

Clamp Cylinders

Frame Clamp Cylinder **WRF100**



- High output: 20,000 N (at 0.5 MPa)

Series	Bore size [mm]	Stroke [mm]
WRF100	100	48

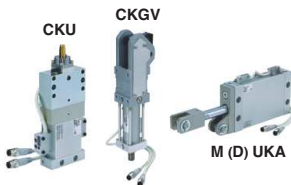
Pallet Lock Cylinder **W-R1/W-R3**



- Centering applied to correct positional deviation of up to ± 50 mm
- Through the toggle mechanism, max. clamping force of 4430 N
- Arm opening angle: Approx. 70°
- The integration of the clamping unit and cylinder unit reduces design and assembly labor.

Series	Mass of transferred object	Clamping force [N]	Bore size [mm]
W-R1	1000 kg or less	4430	100
W-R3	3000 kg or less	4070	100

Other Clamp Cylinders



Description	Series
Plate Clamp Cylinder	M (D) UKA
Clamp Cylinder	CKGV
Pin Clamp Cylinder (Compact body type)	CKU

Pin Shift Cylinders

For High Precision Positioning: Pin Shift Cylinder **CKQG-X2370/CKQP-X2371**



- High Precision: Rod end deflection of ± 0.1 mm or less
- Position reproducibility
- Pins for positioning the workpiece provided by the customer can be directly mounted.
- Built-in coil scraper
- Reduces labor time by integrating the cylinder and guide
- Magnetic field resistant auto switches are mountable.

Type	Series	Bore size [mm]	Stroke [mm]
Built-in standard magnet	CKQG-X2370	32, 40, 50	25, 30, 40, 50
Built-in strong magnet	CKQP-X2371	50	30, 50

Locating Pin Cylinder **MGPL50-X2616**



- Ideal for pin positioning and locating workpieces
- Highly accurate mounting positions
Highly accurate positioning is possible even after the cylinder is replaced.
- D-P3DWA magnetic field resistant auto switch is available.
- Coil scraper is equipped as standard.

Type	Bearing	Series	Action	Bore size [mm]
Locating pin cylinder	Ball bushing	MGPL50-X2616	Double acting	25, 40, 65

Pin Shift Cylinders

Center Lock Unit **MA331-X441**



- The workpiece contact portion of the locating pin can switch from center lock (for locating) to free (for releasing workpieces).
- Even if the workpiece is distorted after welding, if the locating pin is set to free, the workpiece can be removed easily from the locating pin.
- Locating pin swing angle and rotation angle: $3^{\circ} \pm 1^{\circ}$

Series	Action	Handling air pressure
MA331-X441	Double acting	0.2 to 0.7 MPa

Other Pin Shift Cylinders



Description	Series
Pin Shift Cylinder	CKQR
Pin Shift Cylinder	CKZP

Stopper Cylinders

Stopper Cylinder **RSQ/RSDQ/RSG/RSDG**



- A wide range of models are available, so it is possible to select a cylinder that meets your needs. Realizes the labor saving and automation of conveyor lines
- With auto switch (RSDQ series: RSDQ, RSDG series: RSDG)

Type	Series	Action	Bore size [mm]
Fixed mounting height	RSQ	Double acting Double acting with spring Single acting, spring extend	12, 16, 20, 32, 40, 50
Adjustable mounting height	RSG	Double acting Double acting with spring Single acting, spring extend	40, 50

Heavy Duty Stopper Cylinder **RS2H**



- Weight: Reduced by up to 22% (Compared with the current RS1H series)
- Cylinder tube: Shortened by up to 9 mm (RS2H63-30 stroke)
- Capable of stopping pallets softly
- Stopper cylinder with shock absorber

Type	Series	Action	Bore size [mm]
Flange	RS2H	Double acting Double acting with spring Single acting, spring extend	50, 63, 80

Heavy Duty Stopper Cylinder **RSH**



- Capable of stopping pallets softly
- Stopper cylinder with shock absorber

Type	Series	Action	Bore size [mm]
Flange	RSH	Double acting Double acting with spring Single acting, spring extend	20, 32