

Compact Air Cylinders

Plate Cylinder **MU/MDU**



- The oval piston design saves space. Cylinders can be mounted from multiple directions.
- It is possible to mount small auto switches in 4 directions.
- No protrusion of the auto switch from the mounting slot
- Available with a stroke of up to 300 mm
- With auto switch (MDU series: MDU, MDUW)

Type	Series	Action	Bore size [mm]
Standard	MU-Z	Double acting, Single rod	25, 32, 40, 50, 63
Standard	MU-Z	Single acting (Spring return/extend)	25, 32, 40, 50, 63
Standard	MUW-Z	Double acting, Double rod	25, 32, 40, 50, 63

Environment Resistant Cylinders

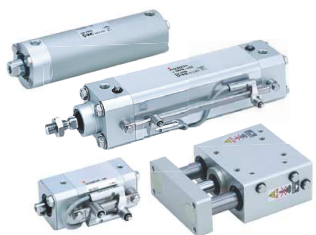
Stainless Steel Cylinder **CJ5-S/CDJ5-S/CG5-S/CDG5-S**



- Applicable for use in an environment with water splashing
- With auto switch (CDJ5-S series: CDJ5-S, CDG5-S series: CDG5-S)

Type	Series	Action	Bore size [mm]
Standard	CJ5-S	Double acting	10, 16
Standard	CG5-S	Double acting	20, 25, 32, 40, 50, 63, 80, 100

Hygienic Design Cylinder **HY□/HYD□**



- Improved water resistant air cylinder with an easily washable configuration
- 5 times the lifespan of the improved water resistant cylinder (SMC comparison)
- With auto switch (HYDB series: HYDB, HYDQB series: HYDQB, HYDC series: HYDC, HYDG series: HYDG)

Type	Series	Action	Bore size [mm]
Basic	HYB	Double acting	20, 25, 32, 40, 50, 63, 80, 100
Basic	HYQ	Double acting	20, 25, 32, 40, 50, 63
ISO Standard	HYC	Double acting	32, 40, 50, 63
With guide	HYG	Double acting	20, 25, 32, 40, 50, 63

Water Resistant Cylinder (Pneumatic/Hydraulic)

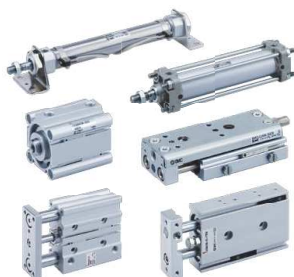


- Can be used in environments where contact with water or coolant occurs
- With water resistant 2-color indicator auto switch
- Suitable for factory machinery, food manufacturing machinery, car washers, etc.

Type	Series	Action	Bore size [mm]
Air cylinder	CM2-Z	Double acting	20, 25, 32, 40
Air cylinder	CG1-Z	Double acting	32, 40, 50, 63, 80, 100
Air cylinder	MB-Z	Double acting	32, 40, 50, 63, 80, 100
Square tube type air cylinder	MB1	Double acting	32, 40, 50, 63, 80, 100
Compact cylinder	CQ2-Z	Double acting	20, 25, 32, 40, 50, 63, 80, 100
Air cylinder	CA2-Z	Double acting	40, 50, 63, 80, 100
Compact guide cylinder	MGP-Z	Double acting	20, 25, 32, 40, 50, 63, 80, 100
Guide cylinder	MGG	Double acting	32, 40, 50, 63, 80, 100
Compact hydraulic cylinder compliant with JIS Standards (10 MPa)	CHKDB	Double acting	20, 25, 32, 40, 50, 63, 80, 100
Hydraulic cylinder compliant with JIS Standards (7 MPa)	CH2F	Double acting	32, 40, 50, 63, 80, 100

Environment Resistant Cylinders

Cylinder with Stable Lubrication Function (Lube-retainer)



- Applicable to operation in micro-powder (10 to 100 μm) /general environments
- Durability is 4 times stronger than the standard model in micro-powder environments.
- The overall length and mounting are the same as those of the standard model. (Except for some models)
- Grease film is formed on the piston rod surface to improve durability.
- Prevents the entry of dust and foreign matter
- The number of operating cycles can be improved even in general environments.

Type	Series	Action	Bore size [mm]
Air cylinder	CM2-Z	Double acting	20, 25, 32, 40
Air cylinder	CG1-Z	Double acting	20, 25, 32, 40, 50, 63, 80, 100
Air cylinder	CA2-Z	Double acting	40, 50, 63, 80, 100
Compact cylinder	CQS	Double acting	20, 25
Compact cylinder	CQ2	Double acting	32, 40, 50, 63, 80, 100
Air slide table	MXQ□A	Double acting	6, 8, 12, 16, 20, 25
Compact guide cylinder	MGP-Z	Double acting	20, 25, 32, 40, 50, 63, 80, 100
Dual rod cylinder	CXS	Double acting	6, 8, 12, 16, 20, 25, 32

Dust Resistant Cylinder



- Applicable for environments with flying micro-powder such as ceramic powder, toner powder, paper powder, and metallic powder (Excludes weld spatter)
- 4 times stronger than the standard model
- 2 Lube-retainers on the rod cover prevent micro-powder of 30 μm or smaller from entering.
- The Lube-retainers create a coat of grease on the piston rod for improved durability.

Type	Series	Action	Bore size [mm]
Air cylinder	CM2-XC92	Double acting	20, 25, 32, 40
Compact cylinder	CQS-XC92	Double acting	12, 16, 20, 25
Compact cylinder	CQ2-XC92	Double acting	32, 40, 50, 63, 80, 100
Compact guide cylinder	MGP-XC92	Double acting	12, 16, 20, 25, 32, 40, 50, 63, 80, 100

Floating Joints

Floating Joint J



- The floating joint can absorb any off-centering or loss of parallel accuracy of the double acting cylinder, making centering unnecessary.

Type	Series	Applicable cylinder bore size [mm]
Lightweight and compact type	JT	20, 25, 32, 40
Light weight type for light load	JC	20, 25, 32, 40, 50, 63
Standard	JA, JAF, JAL	6, 10, 15, 20, 25, 30, 40, 50, 63, 80, 100, 125, 140, 160
Standard	JA-X530, JAF-X530, JAL-X530	180, 200
Heavy load	JAH, JAHF, JAHL	40, 50, 63, 80, 100
For compact cylinders	JB	12, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 140, 160
Stainless steel type	JS	10, 15, 16, 20, 25, 32, 40, 50, 63