



### Tabla para carrera estándar

| D.I. Tubo    | Carrera (mm)                     |
|--------------|----------------------------------|
| ø20,25,32,40 | 25,50,75,100,125,150,200,250,300 |

### Ejemplo de pedido

**MCMB – 11 – 20 – 50 – A – N – G**

MODELO

- 1: Vástago simple
- 2: Doble vástago

D.I. TUBO

CARRERA

- En blanco: Amortiguación elástica (No regulable)
- A: Amortiguación neumática (regulable) ⚠

- TIPO DE ROSCA
- En blanco: Rosca Rc
  - G: Rosca G
  - NPT: Rosca NPT

TIPO

| Código | Símbolo | Descripción  |
|--------|---------|--|
| 1 1    |         | Doble efecto / Rosca macho   |
| 1 3    |         | Simple efecto / vástago extendido / rosca macho  |
| 1 5    |         | Simple efecto / vástago retraído / rosca macho   |
| 2 1    |         | Doble vástago / Rosca macho  |
| 2 7    |         | Doble vástago / Rosca macho regulable<br>Por favor, marque "distancia ajustable (mm)" en la lista de pedidos |

TIPO TAPA

| Código    | Símbolo | Descripción     |
|-----------|---------|-----------------|
| En blanco |         | Tipo estándar   |
| N         |         | Extremo plano   |
| E         |         | Tipo con pivote |

- \* Para el tipo simple efecto, consúltenos.
- \* Consulte la pág. 0-7 para ver un ejemplo de pedido con especificaciones especiales.

### ⚠ Precaución

Para (A) Amortiguación neumática (regulable)

1. Para ajustar la aguja de amortiguación, gire lentamente la válvula del estado completamente cerrado al estado requerido cuyos giros deben estar dentro de los 2.5 círculos.
2. Si la válvula de aguja se afloja excesivamente, el tope no puede surtir efecto y la vida útil del cilindro puede acortarse.

### Características

#### ■ Sin lubricación

- La carcasa especial y el casquillo permiten la lubricación automática del vástago.

#### ■ Larga vida útil de gran calidad

- Los tubos del cilindro de acero inox. anodizado duro ofrecen una alta resistencia a la corrosión y bajo rozamiento interno.
- Fijaciones de cilindros disponibles con una amplia gama de accesorios para montaje rígido o flexible.

#### ■ Magnético como estándar

### Especificaciones

| Modelo                              | MCMB                          |                                     |      |       |      |
|-------------------------------------|-------------------------------|-------------------------------------|------|-------|------|
| D.I. Tubo                           | 20                            | 25                                  | 32   | 40    |      |
| Tamaño del puerto                   | Rc1/8                         |                                     |      | Rc1/4 |      |
| Medio                               | Aire                          |                                     |      |       |      |
| Presión de funcionamiento máx.      | 1 MPa                         |                                     |      |       |      |
| Presión de funcionamiento mín.      | Doble efecto                  | 0.05 MPa                            |      |       |      |
|                                     | Simple efecto                 | Extendido: 0.23, Retraído: 0.18 MPa |      |       |      |
| Presión de prueba                   | 1.5 MPa                       |                                     |      |       |      |
| Temperatura ambiente                | -5~+60°C (Sin congelación)    |                                     |      |       |      |
| Lubricador                          | No requerido                  |                                     |      |       |      |
| Rango de velocidad disponible       | 50~750 mm/seg.                |                                     |      |       |      |
| Energía cinética máx. admisible (J) | Amortiguación elástica        | 0.27                                | 0.4  | 0.65  | 1.2  |
|                                     | Amortiguación neumática       | 0.54                                | 0.78 | 1.27  | 2.35 |
| Sensor final de carrera             | RCM (Consulte la página 8-15) |                                     |      |       |      |
| Sensor final de carrera (banda)     | BM20                          | BM25                                | BM32 | BM40  |      |

\* Para conocer las precauciones, consulte la página 3-2.

### Accesorios de montaje

**LB – MCMB – 20**

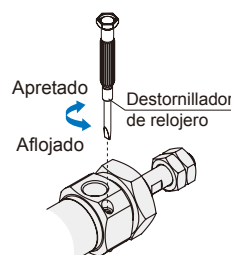
MODELO

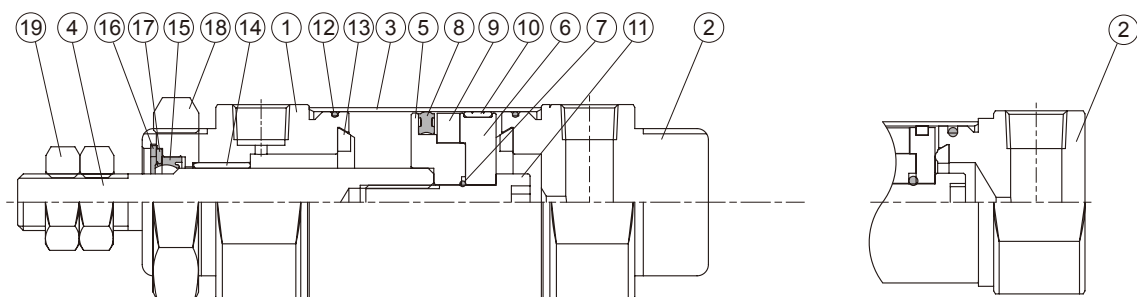
D.I. TUBO

TIPO DE MONTAJE

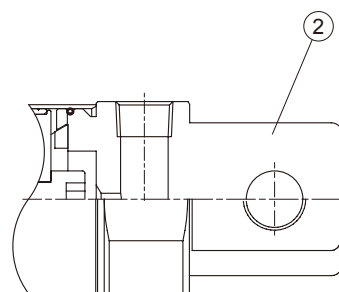
|  |    |  |      |
|--|----|--|------|
|  | LB |  | SDB* |
|  | CA |  | TA   |
|  | CB |  | TB   |
|  | FA |  | Y    |
|  | FB |  | I    |

\* para tapa tipo "E".





Tipo N



Tipo E

### Material

| Núm. | D.I. Tubo<br>Nombre de la pieza | 20                   | 25 | 32 | 40 | Cant.   |         | Componentes (incluidos) |         |
|------|---------------------------------|----------------------|----|----|----|---------|---------|-------------------------|---------|
|      |                                 |                      |    |    |    | tipo 11 | tipo 21 | tipo 11                 | tipo 21 |
| 1    | Cubierta del vástago            | Aleación de aluminio |    |    |    | 1       | 2       | ●                       | ●       |
| 2    | Culata trasera                  | Aleación de aluminio |    |    |    | 1       | —       | ●                       |         |
| 3    | Tubo                            | Acero inoxidable     |    |    |    | 1       | 1       |                         |         |
| 4    | Vástago                         | Acero al carbono     |    |    |    | 1       | 1       |                         |         |
| 5    | Pistón R                        | Aleación de aluminio |    |    |    | 1       | 1       | ●                       | ●       |
| 6    | Pistón H                        | Aleación de aluminio |    |    |    | 1       | 1       | ●                       | ●       |
| 7    | Junta del pistón                | NBR                  |    |    |    | 1       | 1       | ●                       | ●       |
| 8    | Juntas del pistón               | NBR                  |    |    |    | 1       | 1       | ●                       | ●       |
| 9    | Anillo magnético                | Material magnético   |    |    |    | 1       | 1       | ●                       | ●       |
| 10   | Anillo de desgaste              | Resina               |    |    |    | 1       | 1       | ●                       | ●       |
| 11   | Tornillo del pistón             | SCM                  |    |    |    | 1       | —       | ●                       |         |
| 12   | Tórica                          | NBR                  |    |    |    | 2       | 2       | ●                       | ●       |
| 13   | Junta de amortiguación          | NBR                  |    |    |    | 2       | 2       | ●                       | ●       |
| 14   | Casquillo de vástago            | Aleación de cojinete |    |    |    | 1       | 2       | ●                       | ●       |
| 15   | Juntas del vástago *1           | NBR                  |    |    |    | 1       | 2       | ●                       | ●       |
| 16   | Anillo elástico                 | Muelle de acero      |    |    |    | 1       | 2       | ●                       | ●       |
| 17   | Arandela                        | Acero al carbono     |    |    |    | 1       | 2       | ●                       | ●       |
| 18   | Tuerca fijación                 | Acero al carbono     |    |    |    | 1       | 2       | ●                       | ●       |
| 19   | Tuerca vástago front.           | Acero al carbono     |    |    |    | 2       | 2       | ●                       | ●       |

\*1. Sólo el retén vástago es reparable, por favor contacte con nuestro departamento de ventas si es necesario.

### Ejemplo de pedido Componentes

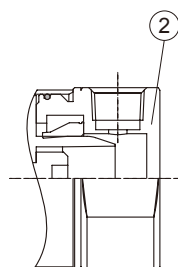
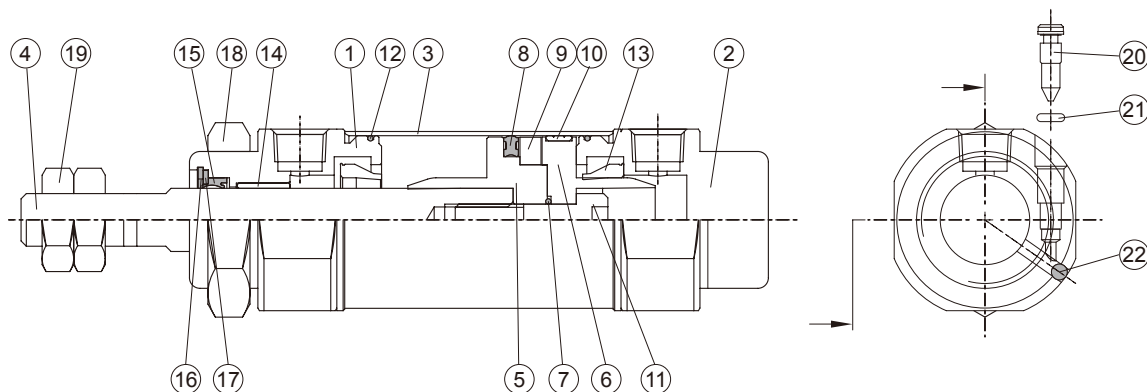
| Tubo D.I. | Componentes |
|-----------|-------------|
| ø20       | CP-MCMB-20  |
| ø25       | CP-MCMB-25  |
| ø32       | CP-MCMB-32  |
| ø40       | CP-MCMB-40  |

### Tipo sin pivote (extremo plano)

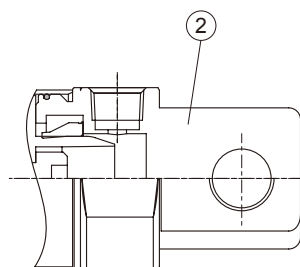
| Tubo D.I. | Componentes  |
|-----------|--------------|
| ø20       | CP-MCMB-20-N |
| ø25       | CP-MCMB-25-N |
| ø32       | CP-MCMB-32-N |
| ø40       | CP-MCMB-40-N |

### Tipo pivote

| Tubo D.I. | Componentes  |
|-----------|--------------|
| ø20       | CP-MCMB-20-E |
| ø25       | CP-MCMB-25-E |
| ø32       | CP-MCMB-32-E |
| ø40       | CP-MCMB-40-E |



Tipo N



Tipo E

Material

| Núm. | D.I. Tubo<br>Nombre de la pieza | 20                   | 25               | 32 | 40 | Cant.   |         | Componentes (incluidos) |         |
|------|---------------------------------|----------------------|------------------|----|----|---------|---------|-------------------------|---------|
|      |                                 |                      |                  |    |    | tipo 11 | tipo 21 | tipo 11                 | tipo 21 |
| 1    | Cubierta del vástago            | Aleación de aluminio |                  |    |    | 1       | 2       | ●                       | ●       |
| 2    | Culata trasera                  | Aleación de aluminio |                  |    |    | 1       | —       | ●                       |         |
| 3    | Tubo                            | Acero inoxidable     |                  |    |    | 1       | 1       |                         |         |
| 4    | Vástago                         | Acero al carbono     |                  |    |    | 1       | 1       |                         |         |
| 5    | Pistón R                        | Aleación de aluminio |                  |    |    | 1       | 1       | ●                       | ●       |
| 6    | Pistón H                        | Aleación de aluminio |                  |    |    | 1       | 1       | ●                       | ●       |
| 7    | Junta del pistón                | NBR                  |                  |    |    | 1       | 1       | ●                       | ●       |
| 8    | Juntas del pistón               | NBR                  |                  |    |    | 1       | 1       | ●                       | ●       |
| 9    | Anillo magnético                | Material magnético   |                  |    |    | 1       | 1       | ●                       | ●       |
| 10   | Anillo de desgaste              | Resina               |                  |    |    | 1       | 1       | ●                       | ●       |
| 11   | Tornillo del pistón             | SCM                  |                  |    |    | 1       | —       | ●                       |         |
| 12   | Tórica                          | NBR                  |                  |    |    | 2       | 2       | ●                       | ●       |
| 13   | Junta de amortiguación          | NBR                  |                  |    |    | 2       | 2       | ●                       | ●       |
| 14   | Casquillo de vástago            | Aleación de cojinete |                  |    |    | 1       | 2       | ●                       | ●       |
| 15   | Juntas del vástago *1           | NBR                  |                  |    |    | 1       | 2       | ●                       | ●       |
| 16   | Anillo elástico                 | Muelle de acero      |                  |    |    | 1       | 2       | ●                       | ●       |
| 17   | Arandela                        | Acero al carbono     |                  |    |    | 1       | 2       | ●                       | ●       |
| 18   | Tuerca fijación                 | Acero al carbono     |                  |    |    | 1       | 2       | ●                       | ●       |
| 19   | Tuerca vástago front.           | Acero al carbono     |                  |    |    | 2       | 2       | ●                       | ●       |
| 20   | Válvula de aguja                | Acero inoxidable     | Acero al carbono |    |    | 2       | 2       | ●                       | ●       |
| 21   | Juntas válvula de aguja         | NBR                  |                  |    |    | 2       | 2       | ●                       | ●       |
| 22   | Bola de acero                   | Acero inoxidable     |                  |    |    | 2       | 2       | ●                       | ●       |

\*1. Sólo el retén vástago es reparable, por favor contacte con nuestro departamento de ventas si es necesario.

Ejemplo de pedido  
Componentes

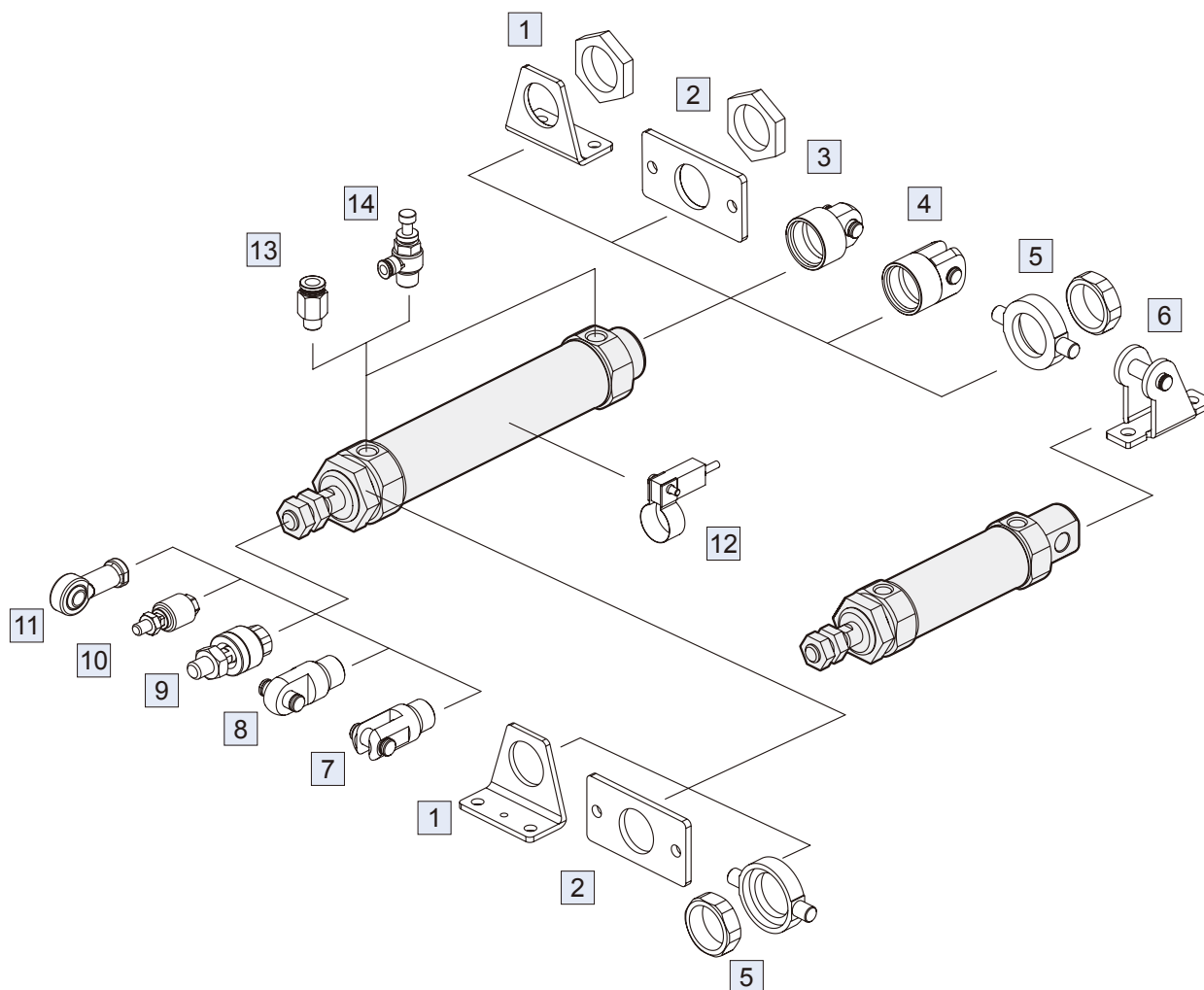
| Tubo D.I. | Componentes |
|-----------|-------------|
| ø20       | CP-MCMB-20A |
| ø25       | CP-MCMB-25A |
| ø32       | CP-MCMB-32A |
| ø40       | CP-MCMB-40A |

Tipo sin pivote  
(extremo plano)

| Tubo D.I. | Componentes   |
|-----------|---------------|
| ø20       | CP-MCMB-20A-N |
| ø25       | CP-MCMB-25A-N |
| ø32       | CP-MCMB-32A-N |
| ø40       | CP-MCMB-40A-N |

Tipo pivote

| Tubo D.I. | Componentes   |
|-----------|---------------|
| ø20       | CP-MCMB-20A-E |
| ø25       | CP-MCMB-25A-E |
| ø32       | CP-MCMB-32A-E |
| ø40       | CP-MCMB-40A-E |



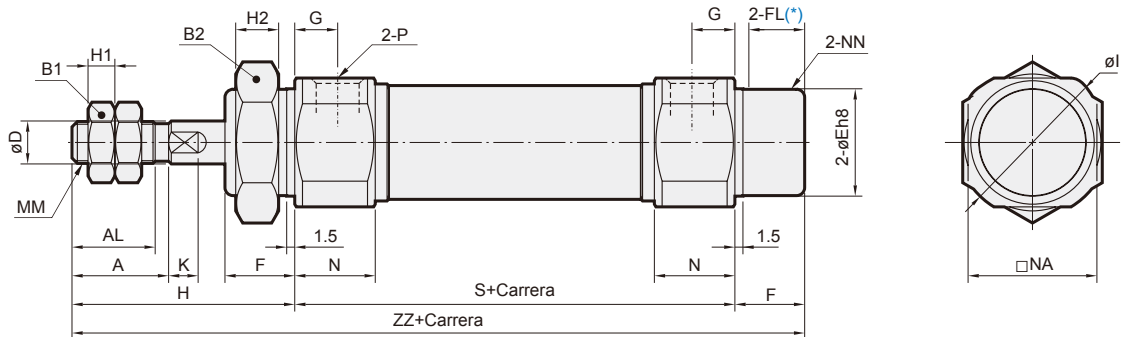
| Núm. | Accesorios                           | Material               | Pág.         |
|------|--------------------------------------|------------------------|--------------|
| 1    | Accesorios de montaje LB             | Acero al carbono       | 3-23         |
| 2    | Accesorios de montaje FA/FB          | Acero al carbono       | 3-24         |
| 3    | Accesorios de montaje CA+PIN         | Acero al carbono       | 3-23, 26     |
| 4    | Accesorios de montaje CB+PIN         | Acero al carbono       | 3-23, 26     |
| 5    | Accesorios de montaje TA/TB          | Fundición de hierro *2 | 3-25         |
| 6    | Accesorios de montaje SDB+PIN *1     | Acero al carbono       | 3-24         |
| 7    | Accesorios Y+PIN                     | Acero al carbono *3    | 3-26         |
| 8    | Accesorios I+PIN                     | Acero al carbono       | 3-26         |
| 9    | Junta flotante MFC                   | Acero al carbono       | 8-2          |
| 10   | Junta flotante MFCS                  | Acero al carbono       | 8-5          |
| 11   | Rótula PHS                           | Acero al carbono       | 8-6          |
| 12   | Sensor final de carrera RCM+BM**     | –                      | 8-15         |
| 13   | Racor PC (PISCO)                     | –                      | 7-3 (Vol.1)  |
| 14   | Controlador de velocidad JSC (PISCO) | –                      | 7-15 (Vol.1) |

\*1. Sólo para tapa extremo tipo "E".

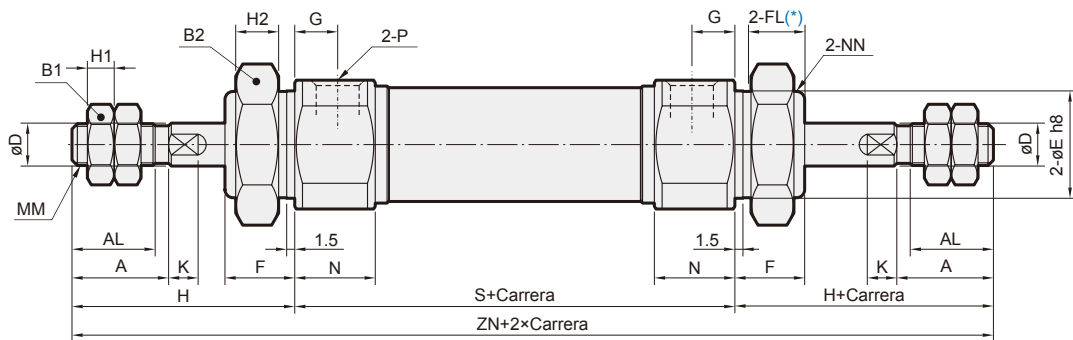
\*2. ø20 el material es acero al carbono.

\*3. Accesorios Y ø40 el material es de hierro fundido.

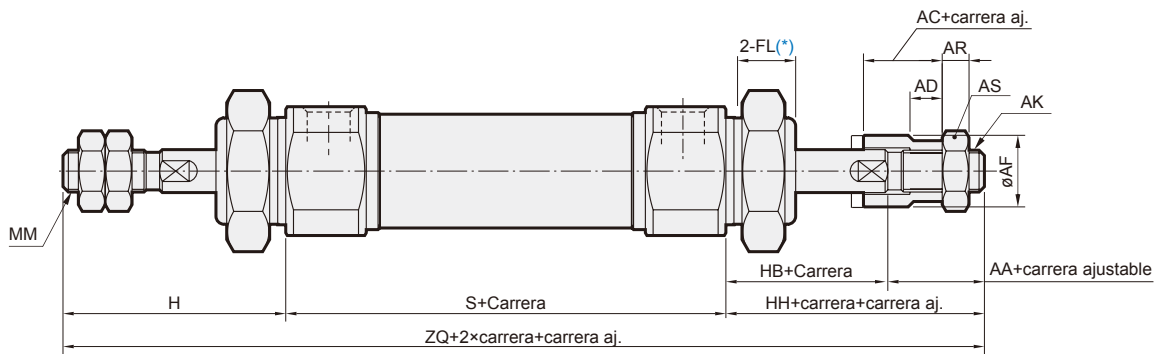
11



21



27



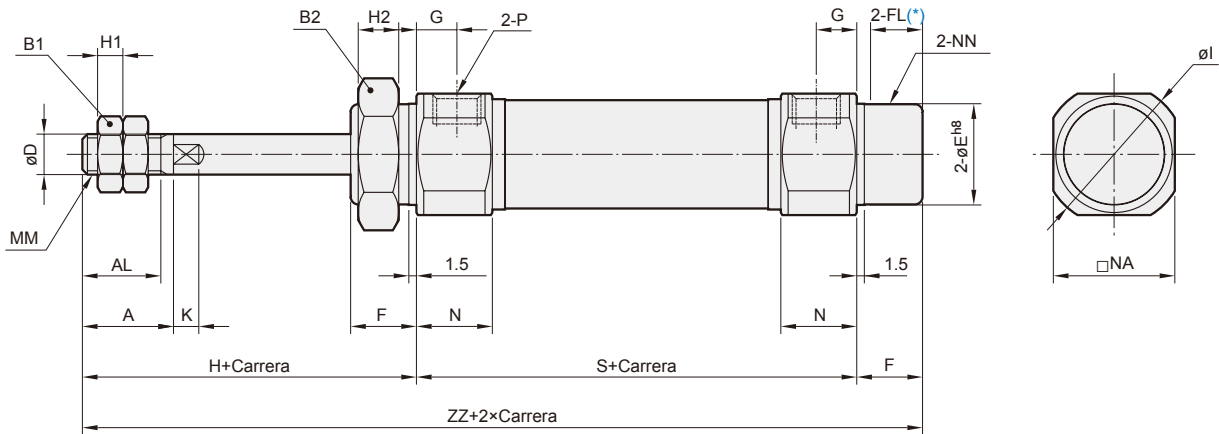
Unidad: mm

| Código D.I. Tubo | A  | AA   | AC | AD  | AF | AK       | AL   | AR | AS | B1 | B2 | D  | E                                | F  | FL   | G  | H  | H1 | H2 | HB   | HH | I    | K   | MM       |
|------------------|----|------|----|-----|----|----------|------|----|----|----|----|----|----------------------------------|----|------|----|----|----|----|------|----|------|-----|----------|
| 20               | 18 | 17.5 | 15 | 9.5 | 16 | M8×1.25  | 15.5 | 5  | 13 | 13 | 26 | 8  | 20 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 41 | 5  | 8  | 20.5 | 38 | 28   | 5   | M8×1.25  |
| 25               | 22 | 18.5 | 15 | 9.5 | 16 | M8×1.25  | 19.5 | 5  | 13 | 17 | 32 | 10 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 8  | 20.5 | 39 | 33.5 | 5   | M10×1.25 |
| 32               | 22 | 16   | 12 | 7   | 20 | M10×1.25 | 19.5 | 6  | 17 | 17 | 32 | 12 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 8  | 20   | 36 | 37.5 | 5.5 | M10×1.25 |
| 40               | 24 | 17   | 12 | 7   | 30 | M12×1.25 | 21   | 7  | 19 | 22 | 41 | 14 | 32 <sup>0</sup> <sub>-0.04</sub> | 16 | 13.5 | 11 | 50 | 8  | 10 | 23   | 40 | 46.5 | 7   | M14×1.5  |

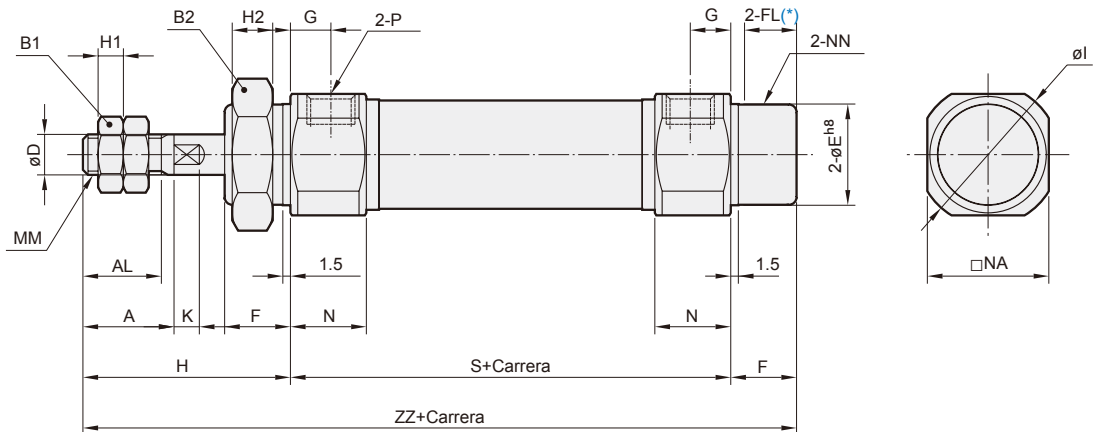
| Código D.I. Tubo | N    | NA   | NN      | P     | S  | ZN  | ZQ  | ZZ  |
|------------------|------|------|---------|-------|----|-----|-----|-----|
| 20               | 15   | 24   | M20×1.5 | Rc1/8 | 62 | 144 | 141 | 116 |
| 25               | 15   | 30   | M26×1.5 | Rc1/8 | 62 | 152 | 146 | 120 |
| 32               | 15   | 34.5 | M26×1.5 | Rc1/8 | 64 | 154 | 145 | 122 |
| 40               | 21.5 | 42.5 | M32×2.0 | Rc1/4 | 88 | 188 | 178 | 154 |

\* FL: Longitud de rosca efectiva

13



15

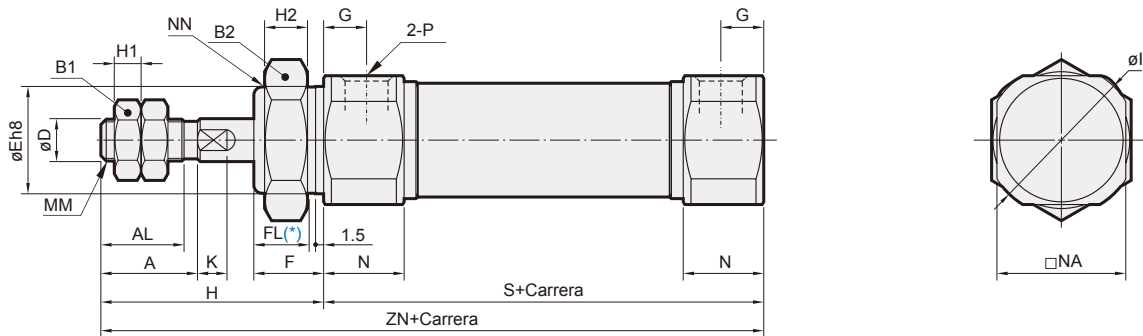


| Código<br>D.I. Tubo | A  | AL   | B1 | B2 | D  | E                                | F  | FL   | G  | H  | H1 | H2 | I    | K   | MM       | N    | NA   | NN      | P     |
|---------------------|----|------|----|----|----|----------------------------------|----|------|----|----|----|----|------|-----|----------|------|------|---------|-------|
| 20                  | 18 | 15.5 | 13 | 26 | 8  | 20 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 41 | 5  | 8  | 28   | 5   | M8×1.25  | 15   | 24   | M20×1.5 | Rc1/8 |
| 25                  | 22 | 19.5 | 17 | 32 | 10 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 8  | 33.5 | 5   | M10×1.25 | 15   | 30   | M26×1.5 | Rc1/8 |
| 32                  | 22 | 19.5 | 17 | 32 | 12 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 8  | 37.5 | 5.5 | M10×1.25 | 15   | 34.5 | M26×1.5 | Rc1/8 |
| 40                  | 24 | 21   | 22 | 41 | 14 | 32 <sup>0</sup> <sub>-0.04</sub> | 16 | 13.5 | 11 | 50 | 8  | 10 | 46.5 | 7   | M14×1.5  | 21.5 | 42.5 | M32×2.0 | Rc1/4 |

| Código<br>Carrera<br>D.I. Tubo | S    |        |         | ZZ   |        |         |
|--------------------------------|------|--------|---------|------|--------|---------|
|                                | 1~50 | 51~100 | 101~150 | 1~50 | 51~100 | 101~150 |
| 20                             | 87   | 112    | 137     | 141  | 166    | 191     |
| 25                             | 87   | 112    | 137     | 145  | 170    | 195     |
| 32                             | 89   | 114    | 139     | 147  | 172    | 197     |
| 40                             | 113  | 138    | 163     | 179  | 204    | 229     |

\* FL: Longitud de rosca efectiva

**N**

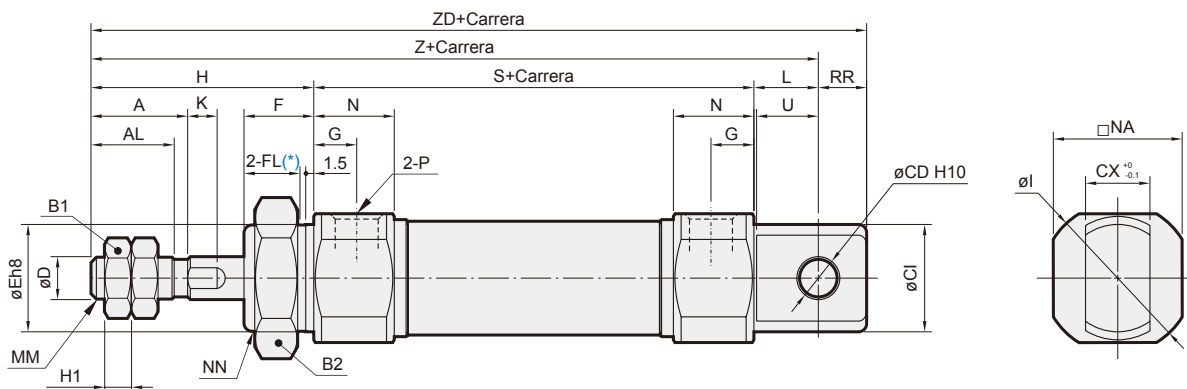


\* FL: Longitud de rosca efectiva

Unidad: mm

| Código D.I. Tubo | A  | AL   | B1 | B2 | D  | E                                | F  | FL   | G  | H  | H1 | H2 | I    | K   | MM       | N    | NA   | NN      | P     | S  | ZN  |
|------------------|----|------|----|----|----|----------------------------------|----|------|----|----|----|----|------|-----|----------|------|------|---------|-------|----|-----|
| 20               | 18 | 15.5 | 13 | 26 | 8  | 20 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 41 | 5  | 8  | 28   | 5   | M8×1.25  | 15   | 24   | M20×1.5 | Rc1/8 | 62 | 103 |
| 25               | 22 | 19.5 | 17 | 32 | 10 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 8  | 33.5 | 5   | M10×1.25 | 15   | 30   | M26×1.5 | Rc1/8 | 62 | 107 |
| 32               | 22 | 19.5 | 17 | 32 | 12 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 8  | 37.5 | 5.5 | M10×1.25 | 15   | 34.5 | M26×1.5 | Rc1/8 | 64 | 109 |
| 40               | 24 | 21   | 22 | 41 | 14 | 32 <sup>0</sup> <sub>-0.04</sub> | 16 | 13.5 | 11 | 50 | 8  | 10 | 46.5 | 7   | M14×1.5  | 21.5 | 42.5 | M32×2.0 | Rc1/4 | 88 | 138 |

**E**



\* FL: Longitud de rosca efectiva

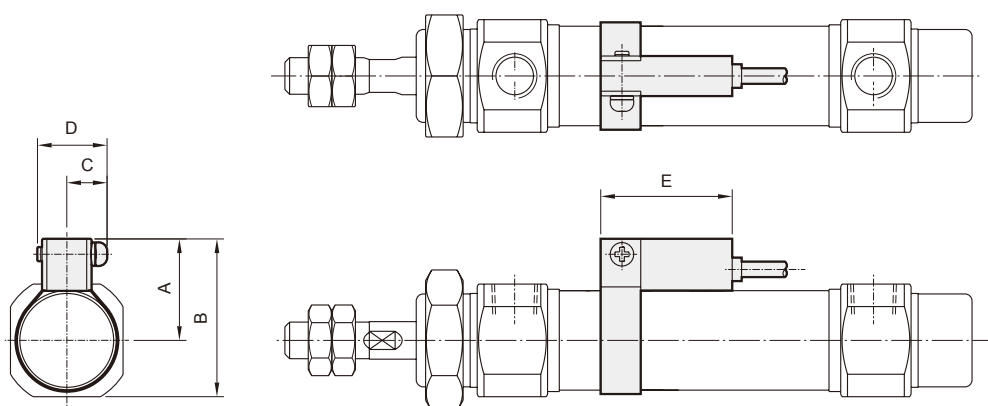
Unidad: mm

| Código D.I. Tubo | A  | AL   | B1 | B2 | CD | CX | CI | D  | E                                | F  | FL   | G  | H  | H1 | I    | K   | L  | MM       | N    | NA   | NN      | P     | RR | S  | U    | Z   | ZD  |
|------------------|----|------|----|----|----|----|----|----|----------------------------------|----|------|----|----|----|------|-----|----|----------|------|------|---------|-------|----|----|------|-----|-----|
| 20               | 18 | 15.5 | 13 | 26 | 8  | 12 | 20 | 8  | 20 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 41 | 5  | 28   | 5   | 12 | M8×1.25  | 15   | 24   | M20×1.5 | Rc1/8 | 9  | 62 | 11.5 | 115 | 124 |
| 25               | 22 | 19.5 | 17 | 32 | 8  | 12 | 22 | 10 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 33.5 | 5   | 12 | M10×1.25 | 15   | 30   | M26×1.5 | Rc1/8 | 9  | 62 | 11.5 | 119 | 128 |
| 32               | 22 | 19.5 | 17 | 32 | 10 | 20 | 27 | 12 | 26 <sup>0</sup> <sub>-0.03</sub> | 13 | 10.5 | 8  | 45 | 6  | 37.5 | 5.5 | 15 | M10×1.25 | 15   | 34.5 | M26×1.5 | Rc1/8 | 12 | 64 | 14.5 | 124 | 136 |
| 40               | 24 | 21   | 22 | 41 | 10 | 20 | 33 | 14 | 32 <sup>0</sup> <sub>-0.04</sub> | 16 | 13.5 | 11 | 50 | 8  | 46.5 | 7   | 15 | M14×1.5  | 21.5 | 42.5 | M32×2.0 | Rc1/4 | 12 | 88 | 14.5 | 153 | 165 |

### ■ Instalación de un sensor final de carrera

Sensor final de carrera: RCM

Abrazadera del sensor final de carrera: BM\*\*


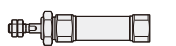

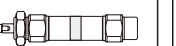

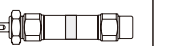


| Código<br>D.I. Tubo | A  | B  | C  | D  | E  |
|---------------------|----|----|----|----|----|
| 20                  | 22 | 34 | 10 | 16 | 28 |
| 25                  | 25 | 40 | 10 | 16 | 28 |
| 32                  | 28 | 46 | 10 | 16 | 28 |
| 40                  | 32 | 54 | 10 | 16 | 28 |

### ■ Peso del cilindro y accesorios












#### Peso del cilindro

Unidad: g

| Modelo           | Peso básico<br>MCMB-11  | Peso básico<br>MCMB-11-N  | Peso básico<br>MCMB-11-E  | Carrera 25 mm<br>MCMB-11   | Peso básico<br>MCMB-11-A  | Carrera 25 mm<br>MCMB-11-A  |
|------------------|---|---|---|--|---|---|
| D.I. Tubo        |  |  |  |  |  |  |
| $\varnothing 20$ | 146   | 146   | 148   | 18   | 144   | 20  |
| $\varnothing 25$ | 232   | 232   | 228   | 28   | 252   | 26  |
| $\varnothing 32$ | 275   | 275   | 287   | 38   | 340   | 38  |
| $\varnothing 40$ | 568   | 568   | 576   | 50   | 565   | 51  |

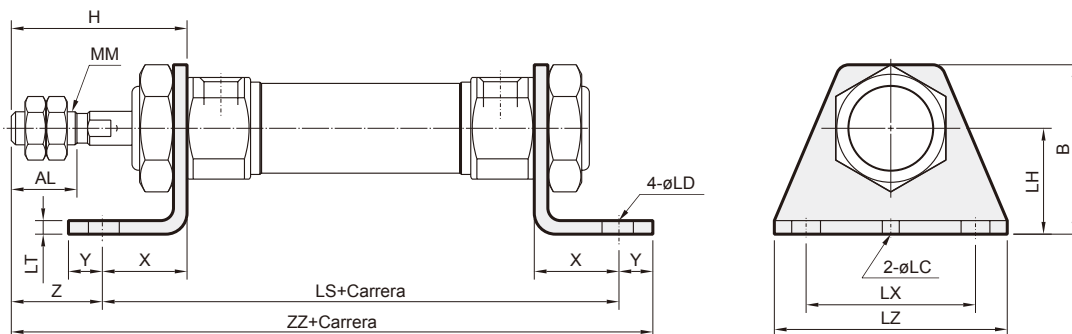
#### Peso de los accesorios

Unidad: g

| Modelo           | LB  | CA  | CB  | FA/FB   | SDB   | TA/TB   | Y  | I   | PIN   | Tuerca del vástago  | Tuerca tapa   |
|------------------|---|---|---|---|---|---|--|---|---|---|---|
| D.I. Tubo        |  |  |  |  |  |  |  |  |  |  |  |
| $\varnothing 20$ | 122   | 53  | 49  | 66  | 62  | 37  | 53   | 63  | 13  | 4   | 19  |
| $\varnothing 25$ | 129   | 63  | 69  | 73  | 62  | 47  | 49   | 62  | 13  | 8   | 23  |
| $\varnothing 32$ | 129   | 63  | 69  | 73  | 140   | 47  | 49   | 62  | 13  | 8   | 23  |
| $\varnothing 40$ | 207   | 162   | 168   | 124   | 140   | 94  | 230  | 164   | 43  | 16  | 50  |



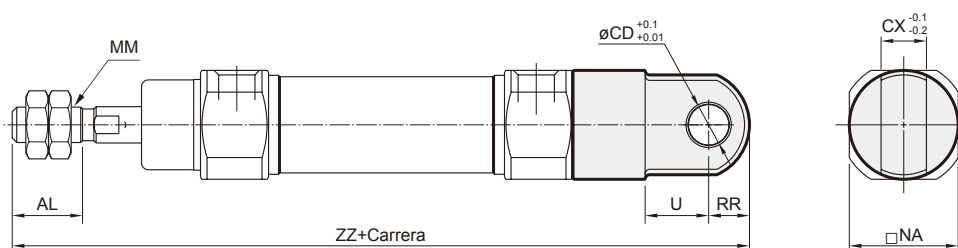
**LB**



Unidad: mm

| Código D.I. Tubo | AL   | B  | H  | LC | LD  | LH | LS  | LT  | LX | LZ | MM       | X  | Y  | Z  | ZZ  |
|------------------|------|----|----|----|-----|----|-----|-----|----|----|----------|----|----|----|-----|
| 20               | 15.5 | 40 | 41 | 4  | 6.8 | 25 | 102 | 3.2 | 40 | 55 | M8×1.25  | 20 | 8  | 21 | 131 |
| 25               | 19.5 | 47 | 45 | 4  | 6.8 | 28 | 102 | 3.2 | 40 | 55 | M10×1.25 | 20 | 8  | 25 | 135 |
| 32               | 19.5 | 47 | 45 | 4  | 6.8 | 28 | 104 | 3.2 | 40 | 55 | M10×1.25 | 20 | 8  | 25 | 137 |
| 40               | 21   | 54 | 50 | 4  | 7   | 30 | 134 | 3.2 | 55 | 75 | M14×1.5  | 23 | 10 | 27 | 171 |

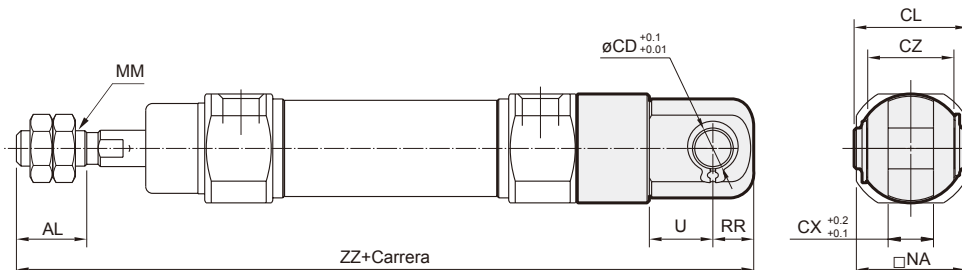
**CA**



Unidad: mm

| Código D.I. Tubo | AL   | CD | CX | MM       | NA   | RR | U  | ZZ  |
|------------------|------|----|----|----------|------|----|----|-----|
| 20               | 15.5 | 9  | 10 | M8×1.25  | 24   | 9  | 14 | 142 |
| 25               | 19.5 | 9  | 10 | M10×1.25 | 30   | 9  | 14 | 146 |
| 32               | 19.5 | 9  | 10 | M10×1.25 | 34.5 | 9  | 14 | 148 |
| 40               | 21   | 10 | 15 | M14×1.5  | 42.5 | 11 | 18 | 188 |

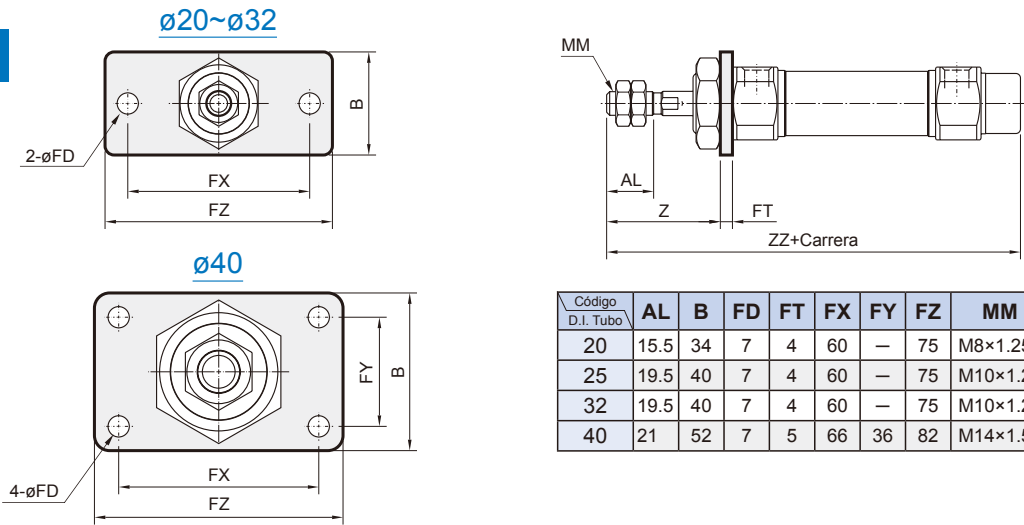
**CB**



Unidad: mm

| Código D.I. Tubo | AL   | CD | CL   | CX | CZ | MM       | NA   | RR | U  | ZZ  |
|------------------|------|----|------|----|----|----------|------|----|----|-----|
| 20               | 15.5 | 9  | 25   | 10 | 19 | M8×1.25  | 24   | 9  | 14 | 142 |
| 25               | 19.5 | 9  | 25   | 10 | 19 | M10×1.25 | 30   | 9  | 14 | 146 |
| 32               | 19.5 | 9  | 25   | 10 | 19 | M10×1.25 | 34.5 | 9  | 14 | 148 |
| 40               | 21   | 10 | 41.2 | 15 | 30 | M14×1.5  | 42.5 | 11 | 18 | 188 |

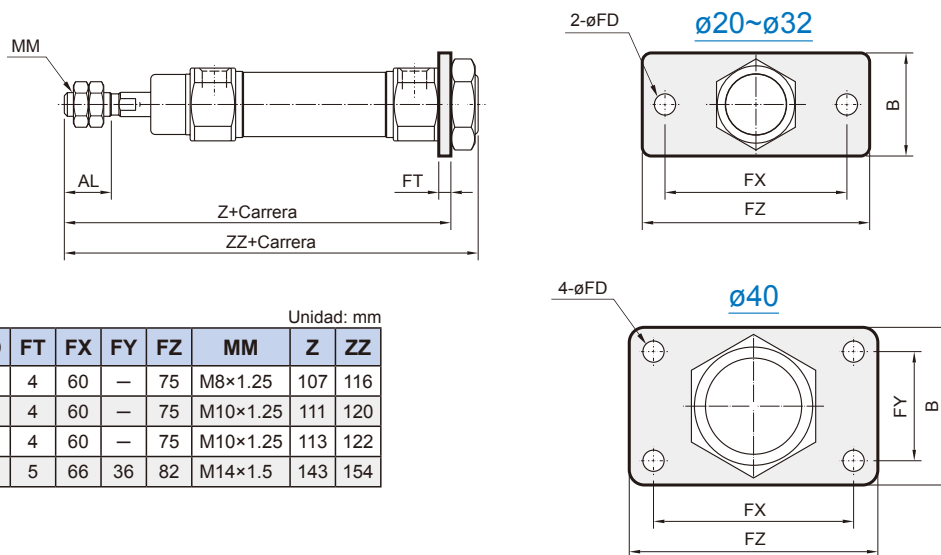
**FA**



Unidad: mm

| Código D.I. Tubo | AL   | B  | FD | FT | FX | FY | FZ | MM       | Z  | ZZ  |
|------------------|------|----|----|----|----|----|----|----------|----|-----|
| 20               | 15.5 | 34 | 7  | 4  | 60 | —  | 75 | M8×1.25  | 37 | 116 |
| 25               | 19.5 | 40 | 7  | 4  | 60 | —  | 75 | M10×1.25 | 41 | 120 |
| 32               | 19.5 | 40 | 7  | 4  | 60 | —  | 75 | M10×1.25 | 41 | 122 |
| 40               | 21   | 52 | 7  | 5  | 66 | 36 | 82 | M14×1.5  | 45 | 154 |

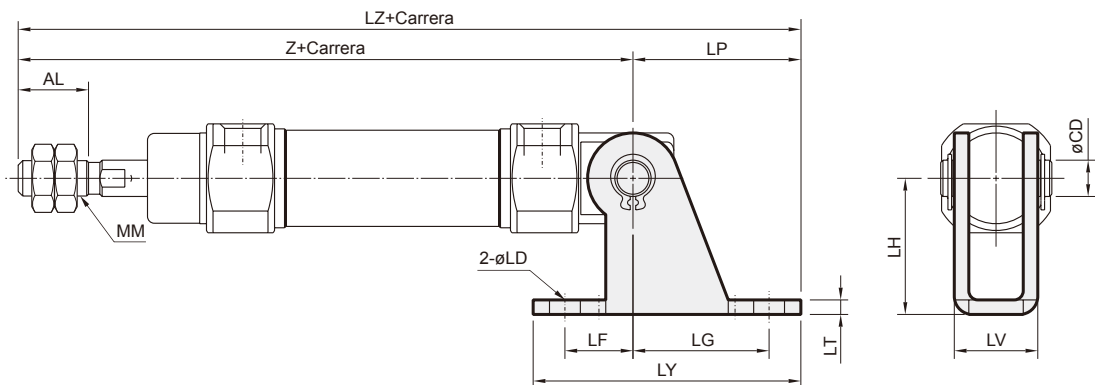
**FB**



Unidad: mm

| Código D.I. Tubo | AL   | B  | FD | FT | FX | FY | FZ | MM       | Z   | ZZ  |
|------------------|------|----|----|----|----|----|----|----------|-----|-----|
| 20               | 15.5 | 34 | 7  | 4  | 60 | —  | 75 | M8×1.25  | 107 | 116 |
| 25               | 19.5 | 40 | 7  | 4  | 60 | —  | 75 | M10×1.25 | 111 | 120 |
| 32               | 19.5 | 40 | 7  | 4  | 60 | —  | 75 | M10×1.25 | 113 | 122 |
| 40               | 21   | 52 | 7  | 5  | 66 | 36 | 82 | M14×1.5  | 143 | 154 |

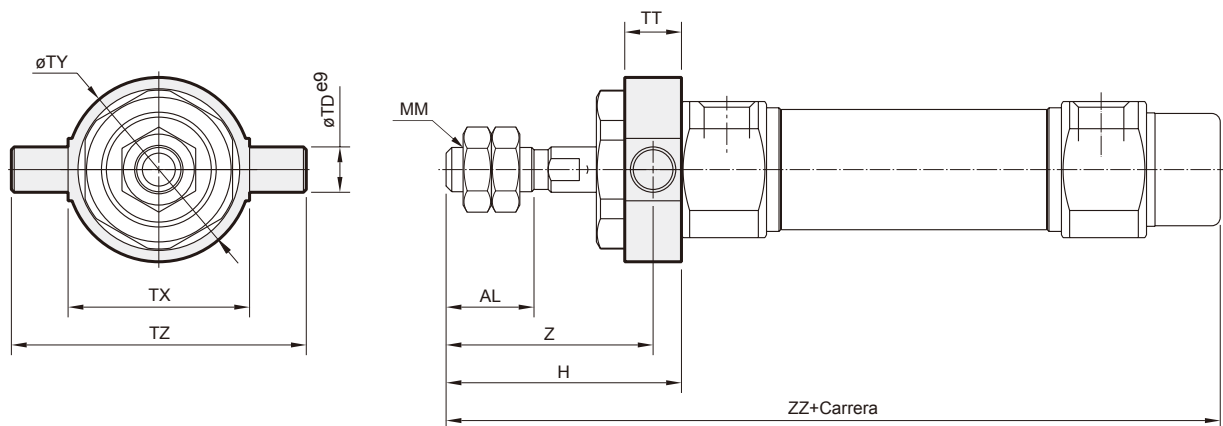
**SDB**



Unidad: mm

| Código D.I. Tubo | AL   | CD | LD  | LF | LG | LH | LP | LT  | LV   | LY | LZ  | MM       | N    | Z   |
|------------------|------|----|-----|----|----|----|----|-----|------|----|-----|----------|------|-----|
| 20               | 15.5 | 8  | 6.8 | 15 | 30 | 30 | 37 | 3.2 | 18.4 | 59 | 152 | M8×1.25  | 15   | 115 |
| 25               | 19.5 | 8  | 6.8 | 15 | 30 | 30 | 37 | 3.2 | 18.4 | 59 | 156 | M10×1.25 | 15   | 119 |
| 32               | 19.5 | 10 | 9   | 15 | 40 | 40 | 50 | 4   | 28   | 75 | 174 | M10×1.25 | 15   | 124 |
| 40               | 21   | 10 | 9   | 15 | 40 | 40 | 50 | 4   | 28   | 75 | 203 | M14×1.5  | 21.5 | 153 |

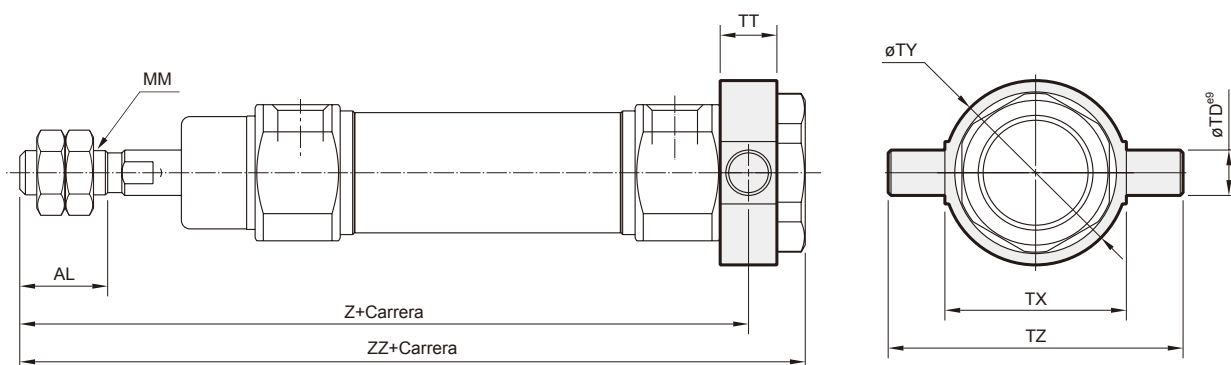
TA



Unidad: mm

| Código D.I. Tubo | AL   | H  | MM       | TD | TT | TX | TY   | TZ | Z    | ZZ  |
|------------------|------|----|----------|----|----|----|------|----|------|-----|
| 20               | 15.5 | 41 | M8×1.25  | 8  | 10 | 32 | 32.5 | 52 | 36   | 116 |
| 25               | 19.5 | 45 | M10×1.25 | 9  | 10 | 40 | 40.5 | 60 | 40   | 120 |
| 32               | 19.5 | 45 | M10×1.25 | 9  | 10 | 40 | 40.5 | 60 | 40   | 122 |
| 40               | 21   | 50 | M14×1.5  | 10 | 11 | 53 | 53.5 | 77 | 44.5 | 154 |

TB



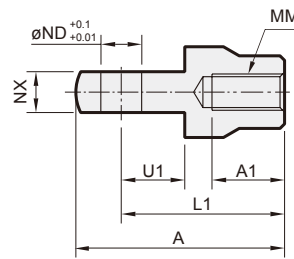
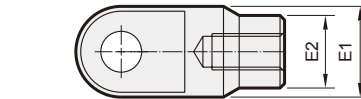
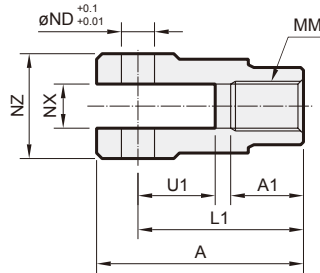
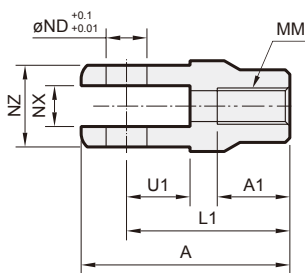
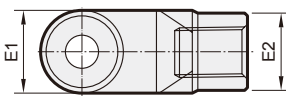
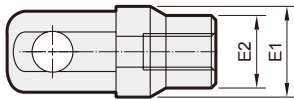
Unidad: mm

| Código D.I. Tubo | AL   | MM       | TD | TT | TX | TY   | TZ | Z     | ZZ  |
|------------------|------|----------|----|----|----|------|----|-------|-----|
| 20               | 15.5 | M8×1.25  | 8  | 10 | 32 | 32.5 | 52 | 108   | 118 |
| 25               | 19.5 | M10×1.25 | 9  | 10 | 40 | 40.5 | 60 | 112   | 122 |
| 32               | 19.5 | M10×1.25 | 9  | 10 | 40 | 40.5 | 60 | 114   | 124 |
| 40               | 21   | M14×1.5  | 10 | 11 | 53 | 53.5 | 77 | 143.5 | 154 |

Conector Y

$\varnothing 20 \sim \varnothing 32$

$\varnothing 40$



Unidad: mm

| Código D.I. Tubo | A  | A1 | E1               | E2               | L1 | MM       | ND | NX                 | NZ | U1 |
|------------------|----|----|------------------|------------------|----|----------|----|--------------------|----|----|
| 20               | 46 | 16 | $\varnothing 20$ | $\varnothing 16$ | 36 | M8×1.25  | 9  | $9^{+0.2}_{+0.1}$  | 18 | 14 |
| 25, 32           | 46 | 16 | $\varnothing 20$ | $\varnothing 16$ | 36 | M10×1.25 | 9  | $9^{+0.2}_{+0.1}$  | 18 | 14 |
| 40               | 68 | 25 | $\varnothing 26$ | $\varnothing 24$ | 55 | M14×1.5  | 12 | $16^{+0.3}_{+0.1}$ | 38 | 25 |

Unidad: mm

| Código D.I. Tubo | A  | A1 | E1               | E2               | L1 | MM       | ND | NX                 | U1 |
|------------------|----|----|------------------|------------------|----|----------|----|--------------------|----|
| 20               | 46 | 16 | $\varnothing 20$ | $\varnothing 16$ | 36 | M8×1.25  | 9  | $9^{+0.1}_{+0.2}$  | 14 |
| 25, 32           | 46 | 16 | $\varnothing 20$ | $\varnothing 16$ | 36 | M10×1.25 | 9  | $9^{+0.1}_{+0.2}$  | 14 |
| 40               | 69 | 22 | $\varnothing 24$ | —                | 55 | M14×1.5  | 12 | $16^{+0.1}_{+0.2}$ | 20 |

PASADOR

Ejemplo de pedido

PIN — MCMB — 32 — Y — P

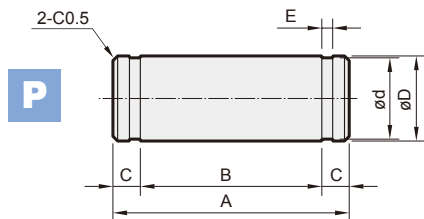
PASADOR

D.I. TUBO

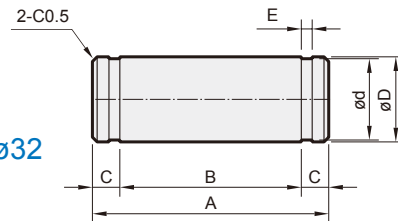
TIPO

P: Con pasador suelto

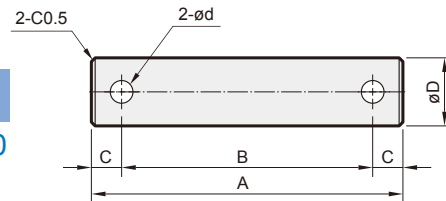
Y: para conectores Y y I  
 CB: para accesorios CA y CB  
 SDB: Para accesorios SDB



P  
 $\varnothing 20 \sim \varnothing 32$



P  
 $\varnothing 40$



para SDB

| Código D.I. Tubo | A    | B    | C   | $\varnothing D^{ø9}$ | $\varnothing d$    | E                  | Anillo elástico |
|------------------|------|------|-----|----------------------|--------------------|--------------------|-----------------|
| 20~25            | 24.5 | 19.5 | 2.5 | $8^{+0.04}_{-0.08}$  | $7.6^{+0}_{-0.06}$ | $0.9^{+0.10}_{0}$  | STW-8           |
| 32~40            | 34   | 29   | 2.5 | $10^{+0.04}_{-0.08}$ | $9.6^{+0}_{-0.09}$ | $1.15^{+0.14}_{0}$ | STW-9           |

para conectores CB y Y

| Código D.I. Tubo | A    | B    | C   | $\varnothing D^{ø9}$ | $\varnothing d$    | E                  | Anillo elástico Pasador suelto |
|------------------|------|------|-----|----------------------|--------------------|--------------------|--------------------------------|
| 20~32-CB, Y      | 25   | 19.2 | 2.9 | $9^{+0.04}_{-0.08}$  | $8.6^{+0}_{-0.06}$ | $1.15^{+0.14}_{0}$ | STW-9                          |
| 40-CB            | 41.2 | 33.2 | 4   | $10^{+0.04}_{-0.08}$ | 3.2                | —                  | $\varnothing 3.2 \times 20L$   |
| 40-Y             | 49.7 | 41.7 | 4   | $12^{+0.05}_{-0.09}$ | 3.2                | —                  | $\varnothing 3.2 \times 20L$   |