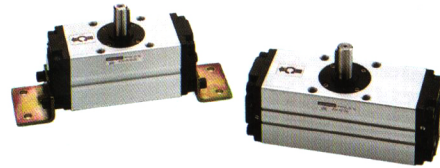


**ROTARY ACTUATOR**

**MCRA series** Bore size:  $\phi 63$  (Double acting)

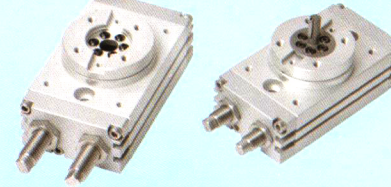
- Body size made more compact than ever.
- Functional design and clean appearance.
- Rail type mounting allows switch position to be adjusted very easily.



**MCRB series**

Bore size:  $\phi 16\text{--}\phi 32$  (Double acting)

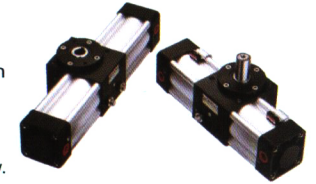
- The swing motion with twin-piston and rack-pinion driving.
- Adjustable swing angle ( $0^{\circ}\text{--}190^{\circ}$ ), three body mounting mode.



**MRTH / MRTF series**

Bore size:  $\phi 40, \phi 63, \phi 80$

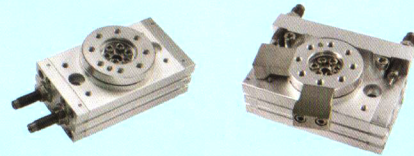
- The body is manufactured in anodized aluminium alloy, and has been designed looking at the harmonious aesthetic development.
- Pinion and rack produced from carbon steel reduces backlash within the mechanism.
- Rotation adjustment screw.



**MCRQ series**

Bore size:  $\phi 12\text{--}\phi 40$   
(Double acting)

- Operating range of table is  $0^{\circ}\text{--}190^{\circ}$  by angle adjusting screw.
- Compact design using double rack and single pinion.



**MCRQ-S series**

Bore size:  $\phi 16, \phi 20, \phi 25$   
(Double acting)

**MINI-ROTARY ACTUATOR**

**MCRJ series** Bore size:  $\phi 6, \phi 8$  (Double acting)

- Rack and pinion type / with external stoppers.
- Mounting from 3 directions.
- Piping and wiring are same directions.

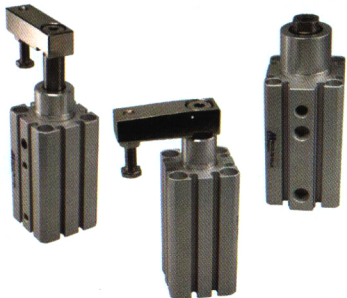


**SWING CLAMP CYLINDERS**

**MCKC series**

Bore size:  $\phi 12\text{--}\phi 40$

- Ultra compact, light weight and space saving cylinder.
- Ideal for use in machinery where space is limited and incorporating sensor groove which enables flush fitting of sensors.



**MTAS / MTAD series**

Bore size:  $\phi 25\text{--}\phi 63$

- These swing clamps are used when it is required to keep the fixture workpiece area free of straps and clamping components for unrestricted workpiece loading and un-loading.
- This pneumatic clamping element is a pull type cylinder. There are five standard sizes, and for each size two versions of standard clamping arms, mounting of these clamping arms at any angle within 360.



**MAS\* series**

**MATS\* series**

Bore size:  $\phi 25\text{--}\phi 63$

This cylinder belongs to a pull cylinder of which the total stroke is equal to the sum of a swing stroke and a clamping stroke, and is usually used within the clamping stroke.



**CLAMP CYLINDERS**

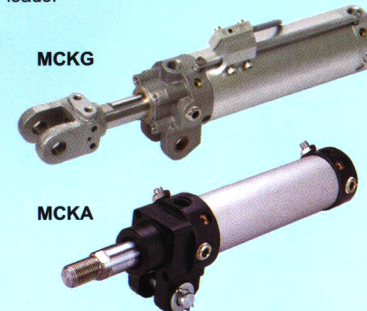
**MCKA series**

Bore size:  $\phi 40$

**MCKG series**

Bore size:  $\phi 50, \phi 63$

- Aluminium alloy tube provides both smooth lines and high corrosion resistance.
- Self lubricated nose bush gives long life.
- Versatile porting position available.
- End cushioning at both ends reduces impact loads.



**MCKB series**

Bore size:  $\phi 32$

- Lever-type air cylinder for grasp use. Compact and light design suitable for limited space application (ex. CNC machining tool).
- Four sides of sensor switch installation available. control is simplified.

