

Compact Air Cylinders

Mini Free Mount Cylinder CUJ/CDUJ



- Space saving: Total length reduced by 64% and capacity by 70% (Compared to the CU series)
- With auto switch (CDUJ series: CDUJ)

Type	Series	Action	Bore size [mm]
Standard	CUJ	Double acting, Single rod	4, 6, 8, 10, 12, 16, 20
Standard	CUJ	Single acting (Spring return)	4, 6, 8, 10, 12, 16, 20

Free Mount Cylinder CU/CDU



- Space-saving cylinder that enables the direct mounting of cylinders on multiple sides
- With auto switch (CDU series: CDU, CDUW, CDUK, CDUKW, CDU-A, ZCDUK)

Type	Series	Action	Bore size [mm]
Standard	CU	Double acting, Single rod	6, 10, 16, 20, 25, 32
Standard	CU	Single acting (Spring return/extend)	6, 10, 16, 20, 25, 32
Standard	CUW	Double acting, Double rod	6, 10, 16, 20, 25, 32
Non-rotating rod	CUK	Double acting, Single rod	6, 10, 16, 20, 25, 32
Non-rotating rod	CUK	Single acting (Spring return/extend)	6, 10, 16, 20, 25, 32
Non-rotating rod	CUKW	Double acting, Double rod	6, 10, 16, 20, 25, 32
Long stroke/Standard	CU	Double acting, Single rod	6, 10, 16, 20, 25, 32
Long stroke/Non-rotating rod	CUK	Double acting, Single rod	6, 10, 16, 20, 25, 32
With air cushion	CU-A	Double acting, Single rod	20, 25, 32
For vacuum	ZCUK	Double acting, Single rod	10, 16, 20, 25, 32

Compact Cylinder/Compact Type CQS/CDQS



- With this compact square type cylinder, auto switch mounting on 3 or 4 sides is possible.
This compact cylinder does not protrude from the body when mounting an auto switch.
- Newly added compact type foot brackets and double clevis pivot bracket
- With auto switch (CDQS series: CDQS, CDQSW, CDQSK, CDQSKW, CDQS□S)

Type	Series	Action	Bore size [mm]
Standard	CQS	Double acting, Single rod	12, 16, 20, 25
Standard	CQS	Single acting (Spring return/extend)	12, 16, 20, 25
Standard	CQSW	Double acting, Double rod	12, 16, 20, 25
Non-rotating rod	CQSK	Double acting, Single rod	12, 16, 20, 25
Non-rotating rod	CQSKW	Double acting, Double rod	12, 16, 20, 25
Anti-lateral load	CQS□S	Double acting, Single rod	12, 16, 20, 25

Compact Cylinder JCQ/JCDQ



- Compact: Overall length shortened by 6.5 mm, Width shortened by 6 mm, Height shortened by 4 mm
- Weight reduced by up to 45% (150 g → 82 g)
- Volume reduced by up to 40%
- With auto switch (JCDQ series: JCDQ)

Type	Series	Action	Bore size [mm]
Standard	JCQ	Double acting, Single rod	12, 16, 20, 25, 32, 40, 50, 63, 80, 100

Compact Air Cylinders

Compact Cylinder **CQ2/CDQ2**



- Space-saving cylinder designed with a compact body
- Small auto switches can be mounted on 4 surfaces. (2 surfaces for ø12 to ø25)
- No projection of the auto switch
- Weight: Reduced by 5 to 13% (Compared with the current CQ2 series)
- Newly added compact type foot brackets and double clevis pivot bracket
- Part numbers with a rod end bracket and/or mounting bolt are available. (It is not necessary to order a bracket for the applicable cylinder separately.)
- With auto switch (CDQ2 series: CDQ2, CDQ2W, CDQ2K, CDQ2KW, CDQP2, CDQ2□S, CDBQ2)

Type	Series	Action	Bore size [mm]
Standard	CQ2-Z	Double acting, Single rod	12, 16, 20, 25, 32, 40, 50, 63, 80, 100
Standard	CQ2W-Z	Double acting, Double rod	12, 16, 20, 25, 32, 40, 50, 63, 80, 100
Standard	CQ2-Z	Single acting (Spring return/extend)	12, 16, 20, 25, 32, 40, 50
Large bore size	CQ2-Z	Double acting, Single rod	125, 140, 160, 180, 200
Large bore size	CQ2W-Z	Double acting, Double rod	125, 140, 160, 180, 200
Long stroke	CQ2-Z	Double acting, Single rod	32, 40, 50, 63, 80, 100
Non-rotating rod	CQ2K-Z	Double acting, Single rod	12, 16, 20, 25, 32, 40, 50, 63
Non-rotating rod	CQ2KW-Z	Double acting, Double rod	12, 16, 20, 25, 32, 40, 50, 63
Axial piping (Centralized piping type)	CQP2	Double acting, Single rod	12, 16, 20, 25, 32, 40, 50, 63, 80, 100
Axial piping (Centralized piping type)	CQP2	Single acting (Spring return/extend)	12, 16, 20, 25, 32, 40, 50
Anti-lateral load	CQ2□S-Z	Double acting, Single rod	32, 40, 50, 63, 80, 100
With end lock	CBQ2	Double acting, Single rod	20, 25, 32, 40, 50, 63, 80, 100

Compact Cylinder with Air Cushion **RQ/RDQ**



- The air cushion mechanism has been added to the CQS and CQ2 series compact cylinders, extending the body length only + 2.5 mm to 13 mm.
- Absorbs nearly triple the amount of absorbable allowable kinetic energy (Compared to the rubber bumper of the CQS and CQ2 series)
- Newly added compact type foot brackets
- With auto switch (RDQ series: RDQ)

Type	Series	Action	Bore size [mm]
Standard	RQ	Double acting, Single rod	20, 25, 32, 40, 50, 63, 80, 100

Compact Cylinder/Guide Rod Type **CQM/CDQM**



- Built-in guide rod in the CQS and CQ2 series compact cylinders
- Non-rotating accuracy: $\pm 0.2^\circ$ or less
- 2 to 4 times the lateral load resistance
 - * Compared to the CQ series compact cylinder
- Loads can be directly mounted.
- Mounting dimensions are compatible with the CQS and CQ2 series.
- With auto switch (CDQM series: CDQM)

Type	Series	Action	Bore size [mm]
Standard	CQM	Double acting	12, 16, 20, 25, 32, 40, 50, 63, 80, 100

Compact Cylinder/Plate Type **CQU**



- The oval piston design reduces the width by a maximum of 40%. (Compared with the CQ2 series)
- Weight: Reduced by up to 36% (Compared with the MU series)
- A small type auto switch can be mounted from 4 directions.
- No protrusion of the auto switch from the mounting slot

Type	Series	Action	Bore size [mm]
Standard	CQU	Double acting, Single rod	20, 25, 32, 40

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