

Características

- Anchura y longitud compactos con guía de precisión.
- Se pueden aplicar altas cargas laterales en las unidades de rodamiento deslizando y rodamiento lineal.
- Magnético como estándar.

Especificaciones

| Modelo | MCDA | | | | | |
|--|---|----------------|----|-------|----|----|
| Tipo de acción | Doble efecto | | | | | |
| D.I. Tubo (mm) | 6 | 12 | 16 | 20 | 25 | 32 |
| Tamaño del puerto | M5×0.8 | | | Rc1/8 | | |
| Medio | Aire | | | | | |
| Rango de presión de funcionamiento (MPa) | 0.7 | | | | | |
| | Máx. | 0.1 | | 0.05 | | |
| | Min. | 0.15 | | 0.05 | | |
| Presión de prueba | 1 MPa | | | | | |
| Temperatura ambiente | -5~+60°C (Sin congelación) | | | | | |
| Amortiguación | Con disco de amortiguación elástica (ambos lados) | | | | | |
| Rango de velocidad disponible | 50~300 | 50~500 mm/seg. | | | | |
| Lubricación | No requerida (Si se usa lubricación, aplique aceite de turbina NO1 ISO VG32) | | | | | |
| Sensor final de carrera (*) | RCE, RCE1, RDEP | | | | | |

* Consulte las páginas 8-12, 13, 18 para las especificaciones de RCE, RCE1 y RDEP.

Ejemplo de pedido

MCDA — 03 — 12 — 50 — □

MODELO D.I. TUBO CARRERA TIPO DE ROSCA

TIPO DE RODAMIENTO

| | |
|----|----------------------|
| 03 | Casquillo deslizando |
| 23 | Rodamiento lineal |



En blanco: M5×0.8 (para ø6~ø20)
En blanco: Rosca Rc
G: Rosca G
NPT: Rosca NPT (para ø25, ø32)

Tabla para carrera estándar

| D.I. Tubo | Carrera (mm) |
|-----------|---|
| ø6 | 10,20,30,40,50 |
| ø12 | 10,15,20,25,30,35,40,45,50,60,70,75,80,90,100,110,120,125,150 |
| ø16 | 10,15,20,25,30,35,40,45,50,60,70,75,80,90,100,110,120,125,150 |
| ø20 | 10,15,20,25,30,35,40,45,50,60,70,75,80,90,100 |
| ø25 | 10,15,20,25,30,35,40,45,50,60,70,75,80,90,100,110,120,125,150,175,200 |
| ø32 | 10,15,20,25,30,35,40,45,50,60,70,75,80,90,100 |

- Por favor, Contáctenos si desea una carrera fuera de las especificaciones.
- Es posible ajustar la long. de carrera básica en 0~5 mm.

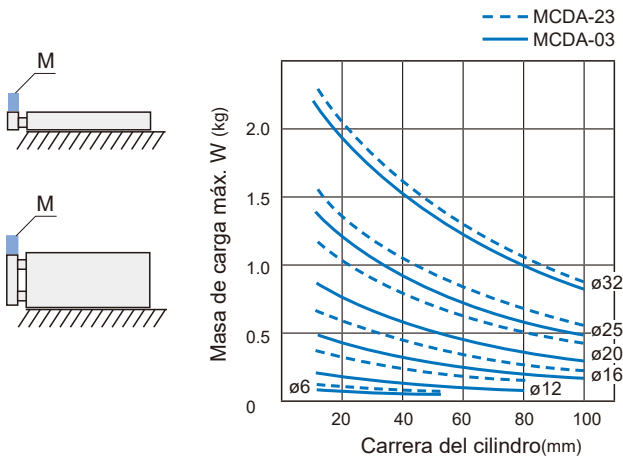
Peso del cilindro Unidad: g

| Modelo | Peso básico MCDA | Carrera 5 mm MCDA |
|-----------|--|---|
| Tubo D.I. |  |  |
| ø6 | 85.8 | 7.5 |
| ø12 | 150 | 8 |
| ø16 | 222 | 13 |
| ø20 | 376 | 18 |
| ø25 | 557 | 27 |
| ø32 | 1105 | 42 |

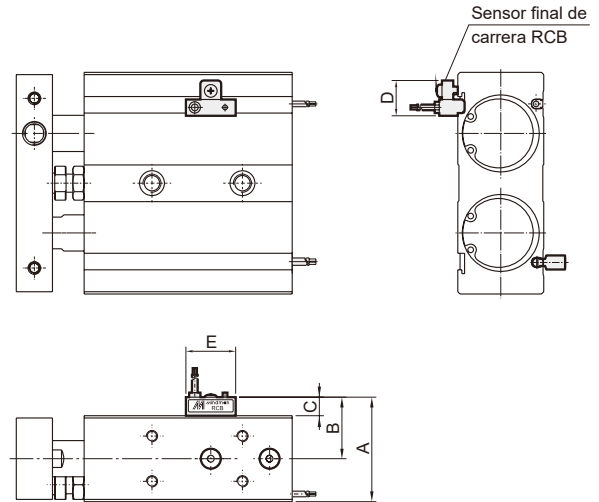
CILINDRO DE DOBLE PISTÓN

Masa de carga máx.

Cuando el cilindro se monta como se muestra en los diagramas a continuación, la masa de carga máxima W no debe exceder los valores ilustrados en el gráfico.

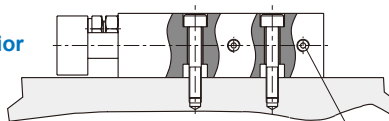


Instalación de un sensor final de carrera Sensor final de carrera: RCE, RCE1, RDEP

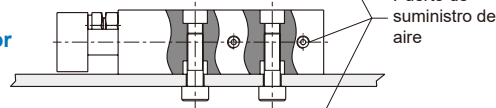


Métodos de montaje

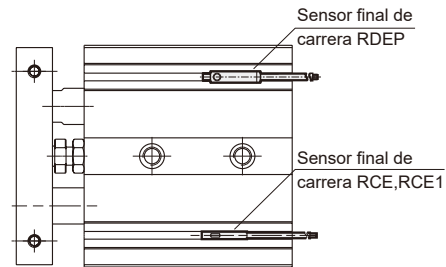
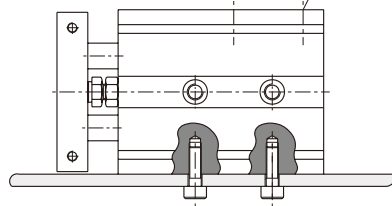
Montaje superior



Montaje inferior

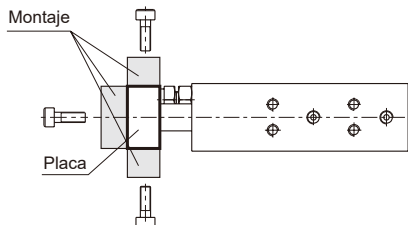


Montaje lateral

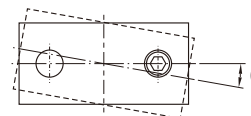


| Código D.I. Tubo | A | B | C | D | E |
|------------------|------|------|-----|----|----|
| 12 | 26.5 | 17.5 | 8.5 | 16 | 22 |
| 16 | 28.5 | 18.5 | 8.5 | 16 | 22 |
| 20 | 33.5 | 21 | 8.5 | 16 | 22 |
| 25 | 38.5 | 23.5 | 8.5 | 16 | 22 |
| 32 | 46.5 | 27.5 | 8.5 | 16 | 22 |

La carga se puede aplicar en las tres caras de la placa.



Precisión estabilizadora



| Código | θ | | | | |
|---------|------------------|------------------|------------------|------------------|----------------------------------|
| Tipo | $\varnothing 6$ | $\varnothing 12$ | $\varnothing 16$ | $\varnothing 20$ | $\varnothing 25, \varnothing 32$ |
| MCDA-03 | $\pm 0.3^\circ$ | $\pm 0.45^\circ$ | $\pm 0.35^\circ$ | $\pm 0.3^\circ$ | $\pm 0.25^\circ$ |
| MCDA-23 | $\pm 0.25^\circ$ | | $\pm 0.2^\circ$ | | $\pm 0.15^\circ$ |

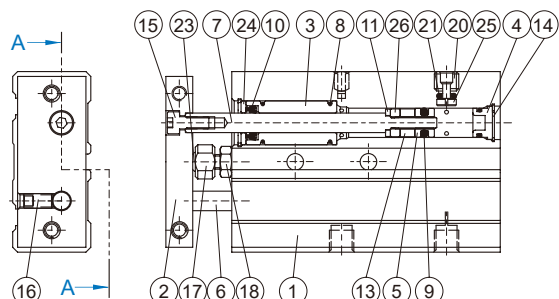
MCDA-03 Estructura interna y Lista de piezas



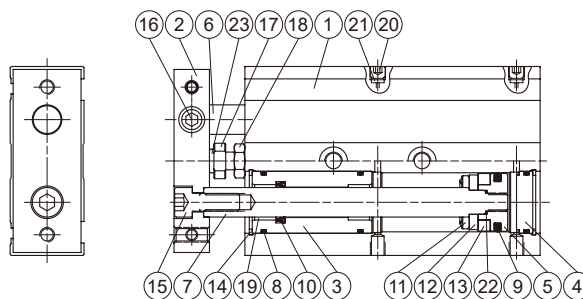
CILINDRO DE DOBLE PISTÓN

Mindman

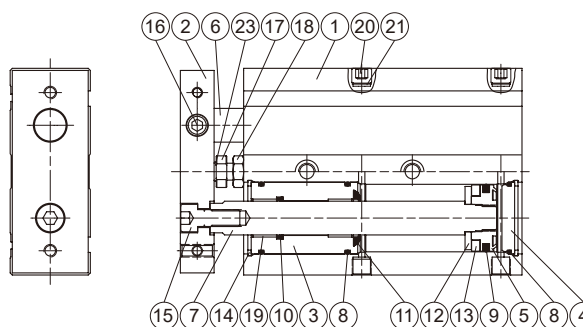
ø6



ø12~ø20



ø25, ø32



Material

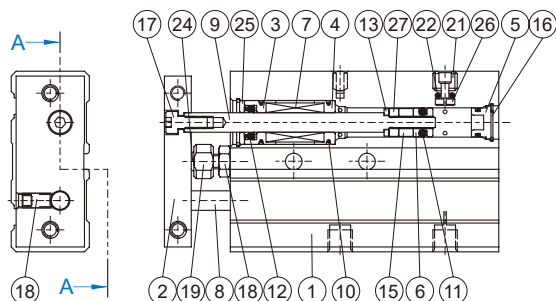
| Núm. | D.I. Tubo Nombre de la pieza | 6 | 12 | 16 | 20 | 25 | 32 | Notas | Cant. | Kits de reparación (incluidos) | |
|------|---------------------------------|----------------------|----|----|----|----|-----|----------|-------|-----------------------------------|---|
| 1 | Cuerpo | Aleación de aluminio | | | | | | | | 1 | |
| 2 | Placa | Aleación de aluminio | | | | | | | | 1 | |
| 3 | Cubierta del vástago | Aleación de aluminio | | | | | | | | 2 | |
| 4 | Tapa | Aleación de aluminio | | | | | | | | 2 | |
| 5 | Pistón | Aleación de aluminio | | | | | | | | 2 | |
| 6 | Vástago #1 | Acero inoxidable | | | | | (*) | | | 1 | |
| 7 | Vástago #2 | Acero inoxidable | | | | | (*) | | | 1 | |
| 8 | Tórica | NBR | | | | | | | | 6 | ● |
| 9 | Juntas del pistón | NBR | | | | | | | | 2 | ● |
| 10 | Juntas del vástago | NBR | | | | | | | | 2 | ● |
| 11 | Amortiguación del vástago | NBR | | | | | | | | 2 | ● |
| 12 | Soporte magnético | Acero inoxidable | | | | | | | | 2 | |
| 13 | Anillo magnético | Material magnético | | | | | | | | 2 | |
| 14 | Anillo elástico | Muelle de acero | | | | | | | | 4 | |
| 15 | Tornillo | Acero inoxidable | | | | | | | | 1 | |
| 16 | Tornillo de ajuste | Acero inoxidable | | | | | | | | 1 | |
| 17 | Tornillo amortiguación | Acero inoxidable | | | | | | | | 1 | |
| 18 | Tuerca | Acero al carbono | | | | | | | | 1 | |
| 19 | Casquillo de vástago | Aleación de cojinete | | | | | | | | 4 | |
| 20 | Conector (tornillo de fijación) | Acero al carbono | | | | | | | | 2 | |
| 21 | Anillo conector | NBR | | | | | | | | 2 | ● |
| 22 | Junta tórica | NBR | | | | | | solo ø20 | | 2 | ● |
| 23 | Tope | PU | | | | | | | | 1 | |
| 24 | Arandela cubierta vástago | Acero inoxidable | | | | | | solo ø6 | | 2 | |
| 25 | Junta conexión | Acero inoxidable | | | | | | solo ø6 | | 1 | |
| 26 | Anillo espaciador | Aluminio | | | | | | solo ø6 | | 2 | |

* Acero al carbono

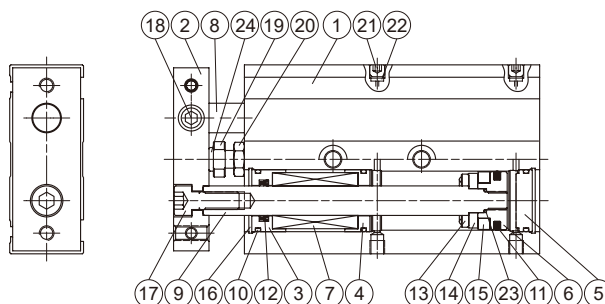
Ejemplo de pedido de kits de reparación

| D.I. Tubo | Kits de reparación |
|-----------|--------------------|
| ø6 | PS-MCDA-6 |
| ø12 | PS-MCDA-12 |
| ø16 | PS-MCDA-16 |
| ø20 | PS-MCDA-20 |
| ø25 | PS-MCDA-25 |
| ø32 | PS-MCDA-32 |

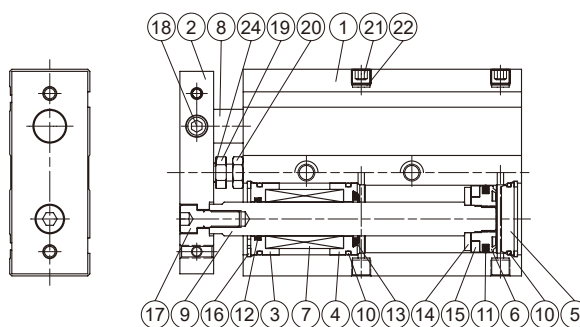
ø6



ø12~ø20



ø25, ø32



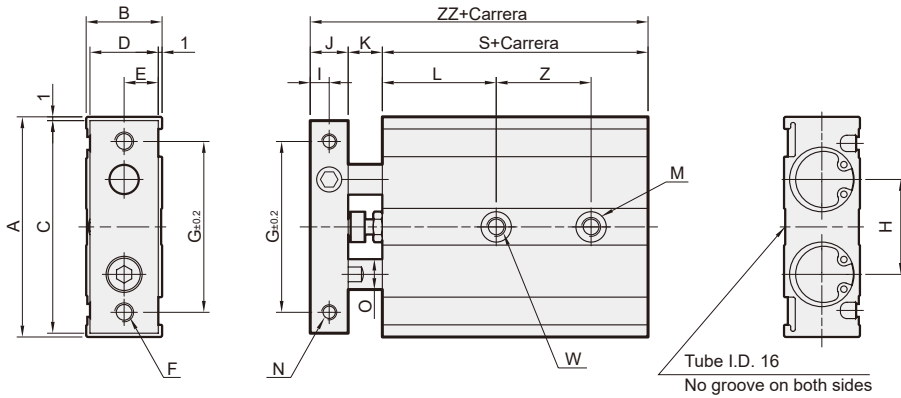
Material

| Núm. | D.I. Tubo Nombre de la pieza | 6 | 12 | 16 | 20 | 25 | 32 | Notas | Cant. | Kits de reparación (incluidos) |
|------|---------------------------------|----------------------|----|----|----|----|----------|-------|-------|-----------------------------------|
| 1 | Cuerpo | Aleación de aluminio | | | | | | | 1 | |
| 2 | Placa | Aleación de aluminio | | | | | | | 1 | |
| 3 | Cubierta vástago #1 | Aleación de aluminio | | | | | | | 2 | |
| 4 | Cubierta vástago #2 | Aleación de aluminio | | | | | | | 2 | |
| 5 | Tapa | Aleación de aluminio | | | | | | | 2 | |
| 6 | Pistón | Aleación de aluminio | | | | | | | 2 | |
| 7 | Casquillo deslizante | — | | | | | | | 2 | |
| 8 | Vástago #1 | Acero especial | | | | | | | 1 | |
| 9 | Vástago #2 | Acero especial | | | | | | | 1 | |
| 10 | Tórica | NBR | | | | | | | 6 | ● |
| 11 | Juntas del pistón | NBR | | | | | | | 2 | ● |
| 12 | Juntas del vástago | NBR | | | | | | | 2 | ● |
| 13 | Amortiguación del vástago | NBR | | | | | | | 2 | ● |
| 14 | Soporte magnético | Acero inoxidable | | | | | | | 2 | |
| 15 | Anillo magnético | Material magnético | | | | | | | 2 | |
| 16 | Anillo elástico | Muelle de acero | | | | | | | 4 | |
| 17 | Tornillo | Acero inoxidable | | | | | | | 1 | |
| 18 | Tornillo de ajuste | Acero inoxidable | | | | | | | 1 | |
| 19 | Tornillo amortiguación | Acero inoxidable | | | | | | | 1 | |
| 20 | Tuerca | Acero al carbono | | | | | | | 1 | |
| 21 | Conexión(tornillo fijación) | Acero al carbono | | | | | | | 2 | |
| 22 | Anillo conector | NBR | | | | | | | 2 | ● |
| 23 | Junta tórica | NBR | | | | | solo ø20 | | 2 | ● |
| 24 | Tope | PU | | | | | | | 1 | |
| 25 | Arandela cubierta vástago | Acero inoxidable | | | | | solo ø6 | | 2 | |
| 26 | Junta conexión | Acero inoxidable | | | | | solo ø6 | | 1 | |
| 27 | Anillo espaciador | Aluminio | | | | | solo ø6 | | 2 | |

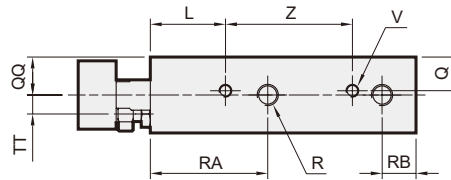
Ejemplo de pedido de kits de reparación

| D.I. Tubo | Kits de reparación |
|-----------|--------------------|
| ø6 | PS-MCDA-6 |
| ø12 | PS-MCDA-12 |
| ø16 | PS-MCDA-16 |
| ø20 | PS-MCDA-20 |
| ø25 | PS-MCDA-25 |
| ø32 | PS-MCDA-32 |

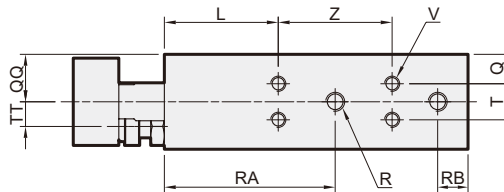
CILINDRO DE DOBLE PISTÓN



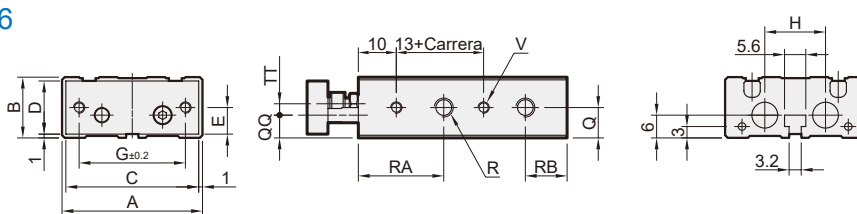
$\phi 12, \phi 16$



$\phi 20 \sim \phi 32$



$\phi 6$



MCDA-03 / 23

| Código D.I. Tubo | A | B | C | D | E | F (Pasante) | G | H | I | J | K | L | M (Ambos lados) | N (Ambos lados) | O | Q | QQ | R (Ambos lados) | RA | RB | S | T |
|---------------------|----|----|----|----|------|----------------|----|----|------|-----|----|----|-----------------------------------|--------------------|----|------|------|--------------------|------|----|----|-----|
| 6 | 37 | 16 | 35 | 14 | 7 | 2-M3×0.5 | 28 | 16 | 2.75 | 5.5 | 8 | 13 | 2- $\phi 6.5 \times 3.3$ prof. *1 | 2-M3×0.5 pasante | 4 | 8 | 6 | 4-M5×0.8 | 22.5 | 11 | 45 | - |
| 12 | 46 | 18 | 44 | 16 | 8 | 2-M4×0.7 | 35 | 19 | 4 | 8 | 9 | 20 | 4- $\phi 6.5 \times 3.3$ prof. | 4-M3×0.5×5prof. | 6 | 9 | 10 | 4-M5×0.8 | 30 | 8 | 55 | - |
| 16 | 58 | 20 | 56 | 18 | 9 | 2-M5×0.8 | 45 | 25 | 5 | 10 | 9 | 30 | 4- $\phi 8 \times 4.4$ prof. | 4-M4×0.7×6prof. | 8 | 10 | 10 | 4-M5×0.8 | 38.5 | 8 | 60 | - |
| 20 | 64 | 25 | 62 | 23 | 11.5 | 2-M5×0.8 | 50 | 28 | 6 | 12 | 12 | 30 | 4- $\phi 9.5 \times 5.3$ prof. | 4-M4×0.7×6prof. | 10 | 7.75 | 12.5 | 4-M5×0.8 | 45 | 8 | 70 | 9.5 |
| 25 | 80 | 30 | 78 | 28 | 14 | 2-M6×1.0 | 60 | 35 | 6 | 12 | 12 | 30 | 4- $\phi 11 \times 6.3$ prof. | 4-M5×0.8×8prof. | 12 | 8.5 | 15 | 4-Rc1/8 | 46 | 9 | 72 | 13 |
| 32 | 98 | 38 | 96 | 36 | 18 | 2-M6×1.0 | 75 | 44 | 8 | 16 | 14 | 30 | 4- $\phi 11 \times 6.3$ prof. | 4-M5×0.8×8prof. | 16 | 9 | 19 | 4-Rc1/8 | 56 | 10 | 82 | 20 |

| Código D.I. Tubo | TT | V (Ambos lados) | W (Pasante) | Z (carrera) | | | | | | ZZ | |
|---------------------|------|--------------------|----------------|-------------------|----------------|-------------|--------|-------------|-----|------|---------|
| | | | | 10,15,20,25 | 30,35,40,45,50 | 60,70,75,80 | 90,100 | 110,120,125 | 150 | | 175,200 |
| 6 | 3 | 4-M3×0.5×4.5 prof. | 2- $\phi 3.4$ | 10+1/2 carrera *2 | | | | | | 58.5 | |
| 12 | 3.5 | 4-M3×0.5×4.5 prof. | 2-M4×0.7 | 30 | 40 | 50 | 60 | 70 | 80 | - | 72 |
| 16 | 5 | 4-M4×0.7×5 prof. | 2-M5×0.8 | 25 | 35 | 45 | 55 | 65 | 75 | - | 79 |
| 20 | 6.5 | 8-M4×0.7×5.5 prof. | 2-M6×1.0 | 30 | 40 | 60 | 80 | 100 | 94 | | |
| 25 | 9 | 8-M5×0.8×7.5 prof. | 2-M8×1.25 | 30 | 40 | 60 | 80 | 100 | 96 | | |
| 32 | 11.5 | 8-M5×0.8×7.5 prof. | 2-M8×1.25 | 40 | 50 | 70 | 90 | 110 | 112 | | |

*1. $\phi 6$ - un solo lado.
*2. $\phi 6$ - carrera (10, 20, 30)