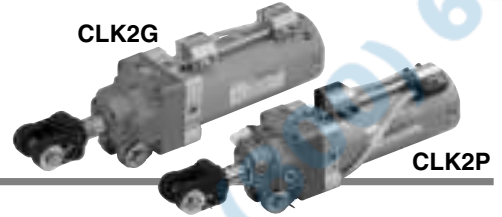


Clamp Cylinder with Lock with Magnetic Field Resistant Auto Switch Rod Mounting

Series **CLK2G/CLK2P**

ø40, ø50, ø63



How to Order

Built-in standard magnet type with magnetic field resistant auto switch

CLK2G A 50 - 100 Y - B - P4DWSC

Built-in strong magnet type with magnetic field resistant auto switch

CLK2P A 50 - 100 Y - B - P79WSE

Clevis width

A	16.5 mm	ø40, ø50, ø63
B	19.5 mm	ø50, ø63

Bore size

40	40 mm
50	50 mm
63	63 mm

Port type

Nil	Rc
TN	NPT

Cylinder stroke

50, 75, 100, 125, 150

End bracket

Nil	None
I	Single knuckle joint (M6 without tap)
IA	Single knuckle joint (M6 with tap)
Y	Double knuckle joint (M6 without tap)
YA	Double knuckle joint (M6 with tap)

Note) Pin (for knuckle), cotter pin and flat washer are provided as a standard for Y and YA.

Option

Nil	None
B	Limit switch mounting base
D	Dog fitting (Note 1)
L	Foot
K (Note 2)	Pedestal (for 75, 100, 150 strokes only)

Note 1) When the dog bracket is selected, choose the rod end bracket IA or YA (M6 with tap).

Note 2) Clevis width B is not available with mounting base K.

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs. (n = 3, 4, 5...n)

Auto switch

Nil	Without auto switch, Without switch mounting rod
P	Without auto switch, With switch mounting rod
Auto switch model	With auto switch, With switch mounting rod

Note) Select applicable auto switch models from the table below.

Switch mounting rod position

Nil	Top
L	Left
R	Right

Note 1) Viewed from the rod end.

Note 2) When the auto switch D-P79WSE is mounted, by-pass piping and a switch mounting rod cannot be placed at the same position.

Port/By-pass piping position

* Refer to page 2.

Locking direction

B	Retraction locking
F	Extension locking

Built-in Standard (Strong) Magnet Cylinder Part No.

- Built-in standard (strong) magnet type without auto switch and switch mounting rod
Symbol for the auto switch type is "Nil" as shown below.
CLK2G: (Example) CLK2GA50-50Y
CLK2P: (Example) CLK2PA50-50Y
- Built-in standard (strong) magnet type without auto switch, with switch mounting rod
Symbol for the auto switch type is "P" as shown below.
CLK2G: (Example) CLK2GA50-50Y-P
CLK2P: (Example) CLK2PA50-50Y-P

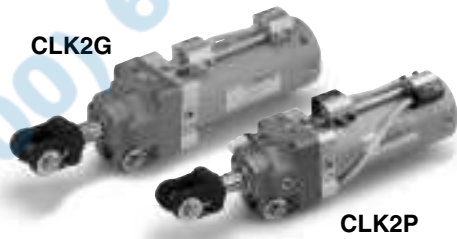
Applicable Magnetic Field Resistant Auto Switches (Refer to page 21 through to 25 for detailed auto switch specifications.)

Applicable cylinder series	Type	Auto switch model	Applicable magnetic field	Electrical entry	Indicator light	Wiring (Pin no. in use)	Load voltage	Lead wire length	Applicable load
CLK2G series	Solid state switch	P4DWSC	AC magnetic field (Single-phase AC welding magnetic field)	Pre-wired connector	2-color display	2-wire (3-4)	24 VDC	0.3 m	Relay, PLC
		P4DWSE				2-wire (1-4)			
		P4DWL		Grommet		2-wire	3 m		
		P4DWZ					5 m		
CLK2P series	Reed switch	P79WSE	DC / AC magnetic field	Pre-wired connector	2-color display	2-wire (1-4)	24 VDC	0.3 m	
		P74L		Grommet (Pre-wired connector)	1-color display	2-wire	24 VDC	3 m	
		P74Z					100 VAC	5 m	

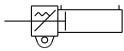
Note 1) PLC: Programmable Logic Controller

Note 2) Refer to page 17 when ordering the auto switch mounting bracket assembly or switch mounting rod assembly.

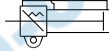
Clamp Cylinder with Lock With Magnetic Field Resistant Auto Switch **Series CLK2G/CLK2P**



Symbol



Retraction locking type



Extension locking type

Standard Stroke

Bore size (mm)	Standard stroke (mm)
40, 50, 63	50, 75, 100, 125, 150

Port/By-pass Piping Position

Symbol	Port position	By-pass piping position	Locking direction	
			B: Retraction locking	F: Extension locking
Nil	Port on top	By-pass piping on left		
2	Port on left	By-pass piping on right		
3	Port on right	By-pass piping on left		
4	Port on top	By-pass piping on right	—	
5	Port on left	By-pass piping on top	—	
6	Port on right	By-pass piping on top	—	

→ Port ⊕ By-pass piping

Clamp Cylinder with Lock Specifications

Bore size	40	50	63
Action	Double acting, Single rod		
Fluid	Air		
Proof pressure	1.5 MPa		
Maximum operating pressure	1.0 MPa		
Minimum operating pressure	0.2 MPa		
Locking action	Spring locking		
Locking pressure	0.05 MPa		
Locking direction	One direction (Retraction, Extension)		
Lock holding force N (Max. static load) ^{Note 1)}	0.5 MPa or equivalent		
	629	982	1559
Lock application	Drop prevention, Position holding		
Ambient and fluid temperature	Without auto switch: -10°C to 70°C With auto switch: -10°C to 60°C		
Lubrication	Non-lube		
Piston speed	50 to 500 mm/s		
Stroke length tolerance	+1.0/0		
Cushion	Retraction direction (Head end): With air cushion		
Thread tolerance	JIS Class 2		
Mounting	Double clevis ^{Note 2)}		

Note 1) Be sure to comply with guidelines in the back of page 3 when selecting cylinders.
Note 2) Pin (for clevis), cotter pin, flat washer are equipped as standard.

Clevis width	16.5 mm	ø40, ø50, ø63
	19.5 mm	ø50, ø63

Weight (Basic weight is for a 0 mm stroke.)

Cylinder basic weight	Bore size (mm)	40	50	63
		CLK2G series	B: 1.05 F: 1.11	B: 1.48 F: 1.54
	CLK2P series	B: 1.12 F: 1.18	B: 1.49 F: 1.55	B: 2.06 F: 2.08
Additional weight per 25 mm stroke		0.08	0.11	0.13
Single knuckle joint		0.25		0.20
Double knuckle joint (Pin, cotter pin, flat washer are included.)		0.36		0.34
Limit switch mounting base			0.22	
Dog fitting			0.12	
Foot			0.24	
Pedestal			2.04	

Note) The above values do not include the weight of the auto switch and bracket.

Calculation
Example) CLK2PB50-100Y-B

- Basic weight ... 1.49 (ø50)
- Additional weight ... 0.11/25 mm
- Cylinder stroke ... 100 mm
- Double knuckle joint ... 0.34 (Y)
- 1.49 + 0.11 x 100 / 25 + 0.34 = 2.27 kg

Theoretical Output

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)			
				0.3	0.4	0.5	0.6
40	16	OUT	1260	378	504	630	756
		IN	1060	318	424	530	636
50	20	OUT	1960	588	784	980	1180
		IN	1650	495	660	825	990
63	20	OUT	3120	934	1250	1560	1870
		IN	2800	840	1120	1400	1680

Accessories (Options)

Symbol	Description	Parts no.		
		CLK2GA/CLK2PA series		CLK2GB/CLK2PB series
		40	50, 63	50, 63
I	Single knuckle joint	M6 without tap	CLK-I04	CKB-I04
IA		M6 with tap	CLK-IA04	CKB-IA04
Y	Double knuckle joint (knuckle pin, cotter pin, flat washer are equipped as a standard.)	M6 without tap	CLK-Y04	CKA-Y04
YA		M6 with tap	CLK-YA04	CKA-YA04
B	Limit switch mounting base			CK-B04
D	Dog fitting			CK-D04
L	Foot			CK-L04
K	Pedestal	For 75 stroke	CKA-K075	—
		For 100 stroke	CKA-K100	—
		For 150 stroke	CKA-K150	—