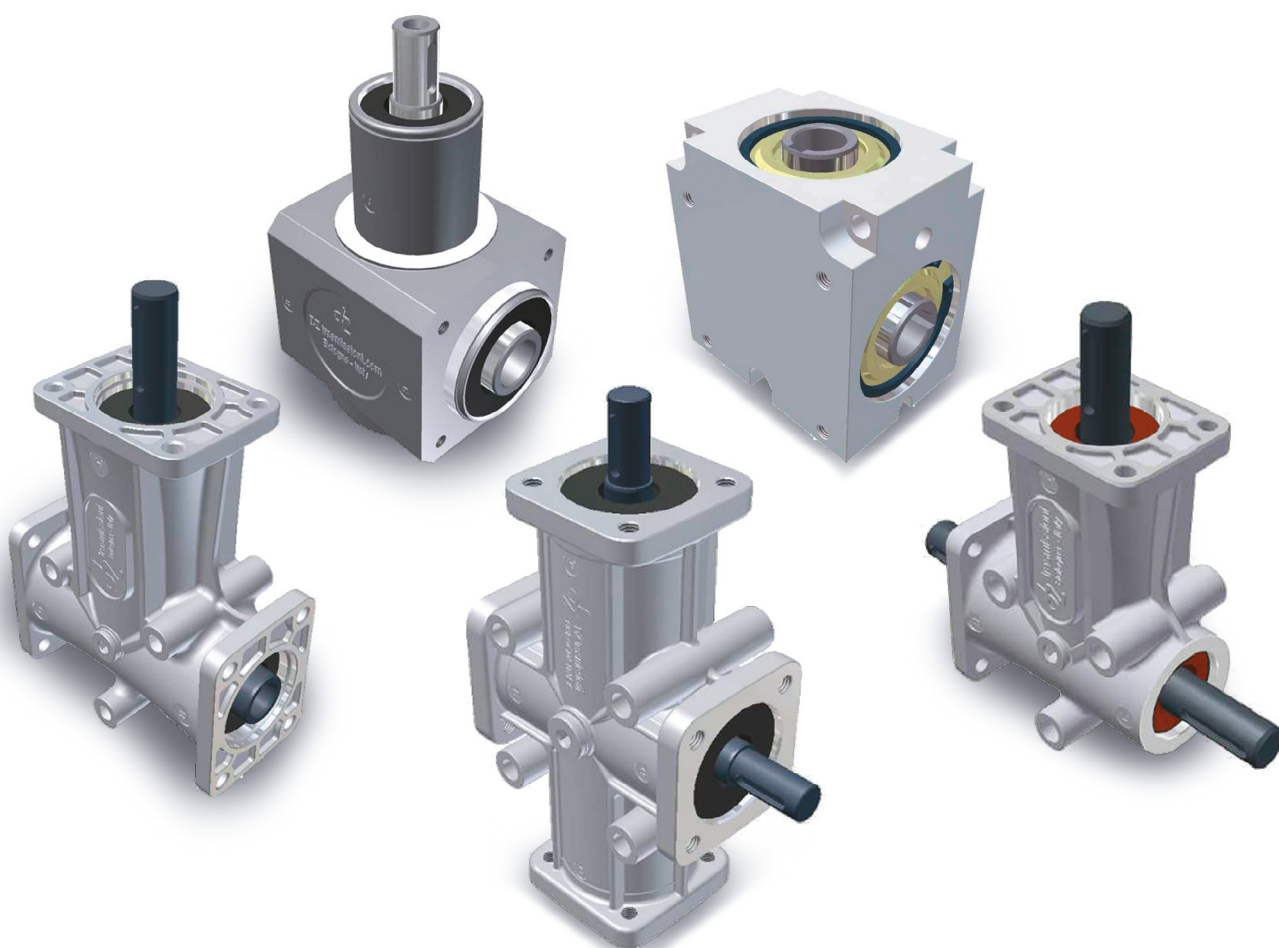


# CAJAS DE REENVÍO ANGULAR DZ / ZP



|                 |        |
|-----------------|--------|
| Características | pág. 3 |
|-----------------|--------|

|                               |        |
|-------------------------------|--------|
| Selección. Factor de servicio | pág. 5 |
|-------------------------------|--------|



|          |        |
|----------|--------|
| Serie DZ | pág. 8 |
|----------|--------|



|               |         |
|---------------|---------|
| Serie INOX DZ | pág. 12 |
|---------------|---------|



|          |         |
|----------|---------|
| Serie ZP | pág. 13 |
|----------|---------|



|                |         |
|----------------|---------|
| Serie ESPECIAL | pág. 17 |
|----------------|---------|

La tabla 1 que se presenta a continuación indica, para cada modelo, el diámetro del eje, la ratio de transmisión, el eje de entrada A, el eje de salida B o C, o D o bien ambos, el sentido de rotación

y el número de bridas indicado en el dibujo lateral. Normalmente, **el eje A se considera el de entrada**, con ratio 1:2 y 1:3 siendo el más rápido.

Tabla 1. **CARACTERÍSTICAS**

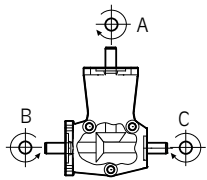
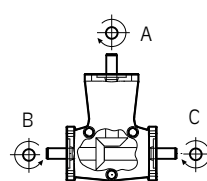
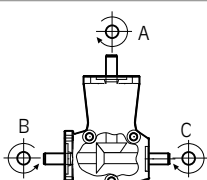
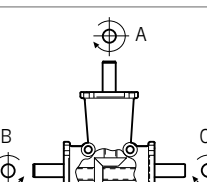
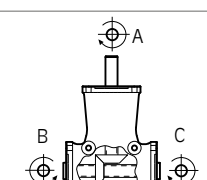
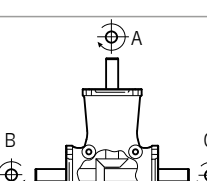
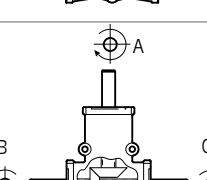
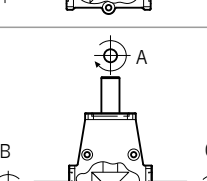
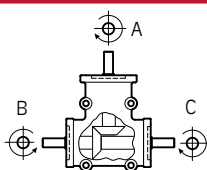
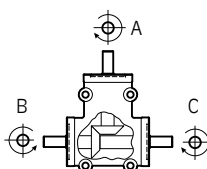
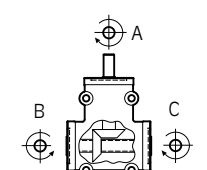
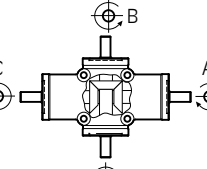
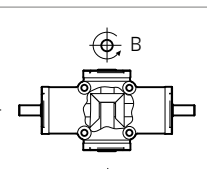
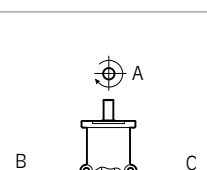
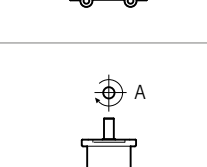
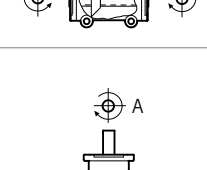
| MODELO DZ                                                                                       | Ø Eje   | Ratio | Entrada | Salida | Modelo        | Peso (kg) |
|-------------------------------------------------------------------------------------------------|---------|-------|---------|--------|---------------|-----------|
| <b>1</b><br>   | Ø 8     | 1:1   | A       | B      | DZ 10S-2FAB-  | 0,3       |
|                                                                                                 | Ø 8     | 1:1   | A       | C      | DZ 10FS2FAC-  |           |
|                                                                                                 | Ø 8     | 1:2   | A       | B      | DZ 12S-2FAB-  |           |
|                                                                                                 | Ø 8     | 1:2   | A       | C      | DZ 12FS2FAC-  |           |
|                                                                                                 | Ø 8     | 1:1   | A       | B-C    | DZ 11--2FABC  |           |
|                                                                                                 | Ø 8     | 1:2   | A       | B-C    | DZ 13--2FABC  |           |
| <b>1</b><br>   | Ø 8     | 1:1   | A       | B      | DZ 10S-3FAB-  | 0,3       |
|                                                                                                 | Ø 8     | 1:1   | A       | C      | DZ 10FS3FAC-  |           |
|                                                                                                 | Ø 8     | 1:2   | A       | B      | DZ 12S-3FAB-  |           |
|                                                                                                 | Ø 8     | 1:2   | A       | C      | DZ 12FS3FAC-  |           |
|                                                                                                 | Ø 8     | 1:1   | A       | B-C    | DZ 11--3FABC  |           |
|                                                                                                 | Ø 8     | 1:2   | A       | B-C    | DZ 13--3FABC  |           |
| <b>2</b><br>  | Ø 15    | 1:1   | A       | B      | DZ 20S-2FAB-  | 1,1       |
|                                                                                                 | Ø 15    | 1:1   | A       | C      | DZ 20FS2FAC-  |           |
|                                                                                                 | Ø 15    | 1:2   | A       | B      | DZ 22S-2FAB-  |           |
|                                                                                                 | Ø 15    | 1:2   | A       | C      | DZ 22FS2FAC-  |           |
|                                                                                                 | Ø 15    | 1:1   | A       | B-C    | DZ 21--2FABC  | 1,2       |
|                                                                                                 | Ø 15    | 1:2   | A       | B-C    | DZ 23--2FABC  |           |
| <b>2</b><br> | Ø 15    | 1:1   | A       | B      | DZ 20S-3FAB-  | 1,1       |
|                                                                                                 | Ø 15    | 1:1   | A       | C      | DZ 20FS3FAC-  |           |
|                                                                                                 | Ø 15    | 1:2   | A       | B      | DZ 22S-3FAB-  |           |
|                                                                                                 | Ø 15    | 1:2   | A       | C      | DZ 22FS3FAC-  |           |
|                                                                                                 | Ø 15    | 1:1   | A       | B-C    | DZ 21--3FABC  | 1,2       |
|                                                                                                 | Ø 15    | 1:2   | A       | B-C    | DZ 23--3FABC  |           |
| <b>3</b><br> | Ø 19-20 | 1:1   | A       | B-C    | DZ 311--3FABC | 3,3       |
|                                                                                                 |         |       |         |        |               |           |
|                                                                                                 |         |       |         |        |               |           |
|                                                                                                 |         |       |         |        |               |           |
|                                                                                                 |         |       |         |        |               |           |
|                                                                                                 |         |       |         |        |               |           |
| <b>3</b><br> | Ø 20    | 1:1   | A       | B      | DZ 30S-3FAB-  | 3,4       |
|                                                                                                 | Ø 20    | 1:1   | A       | C      | DZ 30FS3FAC-  |           |
|                                                                                                 | Ø 20    | 1:2   | A       | B      | DZ 32S-3FAB-  |           |
|                                                                                                 | Ø 20    | 1:2   | A       | C      | DZ 32FS3FAC-  |           |
|                                                                                                 | Ø 20    | 1:1   | A       | B-C    | DZ 31--3FABC  | 3,5       |
|                                                                                                 | Ø 20    | 1:2   | A       | B-C    | DZ 33--3FABC  |           |
| <b>4</b><br> | Ø 25    | 1:1   | A       | B      | DZ 40S-3FAB-  | 5,5       |
|                                                                                                 | Ø 25    | 1:1   | A       | C      | DZ 40FS3FAC-  |           |
|                                                                                                 | Ø 25    | 1:2   | A       | B      | DZ 42S-3FAB-  |           |
|                                                                                                 | Ø 25    | 1:2   | A       | C      | DZ 42FS3FAC-  |           |
|                                                                                                 | Ø 25    | 1:1   | A       | B-C    | DZ 41--3FABC  | 5,8       |
|                                                                                                 | Ø 25    | 1:2   | A       | B-C    | DZ 43--3FABC  |           |
| <b>5</b><br> | Ø 35    | 1:1   | A       | B      | DZ 50S-3FAB-  | 8,1       |
|                                                                                                 | Ø 35    | 1:1   | A       | C      | DZ 50FS3FAC-  |           |
|                                                                                                 | Ø 35    | 1:2   | A       | B      | DZ 52S-3FAB-  |           |
|                                                                                                 | Ø 35    | 1:2   | A       | C      | DZ 52FS3FAC-  |           |
|                                                                                                 | Ø 35    | 1:1   | A       | B-C    | DZ 51--3FABC  | 8,8       |
|                                                                                                 | Ø 35    | 1:2   | A       | B-C    | DZ 53--3FABC  |           |

Tabla 1. CARACTERÍSTICAS

| MODELO ZP                                                                                       | Ø Eje | Ratio | Entrada | Salida | Modelo        | Peso (kg) |  |
|-------------------------------------------------------------------------------------------------|-------|-------|---------|--------|---------------|-----------|--|
| <b>1</b><br>   | Ø 8   | 1:1   | A       | B      | ZP 10S-4PAB-  | 0,6       |  |
|                                                                                                 | Ø 8   | 1:1   | A       | C      | ZP 10FS4PAC-  |           |  |
|                                                                                                 | Ø 8   | 1:2   | A       | B      | ZP 12S-4PAB-  |           |  |
|                                                                                                 | Ø 8   | 1:2   | A       | C      | ZP 12FS4PAC-  |           |  |
|                                                                                                 | Ø 8   | 1:1   | A       | B-C    | ZP 11--4PABC  |           |  |
|                                                                                                 | Ø 8   | 1:2   | A       | B-C    | ZP 13--4PABC  |           |  |
| <b>2</b><br>   | Ø 14  | 1:1   | A       | B      | ZP 20S-4PAB-  | 2         |  |
|                                                                                                 | Ø 14  | 1:1   | A       | C      | ZP 20FS4PAC-  |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | B      | ZP 22S-4PAB-  |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | C      | ZP 22FS4PAC-  |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | B      | ZP 24S-4PAB-  |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | C      | ZP 24FS4PAC-  |           |  |
|                                                                                                 | Ø 14  | 1:1   | A       | B-C    | ZP 21-4PABC   |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | B-C    | ZP 23--4PABC  |           |  |
| <b>2</b><br>   | Ø 14  | 1:3   | A       | B-C    | ZP 25--4PABC  | 1,9       |  |
|                                                                                                 | Ø 14  | 1:1   | A       | B-C    | ZP 211-4P3V-  |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | B-C    | ZP 213-4P3V-  |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | B-C    | ZP 215-4P3V-  |           |  |
|                                                                                                 |       |       |         |        |               |           |  |
| <b>2</b><br>  | Ø 14  | 1:1   | A       | B-C    | ZP 220S-4PABC | 3,2       |  |
|                                                                                                 | Ø 14  | 1:1   | A       | C-D    | ZP 220FS4PACD |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | B-C    | ZP 222S-4PABC |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | C-D    | ZP 222FS4PACD |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | B-C    | ZP 224S-4PABC |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | C-D    | ZP 224FS4PACD |           |  |
|                                                                                                 | Ø 14  | 1:1   | A       | B-C-D  | ZP 221-4PABCD |           |  |
|                                                                                                 | Ø 14  | 1:2   | A       | B-C-D  | ZP 223-4PABCD |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | B-C-D  | ZP 225-4PABCD |           |  |
| <b>2</b><br> | Ø 14  | 1:1   | A       | B-C-D  | ZP 211-4P4V-  | 3,1       |  |
|                                                                                                 | Ø 14  | 1:2   | A       | B-C-D  | ZP 213-4P4V-  |           |  |
|                                                                                                 | Ø 14  | 1:3   | A       | B-C-D  | ZP 215-4P4V-  |           |  |
|                                                                                                 |       |       |         |        |               |           |  |
| <b>3</b><br> | Ø 19  | 1:1   | A       | B      | ZP 30S-4PAB-  | 4,5       |  |
|                                                                                                 | Ø 19  | 1:1   | A       | C      | ZP 30FS4PAC-  |           |  |
|                                                                                                 | Ø 19  | 1:2   | A       | B      | ZP 32S-4PAB-  |           |  |
|                                                                                                 | Ø 19  | 1:2   | A       | C      | ZP 32FS4PAC-  |           |  |
|                                                                                                 | Ø 19  | 1:3   | A       | B      | ZP 34S-4PAB-  |           |  |
|                                                                                                 | Ø 19  | 1:3   | A       | C      | ZP 34FS4PAC-  |           |  |
|                                                                                                 | Ø 19  | 1:1   | A       | B-C    | ZP 31--4PABC  |           |  |
|                                                                                                 | Ø 19  | 1:2   | A       | B-C    | ZP 33--4PABC  |           |  |
|                                                                                                 | Ø 19  | 1:3   | A       | B-C    | ZP 35--4PABC  |           |  |
|                                                                                                 | Ø 19  | 1:1   | A       | B-C    | ZP 311--4P3V- |           |  |
| <b>3</b><br> | Ø 19  | 1:2   | A       | B-C    | ZP 313--4P3V- | 4,4       |  |
|                                                                                                 | Ø 19  | 1:3   | A       | B-C    | ZP 315--4P3V- |           |  |
|                                                                                                 |       |       |         |        |               |           |  |
|                                                                                                 |       |       |         |        |               |           |  |
| <b>4</b><br> | Ø 24  | 1:1   | A       | B      | ZP 40S-4PAB-  | 4,6       |  |
|                                                                                                 | Ø 24  | 1:1   | A       | C      | ZP 40FS4PAC-  |           |  |
|                                                                                                 | Ø 24  | 1:2   | A       | B      | ZP 42S-4PAB-  |           |  |
|                                                                                                 | Ø 24  | 1:2   | A       | C      | ZP 42FS4PAC-  |           |  |
|                                                                                                 | Ø 24  | 1:3   | A       | B      | ZP 44S-4PAB-  |           |  |
|                                                                                                 | Ø 24  | 1:3   | A       | C      | ZP 44FS4PAC-  |           |  |
|                                                                                                 | Ø 24  | 1:1   | A       | B-C    | ZP 41--4PABC  |           |  |
|                                                                                                 | Ø 24  | 1:2   | A       | B-C    | ZP 43--4PABC  |           |  |
|                                                                                                 | Ø 24  | 1:3   | A       | B-C    | ZP 45--4PABC  |           |  |
|                                                                                                 |       |       |         |        |               |           |  |

## DATOS TÉCNICOS

Para la selección de la caja de reenvío angular correcta no depende únicamente de la potencia requerida en relación con R.P.M. y el par a transmitir. También implica definir las condiciones bajo las cuales se utilizará, teniendo en consideración diversos factores como el tipo de ciclo (intermitente, continuo), cargas radiales y axiales, las temperaturas máximas y mínimas, las condiciones ambientales (por ejemplo, niveles de polvo y suciedad) y el tipo de lubricante utilizado.

Para seleccionar el tipo y tamaño de la caja de reenvío angular proceder del siguiente modo:

**1)** Utilice la Tabla 2 para definir el factor de servicio para la aplicación.

**2)** Calcular la Potencia Nominal ( $P_n$ );  $P_n = P_e \cdot F_S$

**3)** En la Tabla 3, use la velocidad de salida y la potencia nominal ( $P_n$ ) para seleccionar el tamaño del reenvío y la ratio de transmisión requeridos para la aplicación

**4)** Comprobar que las cargas radial  $F_r$  y axial  $F_a$  aplicadas en el centro de cada eje o en el centro del eje hueco no exceden los valores indicados en la tabla 4.

**5)** Compruebe que la temperatura de funcionamiento no exceda  $-20\text{ }^{\circ}\text{C} \div +80\text{ }^{\circ}\text{C}$ .

**6)** Si necesita una ratio de 1/2 o 1/3, no use un multiplicador de velocidad con una entrada de más de 750 R.P.M. o 500 R.P.M. respectivamente.

**7)** Si la unidad se va a utilizar en condiciones con polvo o suciedad, proteger el tapón del aceite para evitar daños que podrían reducir la vida útil de la unidad.

Tabla 2. **FACTOR DE SERVICIO**

|                             | $\varnothing$ Eje          | Ratio | Entrada | Peso (kg) |
|-----------------------------|----------------------------|-------|---------|-----------|
|                             | Horas de operación por día |       |         |           |
|                             | 3                          | 8     | 12      | 24        |
| Carga uniforme              | 0,7                        | 0,9   | 1       | 1,3       |
| Carga con choques moderados | 0,9                        | 1     | 1,3     | 1,8       |
| Carga con choques           | 1,3                        | 1,6   | 1,8     | 2,3       |



# POTENCIAS APLICABLES

Tabla 3 **POTENCIAS APLICABLES**

| Velocidad salida      |      | 50 (rpm)    |           | 100 (rpm)   |           | 200 (rpm)   |           | 400 (rpm)   |           | 800 (rpm)   |           | 1400 (rpm)  |           | 2000 (rpm)  |           | 3000 (rpm)  |           |
|-----------------------|------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Par de salida         |      | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) | Mt=Par (Nm) | Pot. (Kw) |
| Modelo                | Rel. |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 10 - DZ 11         | 1:1  | 4,7         | 0,02      | 3,9         | 0,04      | 3,3         | 0,07      | 2,8         | 0,12      | 2,3         | 0,19      | 2,0         | 0,30      | 1,8         | 0,39      | 1,7         | 0,53      |
| DZ 600-61             |      | 7,6         | 0,04      | 6,4         | 0,07      | 5,4         | 0,11      | 4,5         | 0,19      | 3,8         | 0,32      | 3,3         | 0,49      | 3,0         | 0,63      | 2,7         | 0,86      |
| DZ 150-01             |      | 8,0         | 0,04      | 6,8         | 0,07      | 5,7         | 0,12      | 4,8         | 0,20      | 4,0         | 0,34      | 3,5         | 0,51      | 3,2         | 0,67      | 2,9         | 0,91      |
| ZP 10 - ZP 11         |      | 9,1         | 0,05      | 7,6         | 0,08      | 6,4         | 0,13      | 5,4         | 0,23      | 4,5         | 0,38      | 4,0         | 0,58      | 3,6         | 0,76      | 3,3         | 1,03      |
| DZ 20 - DZ 21         |      | 16,5        | 0,09      | 13,9        | 0,15      | 11,7        | 0,24      | 9,8         | 0,41      | 8,2         | 0,69      | 7,2         | 1,05      | 6,6         | 1,37      | 5,9         | 1,86      |
| DZ 200-01 - DZ 200-21 |      | 27,5        | 0,14      | 23,1        | 0,24      | 19,4        | 0,41      | 16,3        | 0,68      | 13,7        | 1,15      | 12,0        | 1,75      | 10,9        | 2,29      | 9,9         | 3,10      |
| DZ 505-60             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 505-70 - DZ 201-01 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 211-3V             |      | 28,8        | 0,15      | 24,2        | 0,25      | 20,3        | 0,43      | 17,1        | 0,72      | 14,4        | 1,20      | 12,5        | 1,83      | 11,4        | 2,39      | 10,3        | 3,25      |
| ZP 211-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 20                 |      | 34,5        | 0,18      | 29,0        | 0,30      | 24,4        | 0,51      | 20,5        | 0,86      | 17,2        | 1,44      | 15,0        | 2,20      | 13,7        | 2,87      | 12,4        | 3,89      |
| ZP 220-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 21                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 221-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 604-50             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| 512-31                |      | 46,9        | 0,25      | 39,5        | 0,41      | 33,2        | 0,70      | 27,9        | 1,17      | 23,5        | 1,97      | 20,4        | 2,99      | 18,7        | 3,91      | 16,9        | 5,30      |
| DZ 930-01             |      | 48,9        | 0,26      | 41,1        | 0,43      | 34,5        | 0,72      | 29,0        | 1,22      | 24,4        | 2,05      | 21,2        | 3,11      | 19,4        | 4,07      | 17,6        | 5,51      |
| DZ 930-11             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 30                 |      | 53,1        | 0,28      | 44,6        | 0,47      | 37,5        | 0,79      | 31,6        | 1,32      | 26,5        | 2,22      | 23,1        | 3,38      | 21,1        | 4,42      | 19,1        | 5,99      |
| DZ 31                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 311                |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 311                |      | 75,7        | 0,40      | 63,7        | 0,67      | 53,5        | 1,12      | 45,0        | 1,89      | 37,9        | 3,17      | 32,9        | 4,82      | 30,1        | 6,30      | 27,2        | 8,54      |
| DZ 40 - ZP 30         |      | 87,3        | 0,46      | 73,4        | 0,77      | 61,8        | 1,29      | 51,9        | 2,17      | 43,7        | 3,66      | 38,0        | 5,56      | 34,7        | 7,27      | 31,4        | 9,86      |
| ZP 40 - DZ 41         |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 31 - ZP 41         |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 50 - DZ 51         |      | 119,5       | 0,63      | 100,5       | 1,05      | 84,5        | 1,77      | 71,0        | 2,98      | 59,7        | 5,00      | 51,9        | 7,61      | 47,5        | 9,95      | 42,9        | 13,48     |
| DZ 270                |      | 4229,5      | 22,14     | 3556,6      | 37,23     | 2990,7      | 62,62     | 2514,9      | 105,31    | 2114,7      | 177,11    | 1838,6      | 269,48    | 1681,8      | 352,13    | 1519,7      | 477,28    |
| DZ 12 - DZ 13         | 1:2  | 4,0         | 0,02      | 3,4         | 0,04      | 2,8         | 0,06      | 2,4         | 0,10      | 2,0         | 0,17      | 1,7         | 0,26      | 1,6         | 0,33      | 1,4         | 0,45      |
| ZP 12 - ZP 13         |      | 8,9         | 0,05      | 7,5         | 0,08      | 6,3         | 0,13      | 5,3         | 0,22      | 4,4         | 0,37      | 3,9         | 0,57      | 3,5         | 0,74      | 3,2         | 1,00      |
| DZ 22 - DZ 23         |      | 14,6        | 0,08      | 12,3        | 0,13      | 10,3        | 0,22      | 8,7         | 0,36      | 7,3         | 0,61      | 6,3         | 0,93      | 5,8         | 1,21      | 5,2         | 1,65      |
| ZP 213-3V             |      | 28,1        | 0,15      | 23,7        | 0,25      | 19,9        | 0,42      | 16,7        | 0,70      | 14,1        | 1,18      | 12,2        | 1,79      | 11,2        | 2,34      | 10,1        | 3,17      |
| ZP 213-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 22                 |      | 33,8        | 0,18      | 28,5        | 0,30      | 23,9        | 0,50      | 20,1        | 0,84      | 16,9        | 1,42      | 14,7        | 2,16      | 13,5        | 2,82      | 12,2        | 3,82      |
| ZP 222-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 23                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 223-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 32 - DZ 33         |      | 42,5        | 0,22      | 35,7        | 0,37      | 30,1        | 0,63      | 25,3        | 1,06      | 21,3        | 1,78      | 18,5        | 2,71      | 16,9        | 3,54      | 15,3        | 4,80      |
| ZP 313                |      | 71,3        | 0,37      | 59,9        | 0,63      | 50,4        | 1,06      | 42,4        | 1,77      | 35,6        | 2,98      | 31,0        | 4,54      | 28,3        | 5,93      | 25,6        | 8,04      |
| DZ 42 - ZP 32         |      | 82,3        | 0,43      | 69,2        | 0,72      | 58,2        | 1,22      | 48,9        | 2,05      | 41,1        | 3,44      | 35,8        | 5,24      | 32,7        | 6,85      | 29,6        | 9,28      |
| ZP 42 - DZ 43         |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 33 - ZP 43         |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| DZ 52 - DZ 53         |      | 100,5       | 0,53      | 84,5        | 0,88      | 71,0        | 1,49      | 59,7        | 2,50      | 50,2        | 4,21      | 43,7        | 6,40      | 39,9        | 8,36      | 36,1        | 11,34     |
| ZP 24                 | 1:3  | 27,5        | 0,14      | 23,1        | 0,24      | 19,4        | 0,41      | 16,3        | 0,68      | 13,7        | 1,15      | 12,0        | 1,75      | 10,9        | 2,29      | 9,9         | 3,10      |
| ZP 25                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 215-3V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 215-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 224-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 225-4V             |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 34                 |      | 63,4        | 0,33      | 53,3        | 0,56      | 44,9        | 0,94      | 37,7        | 1,58      | 31,7        | 2,66      | 27,6        | 4,04      | 25,2        | 5,28      | 22,8        | 7,16      |
| ZP 35                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 315                |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 44                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |
| ZP 45                 |      |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |

**Mt=Par:** Par de salida máximo, teniendo en cuenta que la entrada es por A.

Consulte con nuestra oficina técnica.

# CARGAS APLICABLES EN FUNCIÓN DE LA VELOCIDAD

Tabla 4 **CARGAS APLICABLES**

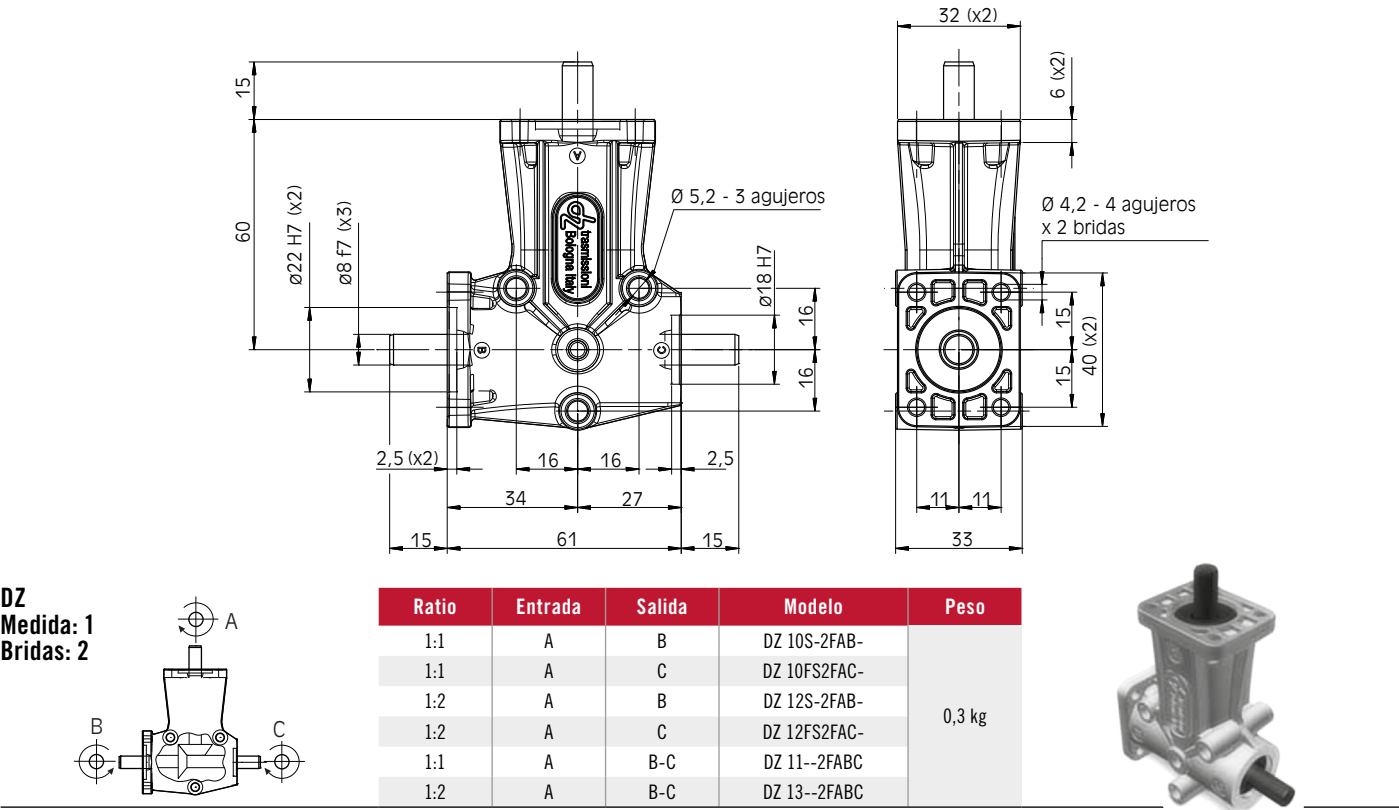
| Velocidad salida          |      | 50 (rpm) |        | 100 (rpm) |        | 200 (rpm) |        | 400 (rpm) |        | 800 (rpm) |        | 1400 (rpm) |        | 2000 (rpm) |        | 3000 (rpm) |        |
|---------------------------|------|----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|------------|--------|------------|--------|------------|--------|
| Cargas radiales y axiales |      | Fr (N)   | Fa (N) | Fr (N)    | Fa (N) | Fr (N)    | Fa (N) | Fr (N)    | Fa (N) | Fr (N)    | Fa (N) | Fr (N)     | Fa (N) | Fr (N)     | Fa (N) | Fr (N)     | Fa (N) |
| Modelo                    | Rel. |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 10 - DZ 11             | 1:1  | 139      | 94     | 117       | 79     | 98        | 66     | 83        | 56     | 70        | 47     | 60         | 41     | 55         | 37     | 50         | 34     |
| DZ 600-61                 |      | 183      | 148    | 154       | 124    | 129       | 105    | 109       | 88     | 91        | 74     | 80         | 64     | 73         | 59     | 66         | 53     |
| DZ 150-01                 |      | 143      | 143    | 120       | 120    | 101       | 101    | 85        | 85     | 72        | 72     | 62         | 62     | 57         | 57     | 51         | 51     |
| ZP 10 - ZP 11             |      | 195      | 158    | 164       | 133    | 138       | 112    | 116       | 94     | 98        | 79     | 85         | 69     | 78         | 63     | 70         | 57     |
| DZ 20 - DZ 21             |      | 328      | 220    | 276       | 185    | 232       | 156    | 195       | 131    | 164       | 110    | 142        | 96     | 130        | 87     | 118        | 79     |
| DZ 200-01 - DZ 200-21     |      | 617      | 412    | 519       | 346    | 436       | 291    | 367       | 245    | 309       | 206    | 268        | 179    | 245        | 164    | 222        | 148    |
| DZ 505-60                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 505-70 - DZ 201-01     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 211-3V                 |      | 430      | 348    | 361       | 293    | 304       | 246    | 256       | 207    | 215       | 174    | 187        | 151    | 171        | 139    | 154        | 125    |
| ZP 211-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 20                     |      | 516      | 418    | 434       | 351    | 365       | 295    | 307       | 248    | 258       | 209    | 224        | 182    | 205        | 166    | 185        | 150    |
| ZP 220-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 21                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 221-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 604-50                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| 512-31                    |      | 512      | 362    | 431       | 304    | 362       | 256    | 305       | 215    | 256       | 181    | 223        | 157    | 204        | 144    | 184        | 130    |
| DZ 930-01                 |      | 470      | 331    | 395       | 278    | 332       | 234    | 279       | 197    | 235       | 165    | 204        | 144    | 187        | 132    | 169        | 119    |
| DZ 930-11                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 30                     |      | 684      | 458    | 575       | 385    | 484       | 324    | 407       | 273    | 342       | 229    | 297        | 199    | 272        | 182    | 246        | 165    |
| DZ 31                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 311                    |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 311                    |      | 826      | 554    | 695       | 465    | 584       | 391    | 491       | 329    | 413       | 277    | 359        | 241    | 329        | 220    | 297        | 199    |
| DZ 40 - ZP 30             |      | 953      | 639    | 802       | 537    | 674       | 452    | 567       | 380    | 477       | 319    | 414        | 278    | 379        | 254    | 342        | 229    |
| ZP 40 - DZ 41             |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 31 - ZP 41             |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 50 - DZ 51             |      | 1102     | 736    | 927       | 619    | 779       | 520    | 655       | 438    | 551       | 368    | 479        | 320    | 438        | 293    | 396        | 264    |
| DZ 270                    |      | 12837    | 10390  | 10795     | 8737   | 9077      | 7347   | 7633      | 6178   | 6419      | 5195   | 5581       | 4517   | 5105       | 4132   | 4613       | 3733   |
| DZ 12 - DZ 13             | 1:2  | 107      | 76     | 90        | 64     | 76        | 54     | 64        | 45     | 54        | 38     | 47         | 33     | 43         | 30     | 39         | 27     |
| ZP 12 - ZP 13             |      | 182      | 110    | 153       | 93     | 129       | 78     | 108       | 66     | 91        | 55     | 79         | 48     | 73         | 44     | 66         | 40     |
| DZ 22 - DZ 23             |      | 276      | 168    | 232       | 141    | 195       | 119    | 164       | 100    | 138       | 84     | 120        | 73     | 110        | 67     | 99         | 60     |
| ZP 213-3V                 |      | 370      | 263    | 311       | 221    | 262       | 186    | 220       | 157    | 185       | 132    | 161        | 114    | 147        | 105    | 133        | 95     |
| ZP 213-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 22                     |      | 445      | 316    | 374       | 266    | 315       | 224    | 265       | 188    | 223       | 158    | 194        | 137    | 177        | 126    | 160        | 114    |
| ZP 222-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 23                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 223-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 32 - DZ 33             |      | 548      | 361    | 461       | 303    | 387       | 255    | 326       | 214    | 274       | 180    | 238        | 157    | 218        | 143    | 197        | 130    |
| ZP 313                    |      | 696      | 422    | 585       | 355    | 492       | 299    | 414       | 251    | 348       | 211    | 303        | 184    | 277        | 168    | 250        | 152    |
| DZ 42 - ZP 32             |      | 803      | 483    | 675       | 406    | 568       | 341    | 478       | 287    | 402       | 241    | 349        | 210    | 319        | 192    | 289        | 173    |
| ZP 42 - DZ 43             |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 33 - ZP 43             |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| DZ 52 - DZ 53             |      | 927      | 562    | 779       | 473    | 655       | 397    | 551       | 334    | 463       | 281    | 403        | 244    | 369        | 223    | 333        | 202    |
| ZP 24                     | 1:3  | 357      | 199    | 301       | 167    | 253       | 141    | 213       | 118    | 179       | 99     | 155        | 86     | 142        | 79     | 128        | 71     |
| ZP 25                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 215-3V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 215-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 224-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 225-4V                 |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 34                     |      | 619      | 346    | 521       | 291    | 438       | 245    | 368       | 206    | 310       | 173    | 269        | 151    | 246        | 138    | 222        | 124    |
| ZP 35                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 315                    |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 44                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |
| ZP 45                     |      |          |        |           |        |           |        |           |        |           |        |            |        |            |        |            |        |

**Fr:** Fuerza radial | **Fa:** Fuerza axial.

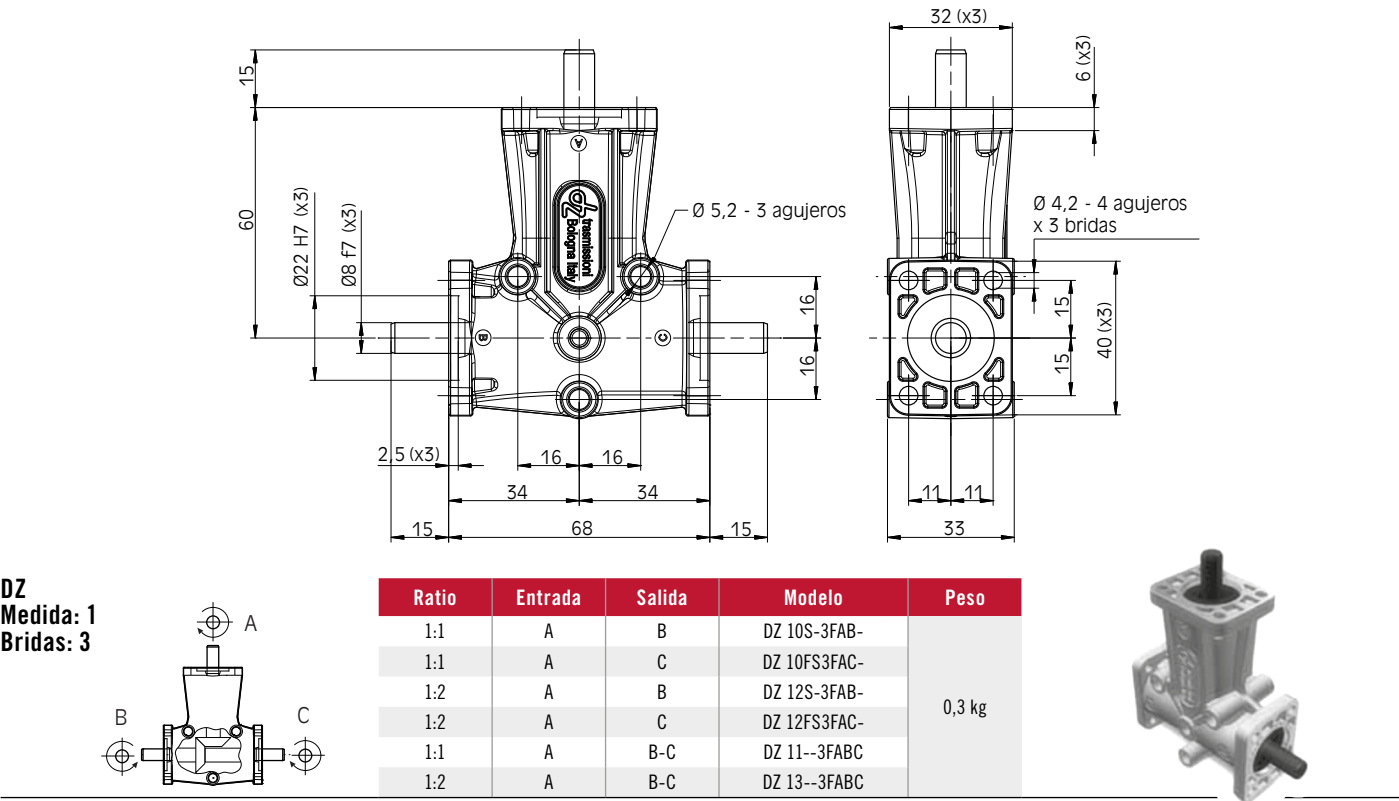
Valores no preferentes. Consulte con nuestra oficina técnica.



MEDIDA: 1 | BRIDAS: 2



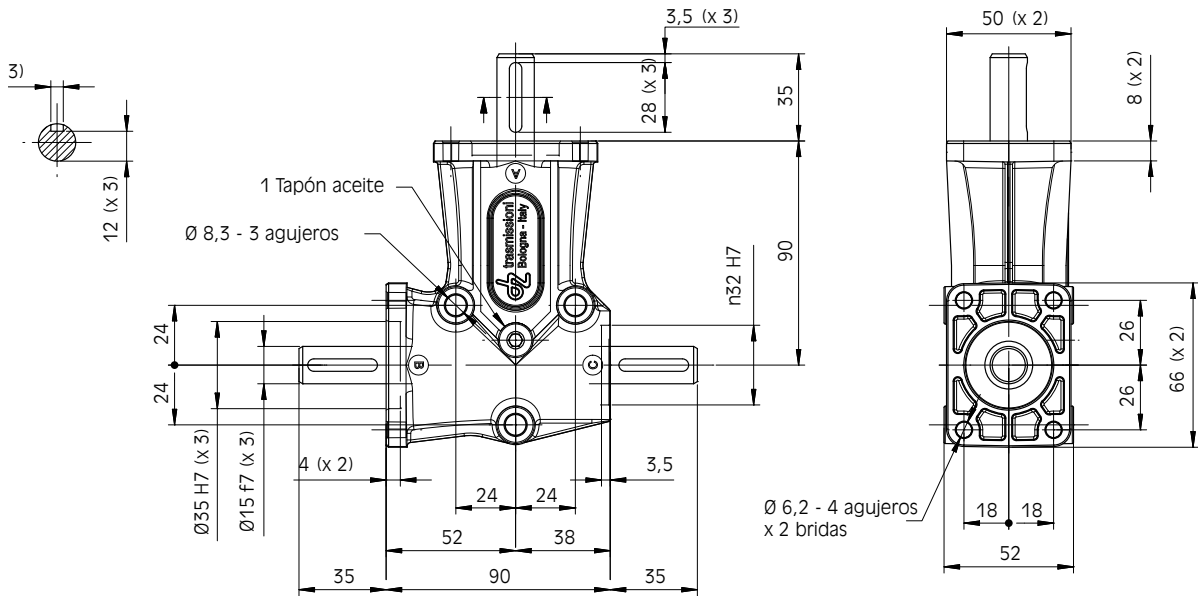
MEDIDA: 1 | BRIDAS: 3



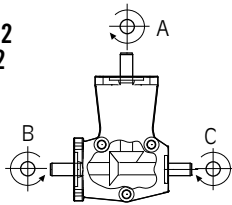


## SERIES DZ

MEDIDA: 2 | BRIDAS: 2



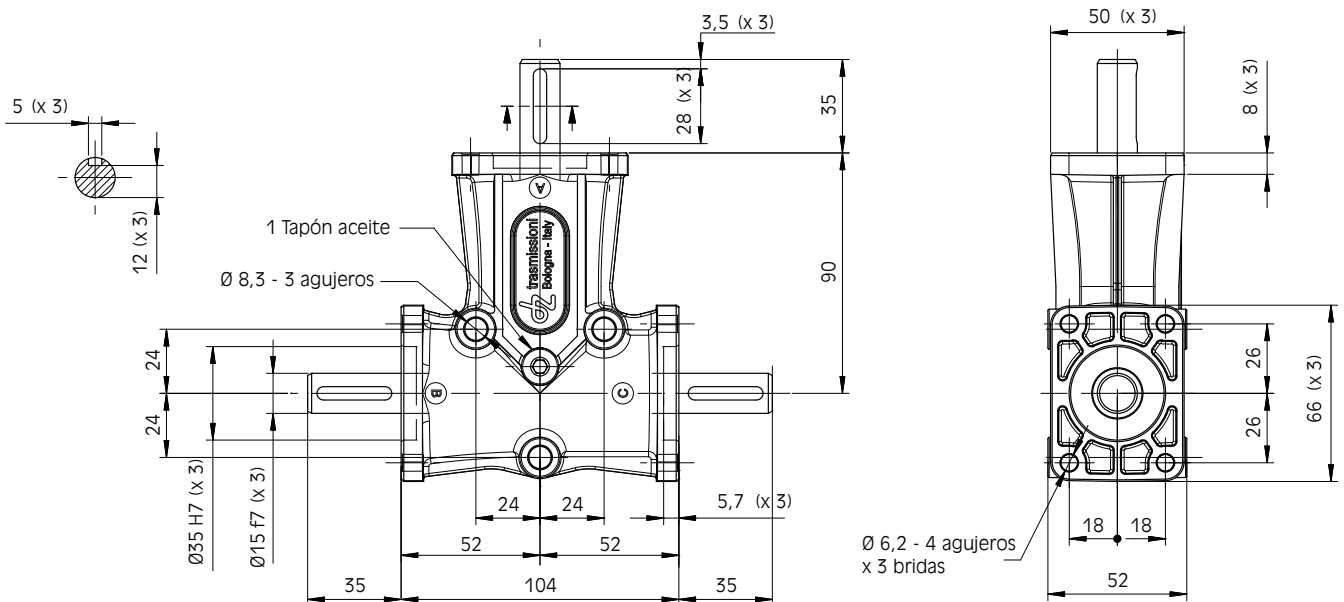
DZ  
Medida: 2  
Bridas: 2



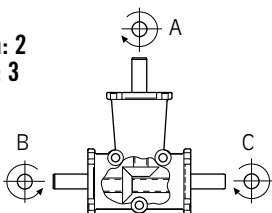
| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | DZ 20S-2FAB- | 1,1 kg |
| 1:1   | A       | C      | DZ 20FS2FAC- |        |
| 1:2   | A       | B      | DZ 22S-2FAB- |        |
| 1:2   | A       | C      | DZ 22FS2FAC- |        |
| 1:1   | A       | B-C    | DZ 21--2FABC | 1,2 kg |
| 1:2   | A       | B-C    | DZ 23--2FABC |        |



MEDIDA: 2 | BRIDAS: 3



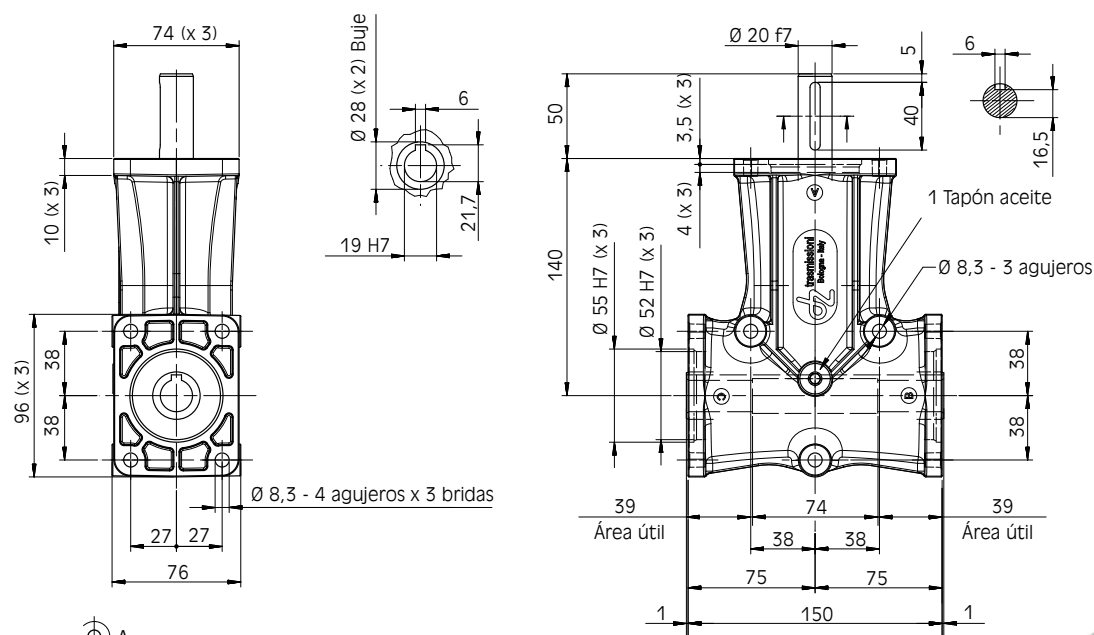
DZ  
Medida: 2  
Bridas: 3



| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | DZ 20S-3FAB- | 1,1 kg |
| 1:1   | A       | C      | DZ 20FS3FAC- |        |
| 1:2   | A       | B      | DZ 22S-3FAB- |        |
| 1:2   | A       | C      | DZ 22FS3FAC- |        |
| 1:1   | A       | B-C    | DZ 21--3FABC | 1,2 kg |
| 1:2   | A       | B-C    | DZ 23--3FABC |        |



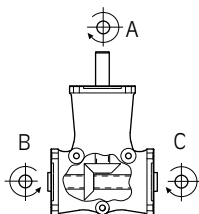
MEDIDA: 3 | EJE HUECO



**DZ**  
**Medida: 3**  

---

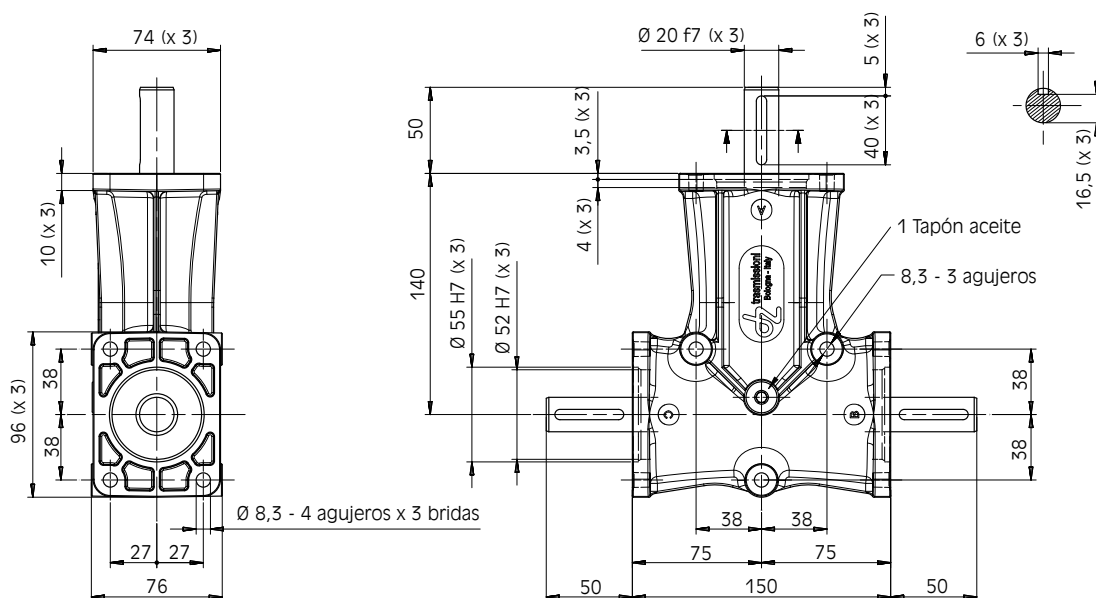
**EJE HUECO**



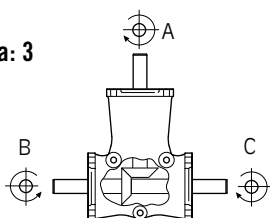
| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B-C    | DZ 311-3FABC | 3,3 kg |



## MEDIDA: 3



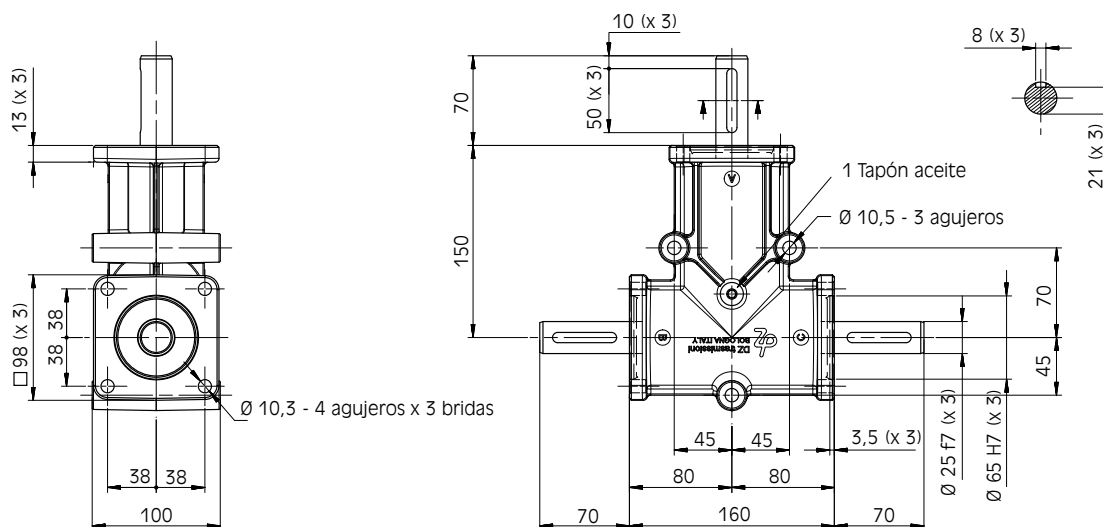
**DZ**  
**Medida: 3**



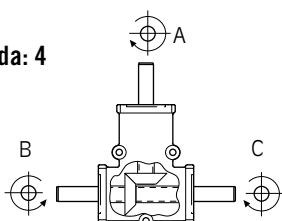
| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | DZ 30S-3FAB- | 3,4 kg |
| 1:1   | A       | C      | DZ 30FS3FAC- |        |
| 1:2   | A       | B      | DZ 32S-3FAB- |        |
| 1:2   | A       | C      | DZ 32FS3FAC- |        |
| 1:1   | A       | B-C    | DZ 31--3FABC | 3,5 kg |
| 1:2   | A       | B-C    | DZ 33--3FABC |        |



## MEDIDA: 4



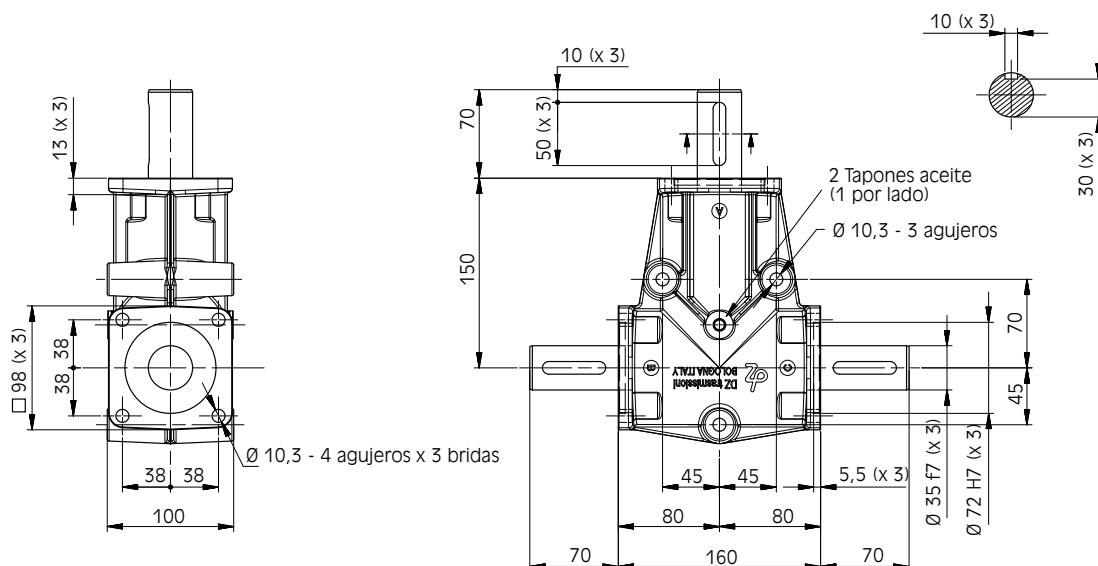
### DZ Medida: 4



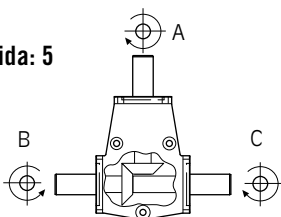
| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | DZ 40S-3FAB- | 5,5 kg |
| 1:1   | A       | C      | DZ 40FS3FAC- |        |
| 1:2   | A       | B      | DZ 42S-3FAB- |        |
| 1:2   | A       | C      | DZ 42FS3FAC- |        |
| 1:1   | A       | B-C    | DZ 41--3FABC | 5,8 kg |
| 1:2   | A       | B-C    | DZ 43--3FABC |        |



## MEDIDA: 5



### DZ Medida: 5



| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | DZ 50S-3FAB- | 8,1 kg |
| 1:1   | A       | C      | DZ 50FS3FAC- |        |
| 1:2   | A       | B      | DZ 52S-3FAB- |        |
| 1:2   | A       | C      | DZ 52FS3FAC- |        |
| 1:1   | A       | B-C    | DZ 51--3FABC | 8,8 kg |
| 1:2   | A       | B-C    | DZ 53--3FABC |        |



[illegible]

Diagram of a three-ported valve. Port A is at the top, Port B is on the left, and Port C is on the right. Each port has a 90-degree rotation arrow indicating its range of motion.

| Ratio | Entrada | Salida | Modelo            | Peso    |
|-------|---------|--------|-------------------|---------|
| 1:1   | A       | B      | DZ 20S-2FAB-INOX  | 1,25 kg |
| 1:1   | A       | C      | DZ 20FS2FAC-INOX  |         |
| 1:2   | A       | B      | DZ 22S-2FAB-INOX  |         |
| 1:2   | A       | C      | DZ 22FS2FAC-INOX  |         |
| 1:1   | A       | B-C    | DZ 21--2FABC-INOX | 1,35 kg |
| 1:2   | A       | B-C    | DZ 23--2FABC-INOX |         |



Technical drawing of a 3D printed part, showing three views: front, top, and side. The part is a rectangular block with a central cylindrical feature and four mounting holes. Dimensions are provided in millimeters.

**Front View Dimensions:**

- Total width: 104
- Total height: 90
- Central cylindrical feature diameter:  $\varnothing 15$
- Central cylindrical feature height: 24
- Mounting holes diameter:  $\varnothing 8,5$  (3 holes)
- Distance from top edge to mounting holes: 28 (x 3)
- Distance from bottom edge to mounting holes: 24
- Distance from left edge to mounting holes: 5,6 (x 3)
- Distance from right edge to mounting holes: 5,6 (x 3)
- Distance between mounting holes: 24
- Distance from central axis to mounting holes: 52

**Top View Dimensions:**

- Total width: 66 (x 3)
- Total depth: 52
- Distance from left edge to mounting holes: 18
- Distance from right edge to mounting holes: 18
- Distance between mounting holes: 50 (x 3)

**Side View Dimensions:**

- Total width: 52
- Total height: 35
- Distance from top edge to mounting holes: 12 (x 3)
- Distance from bottom edge to mounting holes: 5,5 (x 3)

**Labels:**

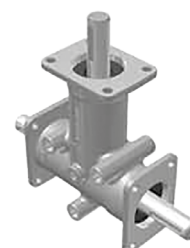
- 1 Tapón aceite
- $\varnothing 8,5 - 3$  agujeros

**Scale:** 1:10

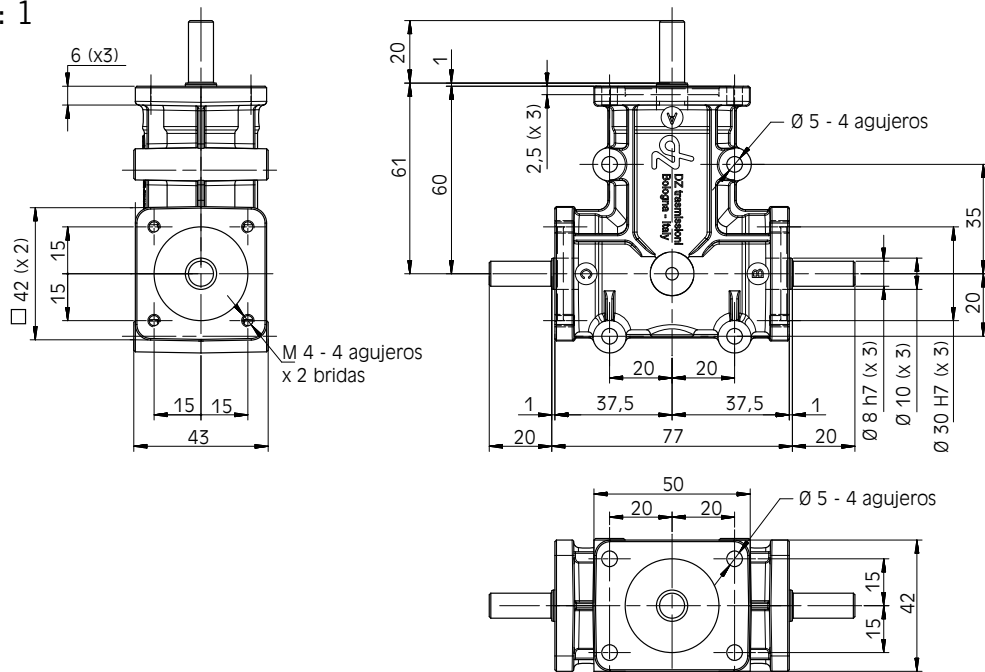
**OX**  
**la: 2**  
**s: 3**



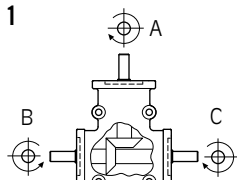
| Ratio | Entrada | Salida | Modelo            | Peso    |
|-------|---------|--------|-------------------|---------|
| 1:1   | A       | B      | DZ 20S-3FAB-INOX  | 1,31 kg |
| 1:1   | A       | C      | DZ 20FS3FAC-INOX  |         |
| 1:2   | A       | B      | DZ 22S-3FAB-INOX  |         |
| 1:2   | A       | C      | DZ 22FS3FAC-INOX  |         |
| 1:1   | A       | B-C    | DZ 21--3FABC-INOX | 1,41 kg |
| 1:2   | A       | B-C    | DZ 23--3FABC-INOX |         |



## MEDIDA: 1



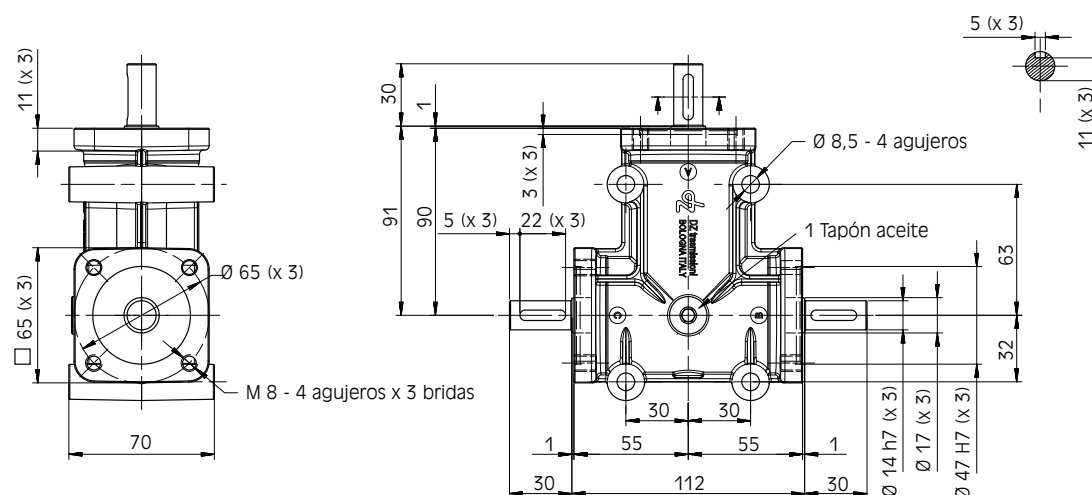
### ZP Medida: 1



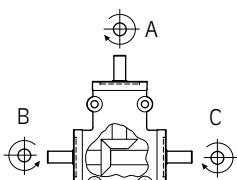
| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | ZP 10S-4PAB- | 0,6 kg |
| 1:1   | A       | C      | ZP 10FS4PAC- |        |
| 1:2   | A       | B      | ZP 12S-4PAB- |        |
| 1:2   | A       | C      | ZP 12FS4PAC- |        |
| 1:1   | A       | B-C    | ZP 11--4PABC |        |
| 1:2   | A       | B-C    | ZP 13--4PABC |        |



## MEDIDA: 2



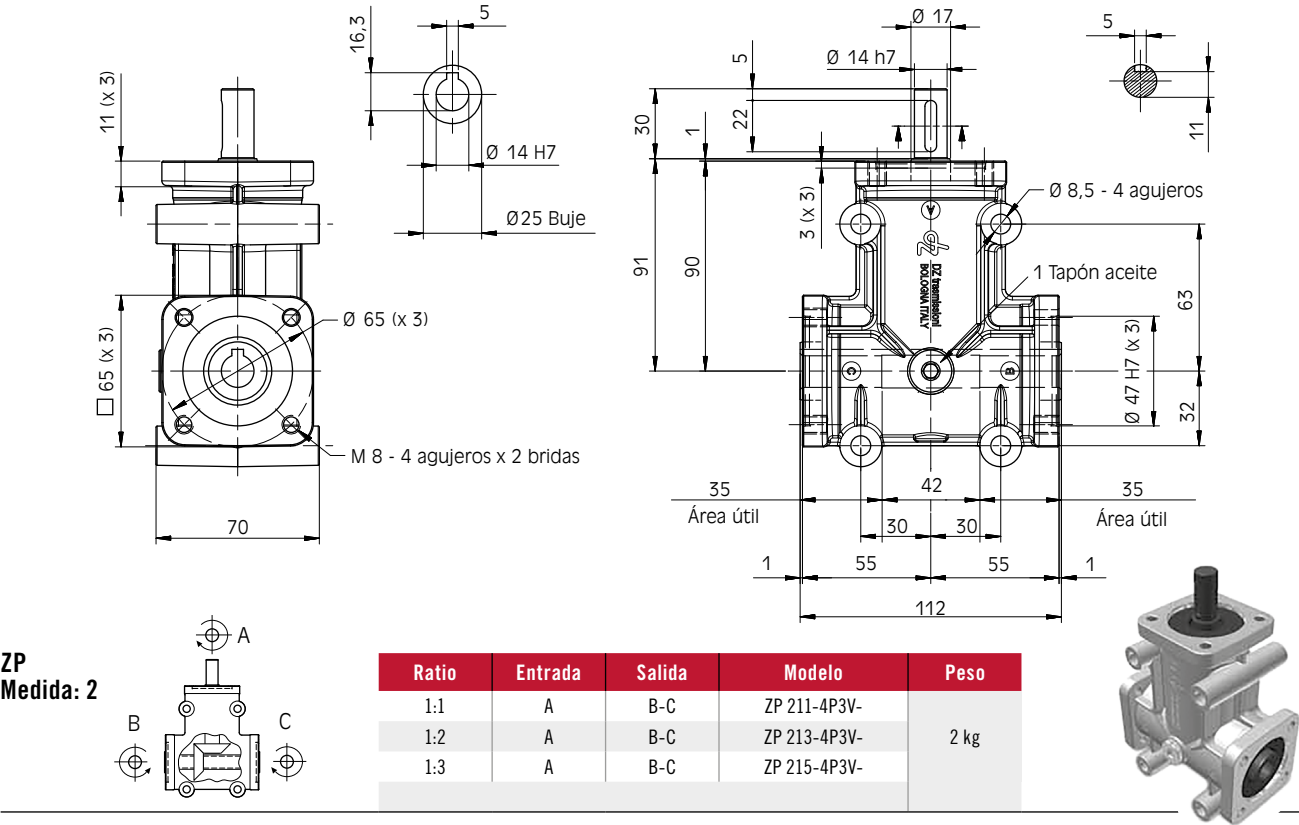
### ZP Medida: 2



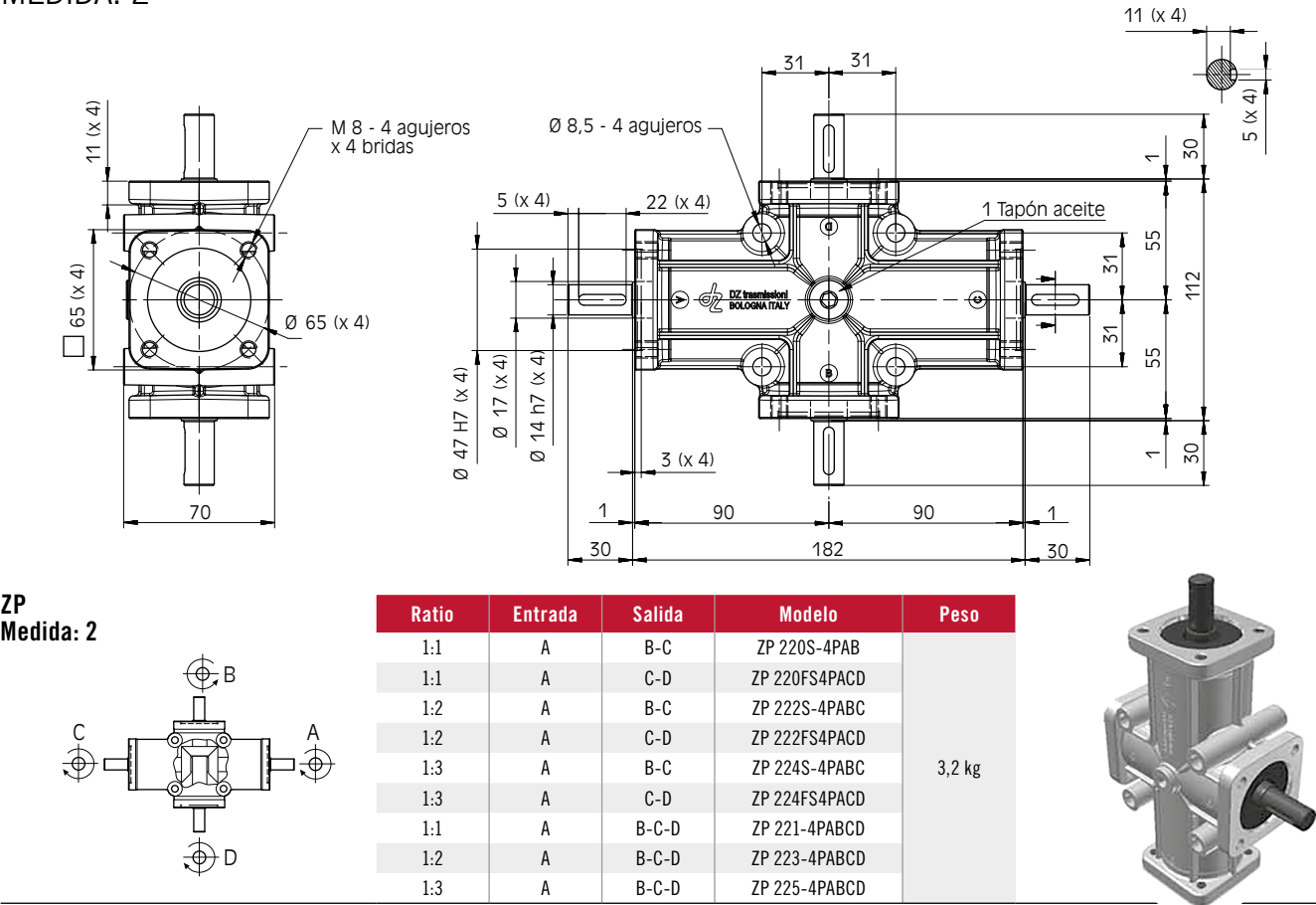
| Ratio | Entrada | Salida | Modelo       | Peso |
|-------|---------|--------|--------------|------|
| 1:1   | A       | B      | ZP 20S-4PAB- | 2 kg |
| 1:1   | A       | C      | ZP 20FS4PAC- |      |
| 1:2   | A       | B      | ZP 22S-4PAB- |      |
| 1:2   | A       | C      | ZP 22FS4PAC- |      |
| 1:3   | A       | B      | ZP 24S-4PAB- |      |
| 1:3   | A       | C      | ZP 24FS4PAC- |      |
| 1:1   | A       | B-C    | ZP 21--4PABC |      |
| 1:2   | A       | B-C    | ZP 23--4PABC |      |
| 1:3   | A       | B-C    | ZP 25--4PABC |      |



MEDIDA: 2

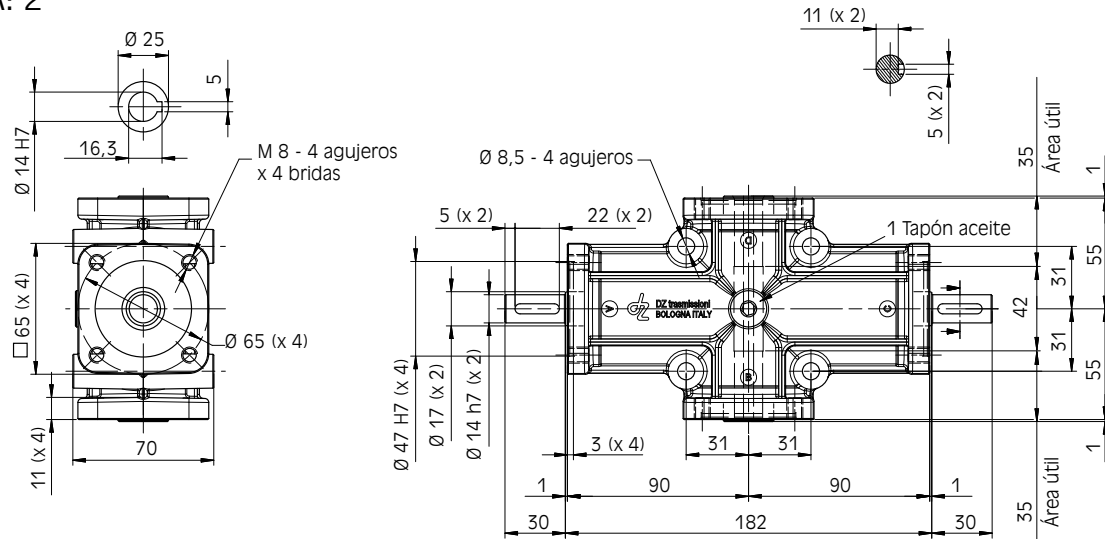


MEDIDA: 2

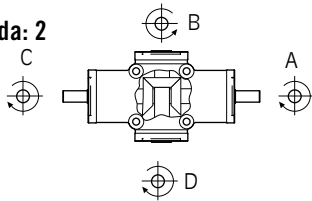


## SERIES ZP

MEDIDA: 2



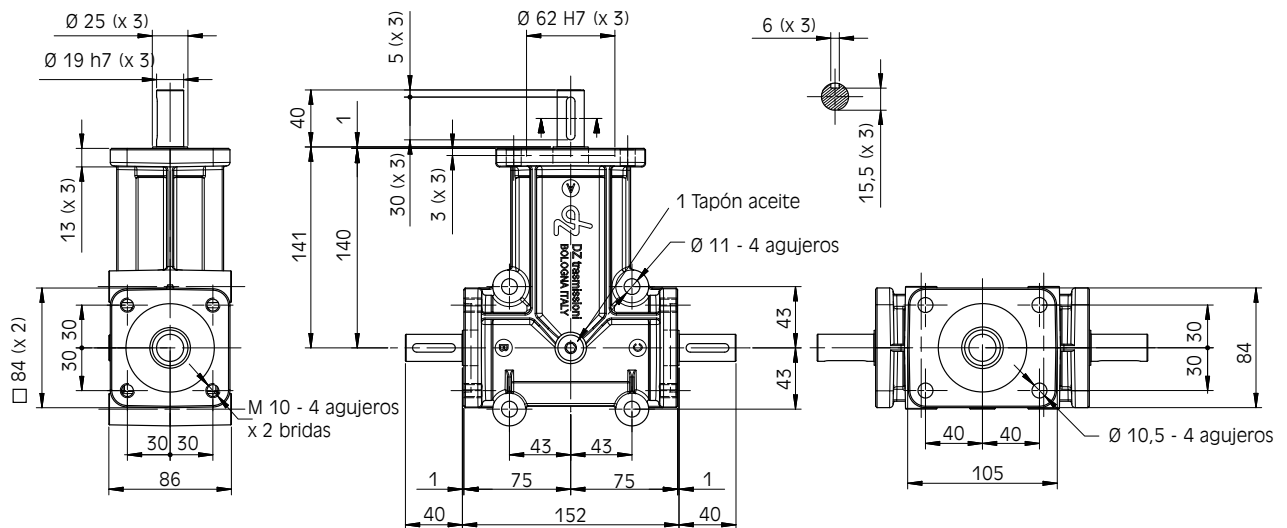
ZP  
Medida: 2



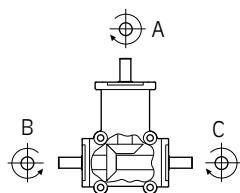
| Ratio | Entrada | Salida | Modelo       | Peso |
|-------|---------|--------|--------------|------|
| 1:1   | A       | B-C-D  | ZP 211-4P4V- | 3 kg |
| 1:2   | A       | B-C-D  | ZP 213-4P4V- |      |
| 1:3   | A       | B-C-D  | ZP 215-4P4V- |      |



MEDIDA: 3



ZP  
Medida: 3

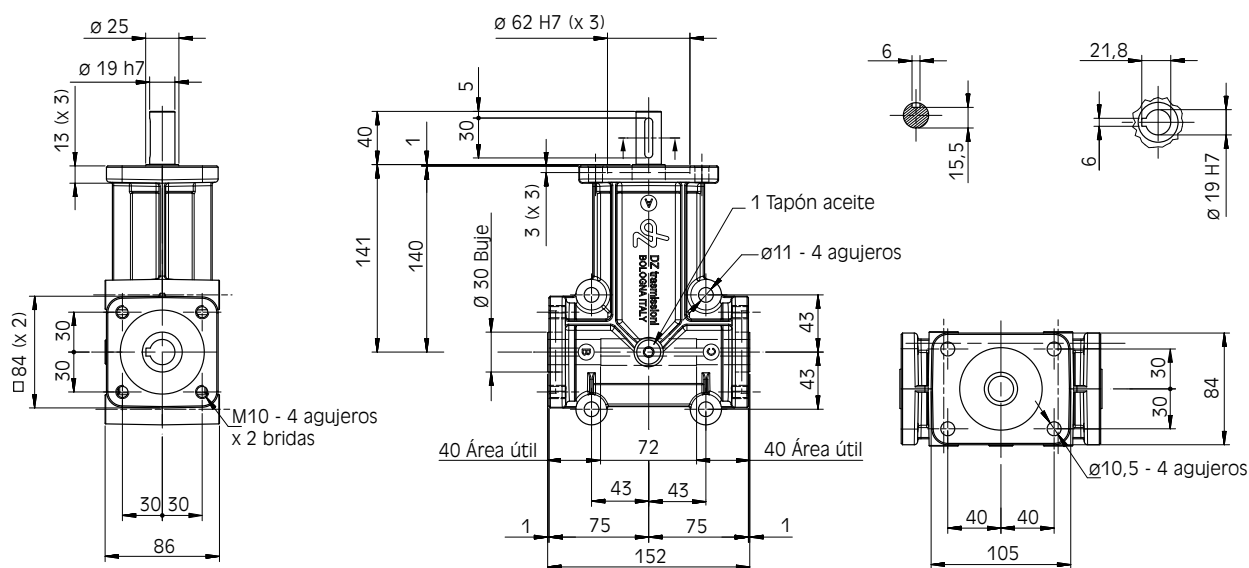


| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | ZP 30S-4PAB- | 4,5 kg |
| 1:1   | A       | C      | ZP 30FS4PAC- |        |
| 1:2   | A       | B      | ZP 32S-4PAB- |        |
| 1:2   | A       | C      | ZP 32FS4PAC- |        |
| 1:3   | A       | B      | ZP 34S-4PAB- |        |
| 1:3   | A       | C      | ZP 34FS4PAC- |        |
| 1:1   | A       | B-C    | ZP 31--4PABC |        |
| 1:2   | A       | B-C    | ZP 33--4PABC |        |
| 1:3   | A       | B-C    | ZP 35--4PABC |        |

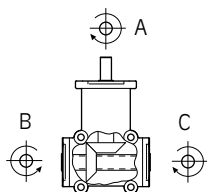




## MEDIDA: 3



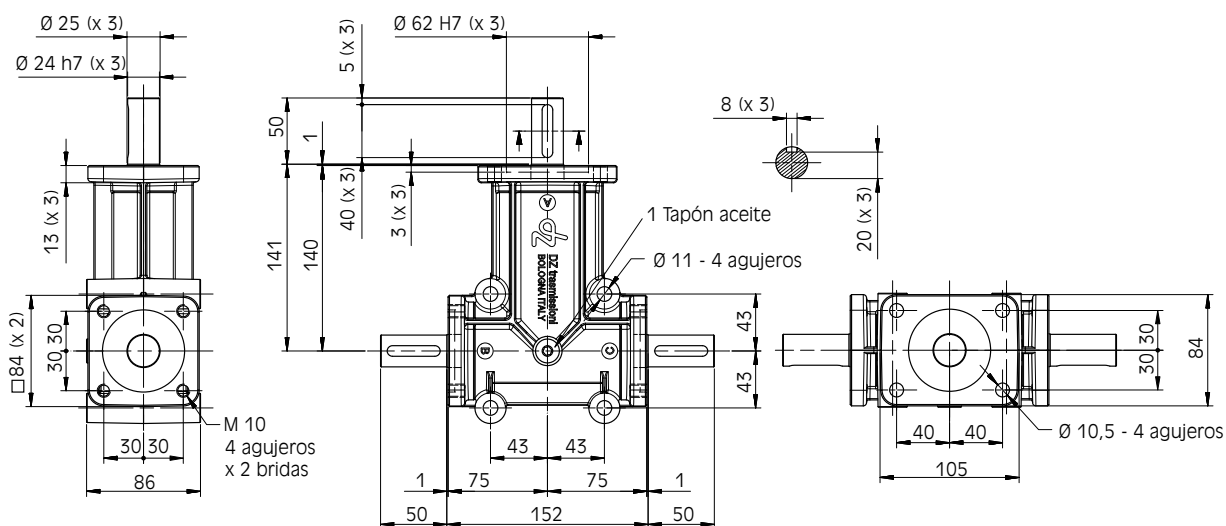
**ZP**  
**Medida: 3**



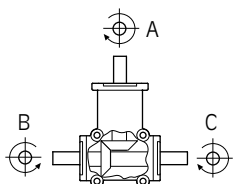
| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B-C    | ZP 311-4P3V- | 4,5 kg |
| 1:2   | A       | B-C    | ZP 313-4P3V- |        |
| 1:3   | A       | B-C    | ZP 315-4P3V- |        |



## MEDIDA: 4



**ZP**  
**Medida: 4**

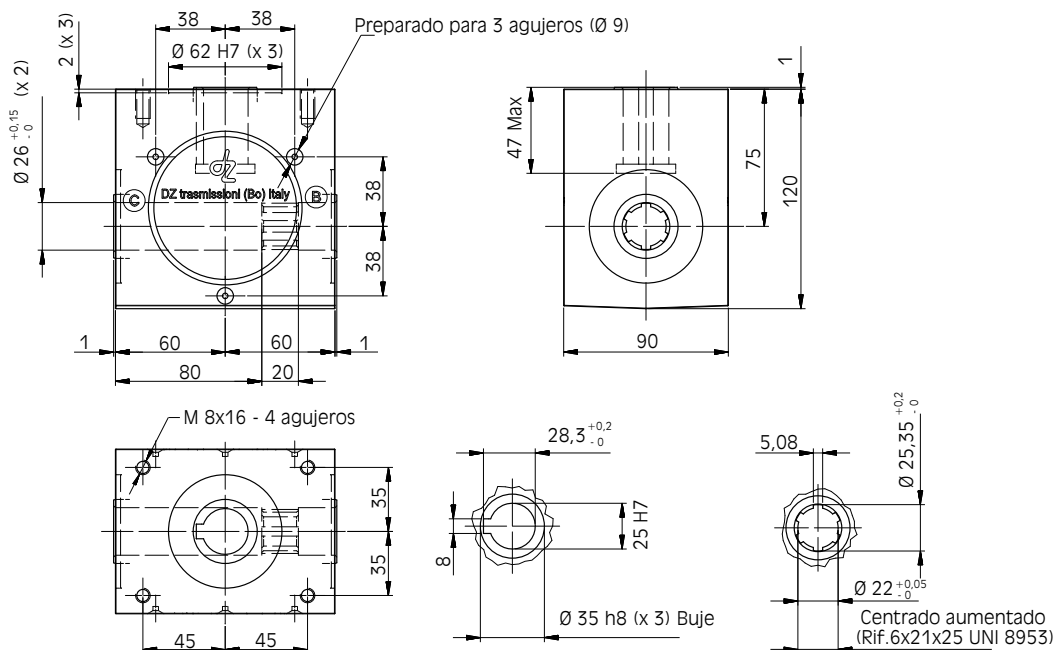


| Ratio | Entrada | Salida | Modelo       | Peso   |
|-------|---------|--------|--------------|--------|
| 1:1   | A       | B      | ZP 40S-4PAB- | 4,5 kg |
| 1:1   | A       | C      | ZP 40FS4PAC- |        |
| 1:2   | A       | B      | ZP 42S-4PAB- |        |
| 1:2   | A       | C      | ZP 42FS4PAC- |        |
| 1:3   | A       | B      | ZP 44S-4PAB- |        |
| 1:3   | A       | C      | ZP 44FS4PAC- |        |
| 1:1   | A       | B-C    | ZP 41-4PABC  |        |
| 1:2   | A       | B-C    | ZP 43-4PABC  |        |
| 1:3   | A       | B-C    | ZP 45-4PABC  |        |

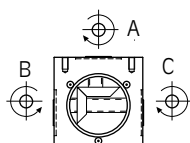


# SERIES DZ ESPECIAL

## ESPECIAL



### DZ ESPECIAL

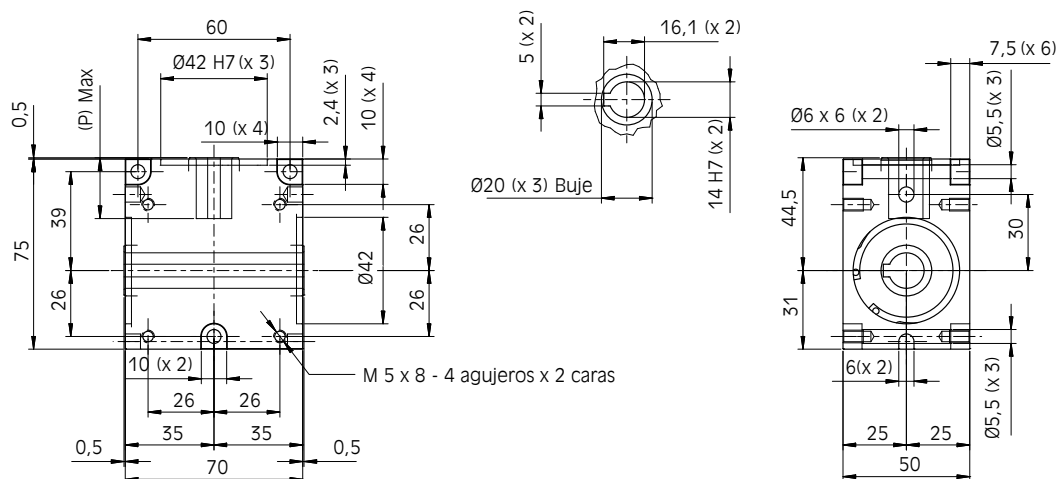


| Ratio | Entrada | Salida | Modelo    | Peso   |
|-------|---------|--------|-----------|--------|
| 1:1   | A       | B-C    | DZ 512-31 | 4,1 kg |

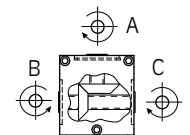


\* Modelo sobre pedido

## ESPECIAL



### DZ ESPECIAL

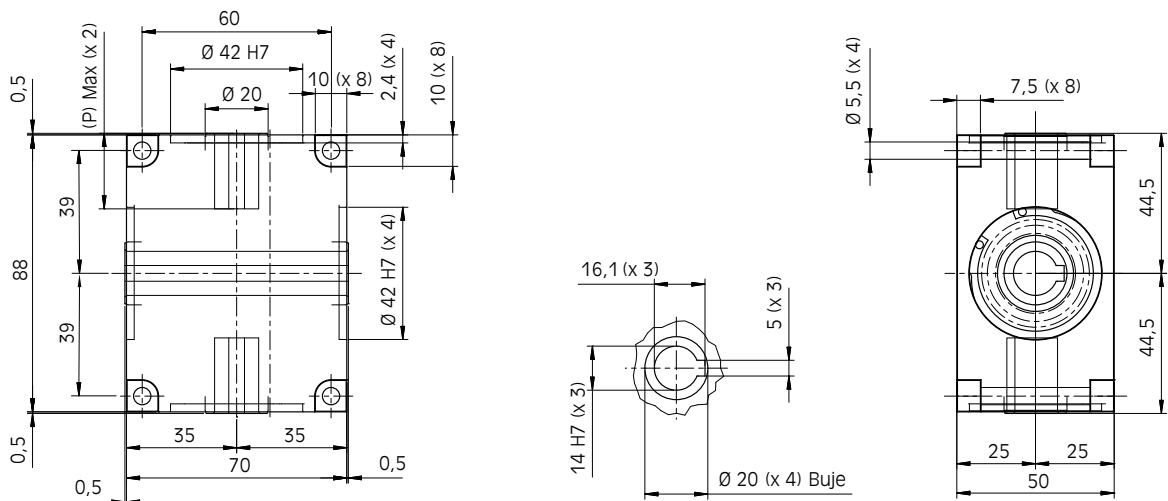


| Ratio | Entrada | Salida | Modelo     | Peso   |
|-------|---------|--------|------------|--------|
| 1:1   | A       | B-C    | DZ 505-60  | 0,7 kg |
| 1:1,5 | A       | B-C    | DZ 505-51* |        |

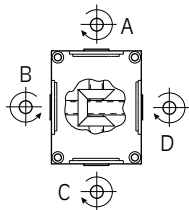


\* Modelo sobre pedido

ESPECIAL



DZ  
ESPECIAL

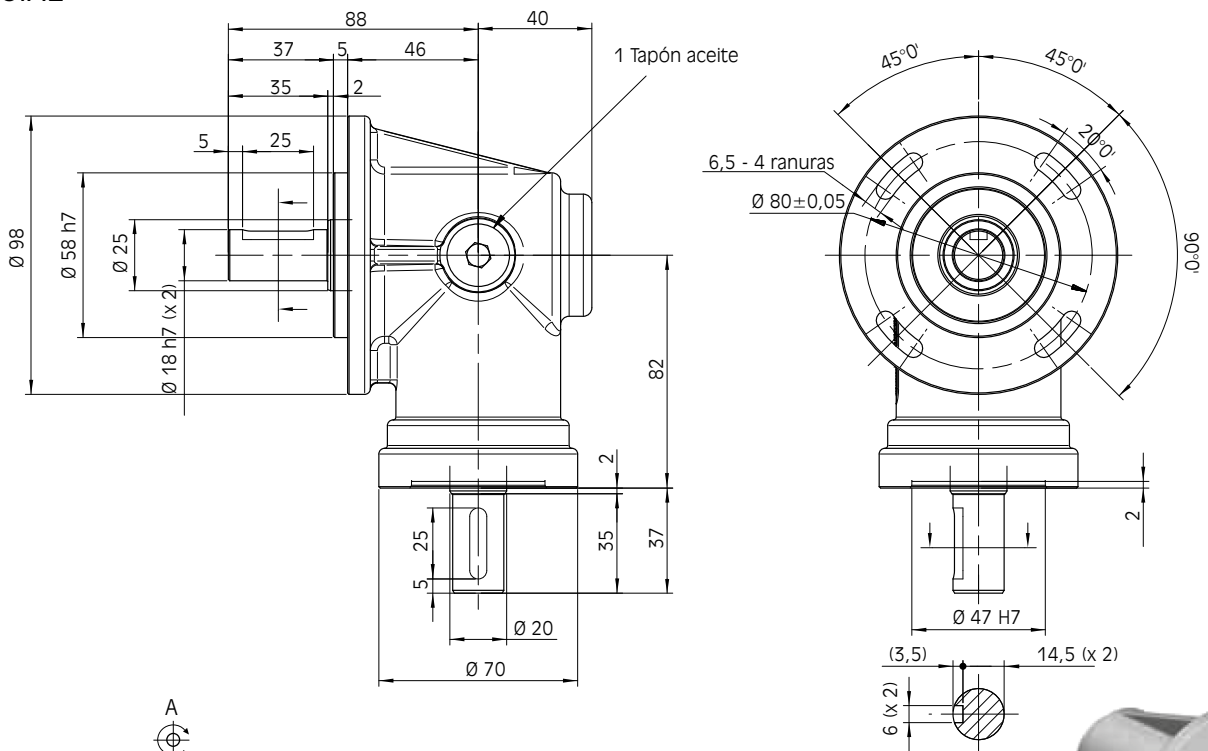


| Ratio | Entrada | Salida | P  | Modelo     | Peso |
|-------|---------|--------|----|------------|------|
| 1:1   | A       | B-C-D  | 24 | DZ 505-70  | 1 kg |
| 1:1,5 | A       | B-C-D  | 16 | DZ 507-71* |      |

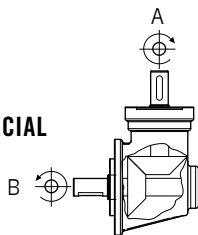


\* Modelo sobre pedido

ESPECIAL



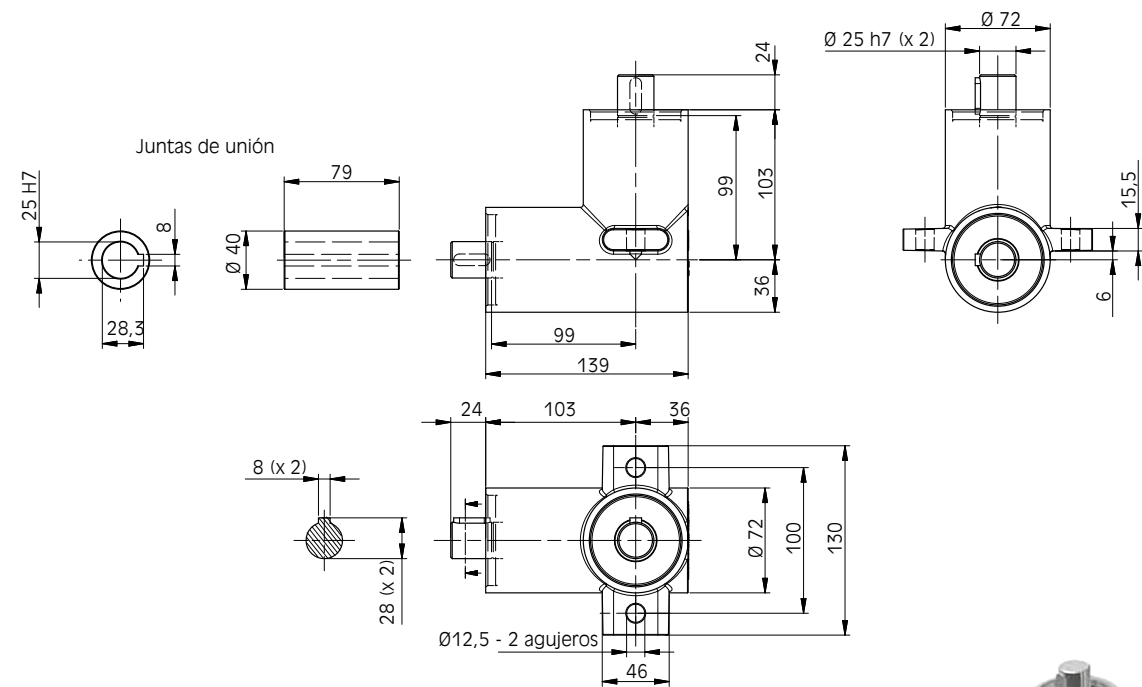
DZ  
ESPECIAL



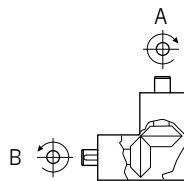
| Ratio | Entrada | Salida | Modelo    | Peso   |
|-------|---------|--------|-----------|--------|
| 1:1   | A       | B      | DZ 604-50 | 1,7 kg |



ESPECIAL



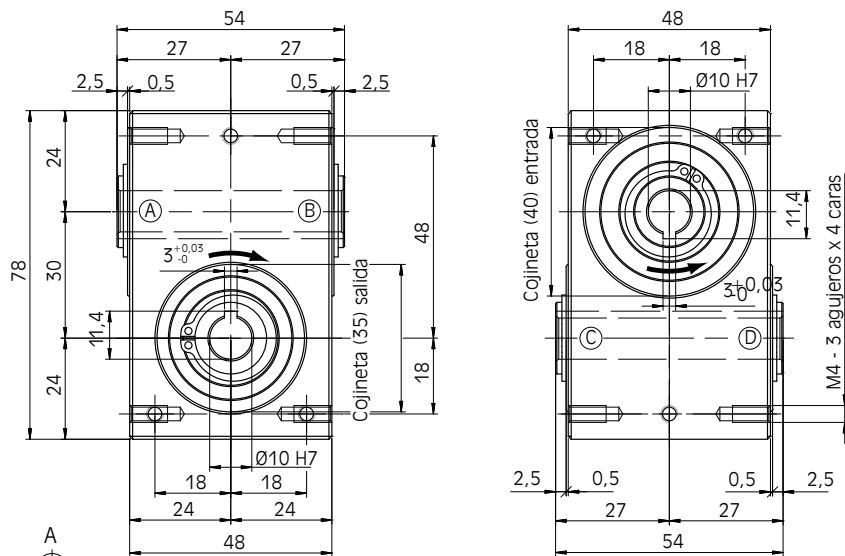
DZ  
ESPECIAL



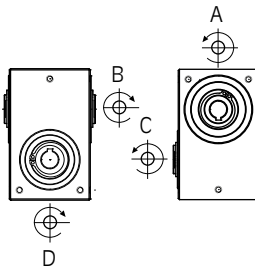
| Ratio | Entrada | Salida | Modelo    | Peso   |
|-------|---------|--------|-----------|--------|
| 1:1   | A       | B-C    | DZ 512-21 | 4,2 kg |



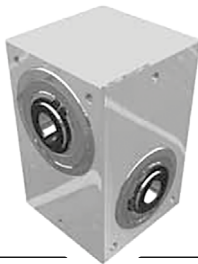
ESPECIAL | REENVÍO ORTOGONAL CON ENGRANAJES CILÍNDRICOS



DZ  
ESPECIAL

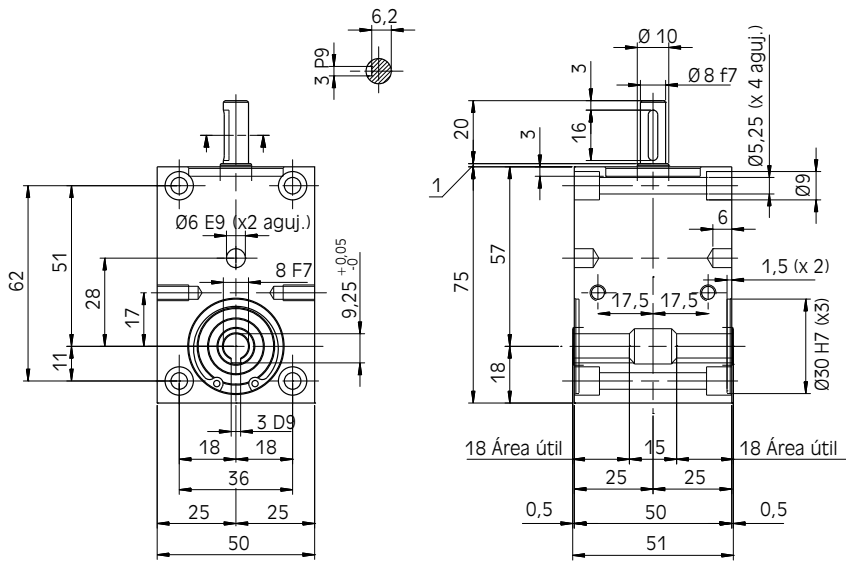


| Ratio | Entrada | Salida | Modelo    | Peso   |
|-------|---------|--------|-----------|--------|
| 1:1   | A-B     | C-D    | DZ 150-01 | 0,7 kg |

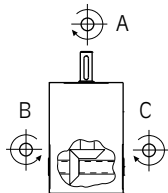


# SERIES DZ ESPECIAL

## ESPECIAL



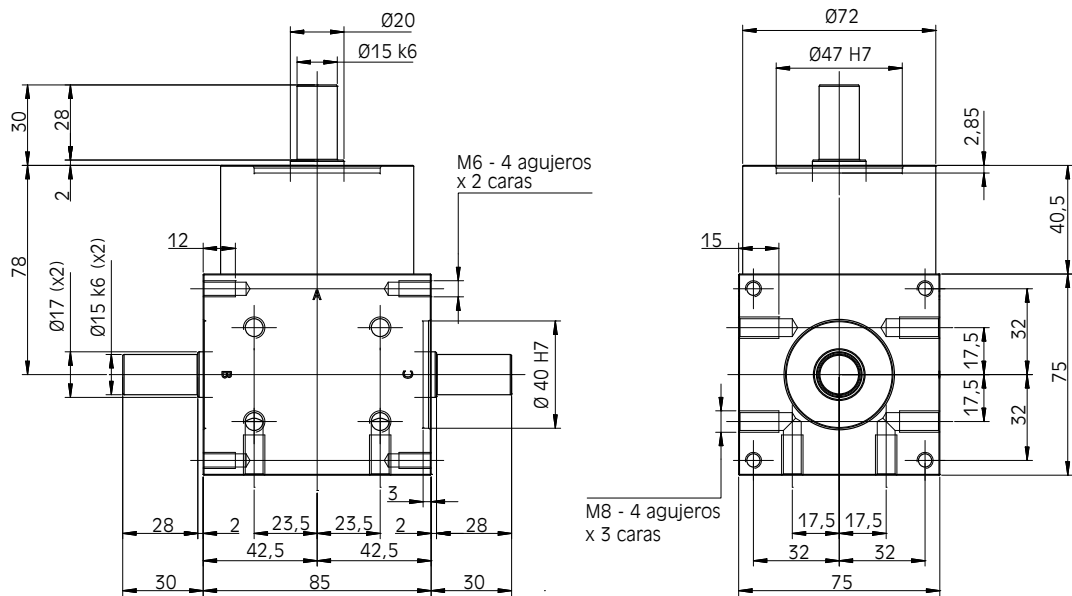
DZ  
ESPECIAL



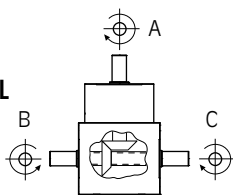
| Ratio | Entrada | Salida | Modelo    | Peso |
|-------|---------|--------|-----------|------|
| 1:1   | A       | B-C    | DZ 600-61 | 1 kg |



## ESPECIAL



DZ  
ESPECIAL



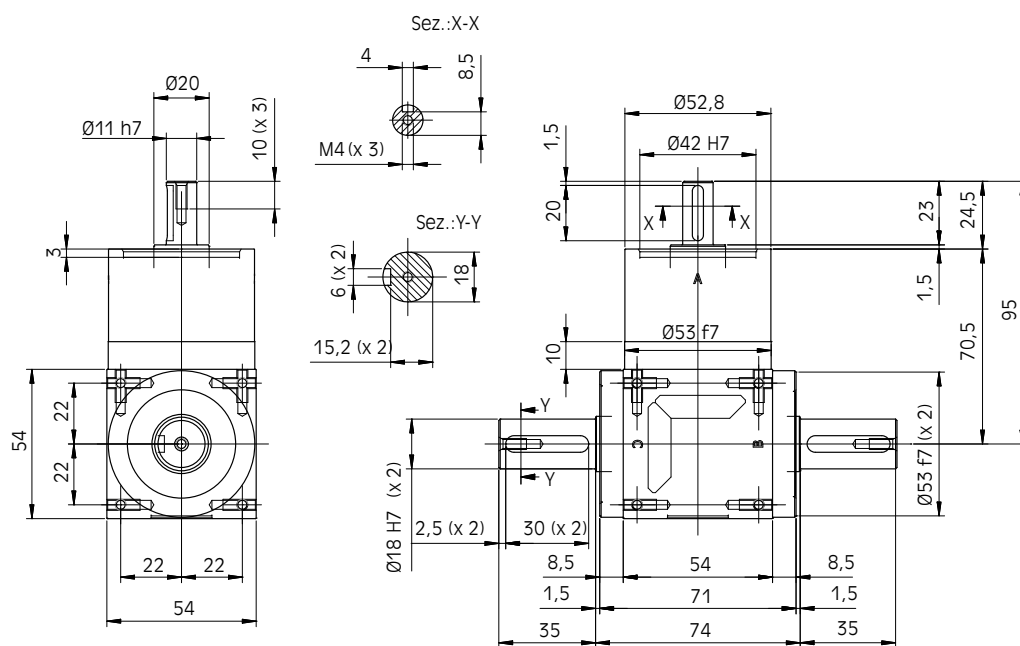
| Modelo    | Versión   | Ratio | Peso   |
|-----------|-----------|-------|--------|
| DZ 201-01 | AB AC ABC | 1:1   | 2,4 kg |



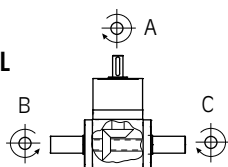
Se suministran otras ratios sobre pedido I Para pedido indicar: **modelo - versión (ejes) - ratio.**



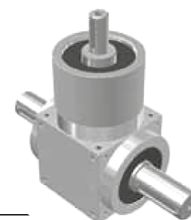
ESPECIAL



**DZ  
ESPECIAL**

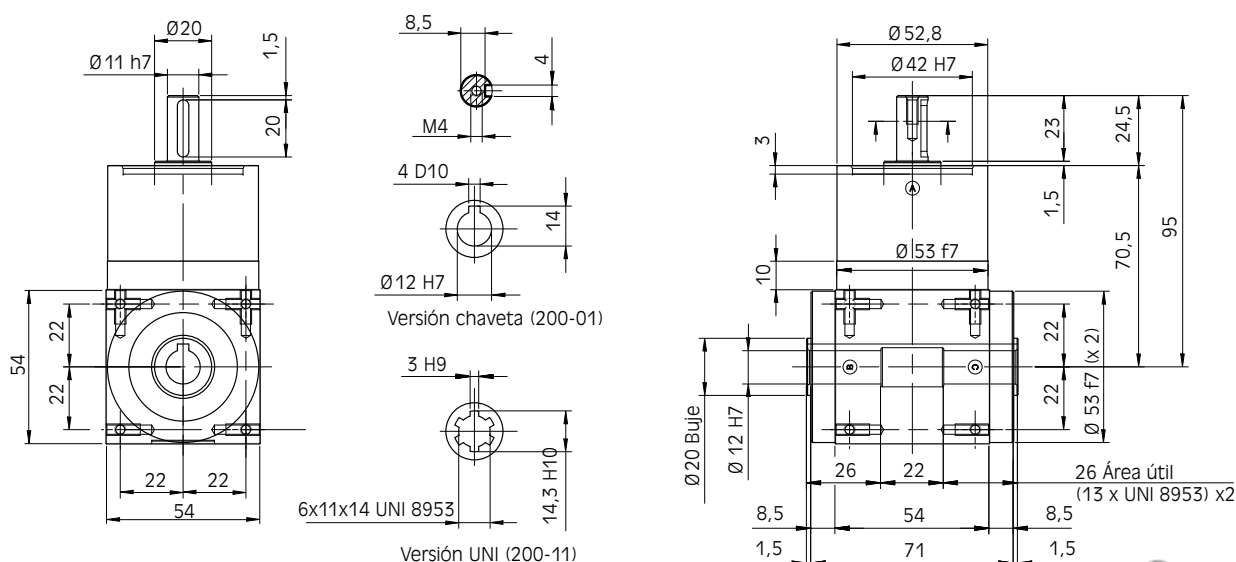


| Modelo    | Versión |    |     | Ratio | Peso   |
|-----------|---------|----|-----|-------|--------|
| DZ 200-21 | AB      | AC | ABC | 1:1   | 1,1 kg |

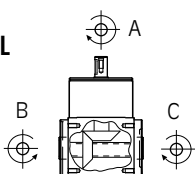


Se suministran otras ratios sobre pedido | Para pedido indicar: **modelo - versión (ejes) - ratio.**

ESPECIAL



**DZ  
ESPECIAL**



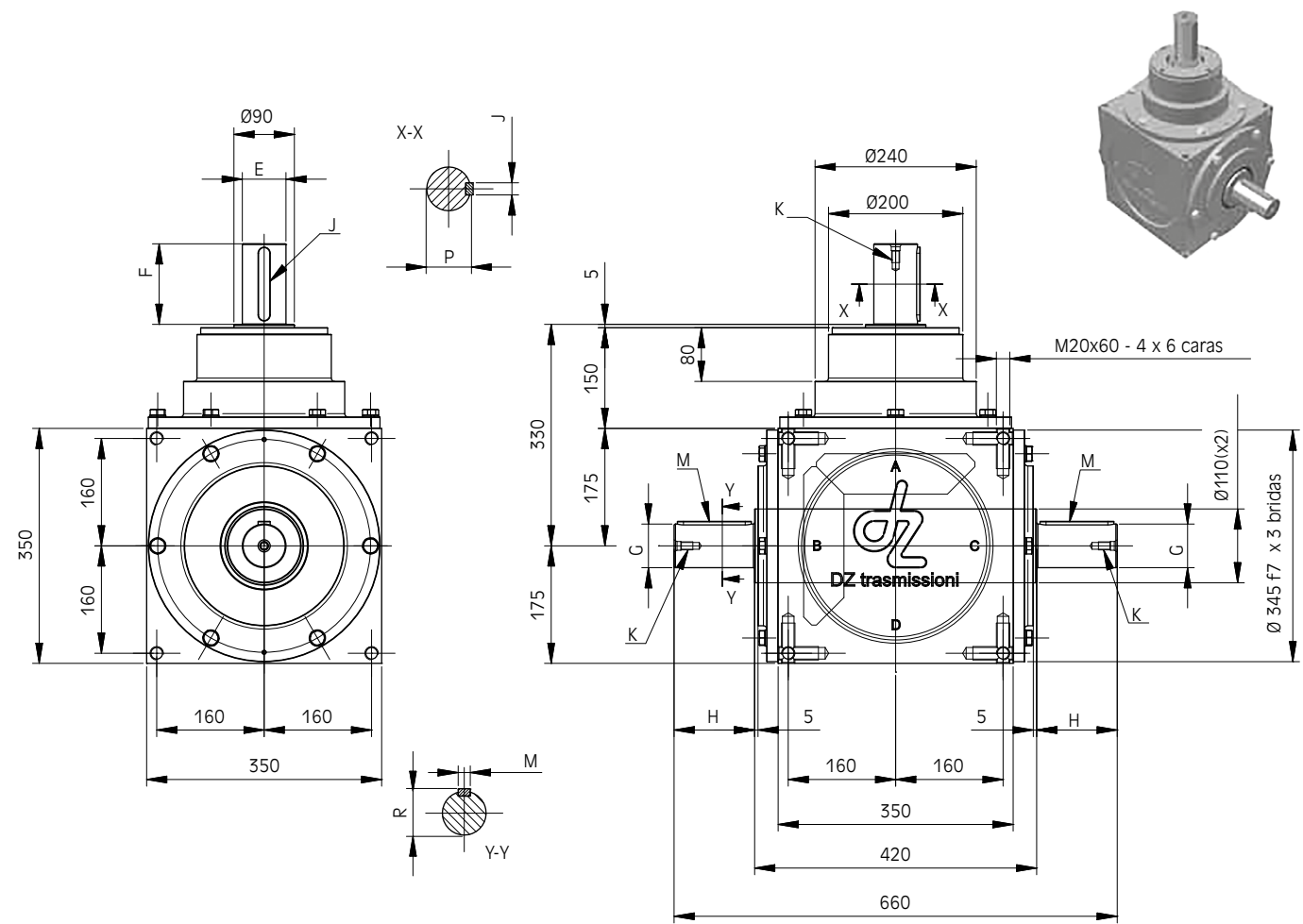
| Ratio | Entrada | Salida | Modelo              | Peso |
|-------|---------|--------|---------------------|------|
| 1:1   | A       | B-C    | DZ 200-01 (chaveta) | 1 kg |
| 1:1   | A       | B-C    | DZ 200-11 (UNI)     |      |



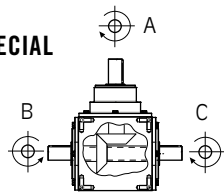
Se suministran otras ratios sobre pedido | Para pedido indicar: **modelo - versión (ejes) - ratio.**



ESPECIAL



DZ  
ESPECIAL

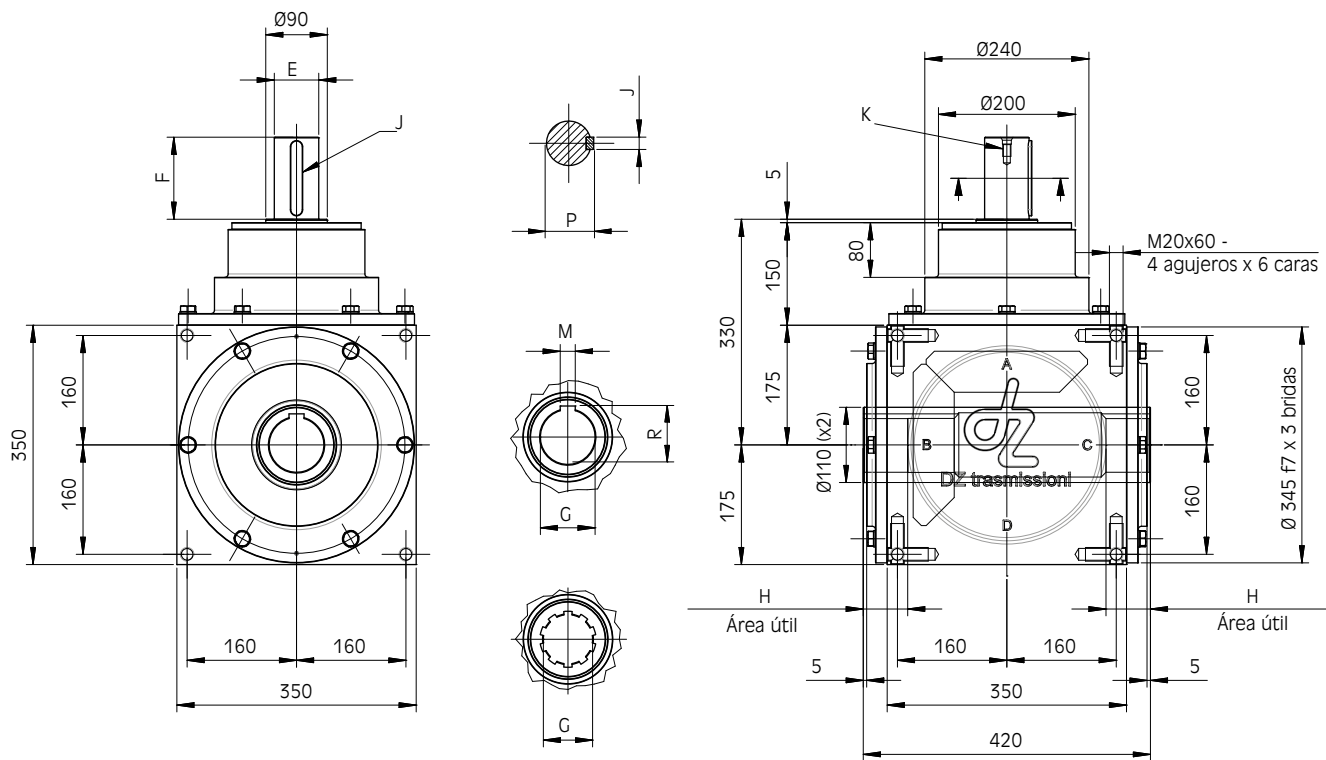


| Modelo    | Versión |     |       | Ratio | E  | F   | G  | H   | J         | M         | K      | P  | R  | Peso       |
|-----------|---------|-----|-------|-------|----|-----|----|-----|-----------|-----------|--------|----|----|------------|
| DZ 270-51 | A-B     | A-C | A-B-C | 1:1   | 65 | 120 | 65 | 120 | 18x11x110 | 18x11x110 | M12x25 | 69 | 69 | 212-221 kg |
| DZ 270-61 | A-B     | A-C | A-B-C | 1:1   | 65 | 120 | 85 | 170 | 18x11x110 | 22x14x160 | M12x25 | 69 | 90 |            |
| DZ 270-71 | A-B     | A-C | A-B-C | 1:1   | 85 | 170 | 85 | 170 | 22x14x160 | 22x14x160 | M12x25 | 90 | 90 |            |

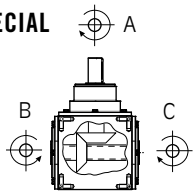
Se suministran otras ratios sobre pedido I Para pedido indicar: **modelo - versión (ejes) - ratio.**



ESPECIAL



**DZ  
ESPECIAL**



| Modelo    | Ratio | E  | F   | G                    | H  | J         | M  | K      | P  | R    | Peso       |
|-----------|-------|----|-----|----------------------|----|-----------|----|--------|----|------|------------|
| DZ 270-01 | 1:1   | 65 | 120 | 80                   | 65 | 18x11x110 | 22 | M12x25 | 65 | 85,5 | 204-207 kg |
| DZ 270-21 | 1:1   | 85 | 170 | 80                   | 65 | 22x14x160 | 22 | M12x25 | 90 | 85,5 |            |
| DZ 270-31 | 1:1   | 65 | 120 | UNI 8953<br>10X72X82 | 50 | 18x11x110 | -  | M12x25 | 65 |      |            |



Se suministran otras ratios sobre pedido I Para pedido indicar: **modelo - versión (ejes) - ratio.**

En **TecnoPower** trabajamos para que toda la información de nuestros catálogos sea correcta, sin embargo, la información incluida en este catálogo se facilita sin garantía y no es vinculante. Las dimensiones y valores se proporcionan a efectos orientativos. Para valores exactos consultar con nuestra oficina técnica. Las especificaciones y características del presente catálogo pueden ser modificadas en cualquier momento sin previo aviso.



Información técnica en PDF, DWG  
y STEP con configurador online en  
[www.tecnopower.es](http://www.tecnopower.es)

Carretera Laureà Miró, 407  
08980 Sant Feliu de Llobregat · Barcelona · España  
Tel. 93 656 80 50 · [tp@tecnopower.es](mailto:tp@tecnopower.es)

**[www.tecnopower.es](http://www.tecnopower.es)**