

Clamp Cylinder with Lock:

Standard Auto Switch (Rod Mounting/Band Mounting Type)

CLK2G Series

ø32, ø40, ø50, ø63

RoHS

How to Order

Rod mounting type CLK2G A 50 - 100 Y - B 2 L - M9BW - P -

Band mounting type CLK2G A 50 - 100 Y - B 2 - M9BW - C -

Bore size

40	40 mm
50	50 mm
63	63 mm

Switch mounting rod position

Nil	Top
L	Left
R	Right

Built-in magnet for auto switch

Clevis width

A	12 mm	ø32
B	16.5 mm	ø40, ø50, ø63
C	19.5 mm	ø50, ø63
C	12.5 mm	ø40, ø50, ø63

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port type

Nil	Rc1/4
TN	NPT1/4
TF	G1/4

Note) G thread is not available for ø32.

Cylinder stroke (mm)

32	50, 75, 100, 125, 150
40	50, 75, 100, 125, 150
50	50, 75, 100, 125, 150
63	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) Knuckle pin, cotter pin and flat washer are provided as a standard for Y and YA.

Option

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

Locking direction

B	Retraction locking
F	Extension locking

Auto switch

Nil	Without auto switch (Built-in magnet)
S	With auto switch

* For applicable auto switches, refer to the table below.
* Auto switches are shipped together, but not assembled.

Auto switch mounting bracket Note)

Note) This symbol is indicated when the D-A9□ or M9□ type auto switch is specified.

Number of auto switches

Nil	2
S	1

Made to Order

For details, refer to page 449.

Unlock-port position

Symbol	Position (Viewed from rod side)	Locking direction	
		Retraction locking	Extension locking
Nil	Top	—	○
2	Left	○	○
3	Right	○	○

Note 1) Unlock-port cannot be placed on the top of the cylinder when the retraction locking type is selected.
Note 2) The cylinder actuating port is mounted on the top of the cylinder at the time of shipment from the factory.
Although the position of the cylinder actuating port can be changed from [top] to [left or right] in the extension locking type by changing the plug position, it cannot be changed from [top] in the retraction locking type.

MK

MK2T

CK□1

CLK2

CLKG

CKQ

CLKQ

CK□

CLK□

CKQ□

Standard Auto Switches Standard auto switches cannot be used under a strong magnetic field.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model	Lead wire length [m]				Pre-wired connector	Applicable load			
					DC	AC		0.5 (Nil)	1 (M)	3 (L)	5 (Z)					
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9N	●	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)		12 V		M9P	●	●	●	○	○			
				2-wire		5 V, 12 V		M9B	●	●	●	○	○			
	3-wire (NPN)			5 V, 12 V		M9NW		●	●	●	○	○	IC circuit			
	3-wire (PNP)					M9PW		●	●	●	○	○				
	2-wire					M9BW		●	●	●	○	○				—
	3-wire (NPN)					M9NA		○	○	●	○	○				IC circuit
	3-wire (PNP)			M9PA		○		○	●	○	○					
	2-wire	M9BA	○	○	●	○	○	—								
	Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	A96	●	—	●	—	—	IC circuit	—
No				2-wire	24 V	12 V	100 V	A93	●	●	●	●	—	—	—	Relay, PLC
						5 V, 12 V	100 V or less	A90	●	—	●	—	—	—		

* Solid state auto switches marked with "○" are produced upon receipt of order.

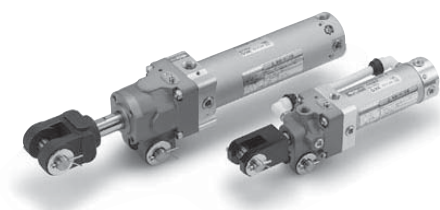
* Auto switches and mounting brackets are shipped together, (but not assembled).

* Lead wire length symbols: 0.5 m.....Nil (Example) M9NWV
1 m.....M (Example) M9NWVM
3 m.....L (Example) M9NWVL
5 m.....Z (Example) M9NWVZ

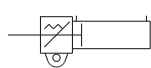
D-□

-X□

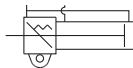




SMC Original Symbol



Retraction
locking type



Extension
locking type

Standard Stroke

Bore size (mm)	Standard stroke (mm)
32, 40, 50, 63	50, 75, 100, 125, 150

Port/Bypass Piping Position

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

⇒ Port Bypass piping



Made to Order: Individual Specifications
(For details, refer to pages 466 and 467.)

Symbol	Specifications
-X1604	Unlock-port separate piping type: ø40 to ø63 only

Made to Order

[Click here for details](#)

Symbol	Specifications
-XC87	Heavy duty specification: ø40 to ø63 only

For specifications with auto switches, refer to pages 463 and 464.

- Minimum Stroke for Auto Switch Mounting
- Auto Switch Proper Mounting Position (for Stroke End Detection) and its Mounting Height
- Operating Range
- Auto Switch Mounting Bracket/Part No.

Clamp Cylinder with Lock Specifications

Bore size	32	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 ^{Note 1)} (Max. static load)	402	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	Not required (Non-lube)			
Piston speed	50 to 500 mm/s			
Stroke length tolerance	+1.0/0			
Cushion	Retraction direction (Head end): With air cushion			
Mounting	Double clevis ^{Note 2)}			

Note 1) The holding force (max. static load) shows the maximum capability and does not show the normal holding capability. So, select an appropriate cylinder while referring to page 469.

Note 2) Pin (for clevis), cotter pin, flat washer are equipped as a standard.

Clevis width	12 mm	ø32
	16.5 mm	ø40, ø50, ø63
	19.5 mm	ø50, ø63
	12.5 mm	ø40, ø50, ø63

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

Bore size (mm)		32	40	50	63
Cylinder basic weight	CLK2□ series	B: 0.51 F: 0.54	B: 1.05 F: 1.11	B: 1.48 F: 1.54	B: 1.96 F: 2.02
	Additional weight per 25 mm stroke	0.08	0.08	0.11	0.13
Single knuckle joint		0.25	0.25	0.20	
Double knuckle joint (Pin, cotter pin, flat washer are included.)		0.17	0.36	0.34	
Limit switch mounting base		—	—	0.22	
Dog fitting		—	—	0.12	
Foot		—	—	0.24	
Pedestal		—	—	2.04	

Calculation

Example) CLK2B50-100Y-B

• Basic weight ... 1.48 (ø50)

• Additional weight ... 0.11/25 mm

• Cylinder stroke ... 100 mm

• Double knuckle joint ... 0.34 (Y)

1.48 + 0.11 x 100 / 25 + 0.34 = 2.26 kg

• Cylinder stroke ... 100 mm

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
32	12			OUT	804	241	322	402	482
				IN	691	207	276	346	415
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

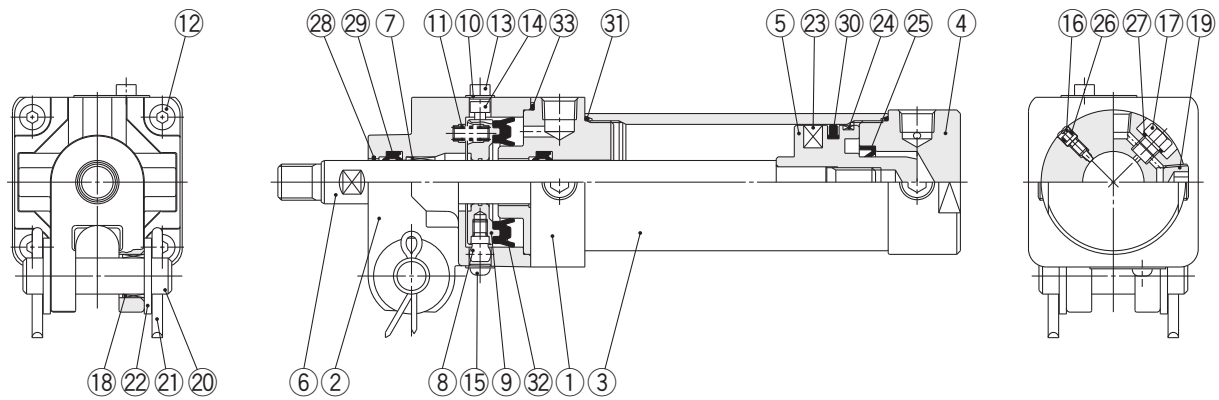
Accessories (Options)

Symbol	Description		Parts no.					
			CLK2A series		CLK2B series	CLK2C series		
			32	40	50, 63	50, 63	40	50, 63
I	Single knuckle joint	M6 without tap	CLK-I03	CLK-I04	CKB-I04	CLK-I04	CLK-I04	CLK-I04
IA		M6 with tap	—	CLK-IA04	CKB-IA04	CLK-IA04	CLK-IA04	CLK-IA04
Y	Double knuckle joint (knuckle pin, cotter pin, flat washer are equipped as a standard.)	M6 without tap	CLK-Y03	CLK-Y04	CKA-Y04	CKB-Y04	CLKC-Y04	CKC-Y04
YA		M6 with tap	—	CLK-YA04	CKA-YA04	CKB-YA04	CLKC-YA04	CKC-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	—	—	—	—

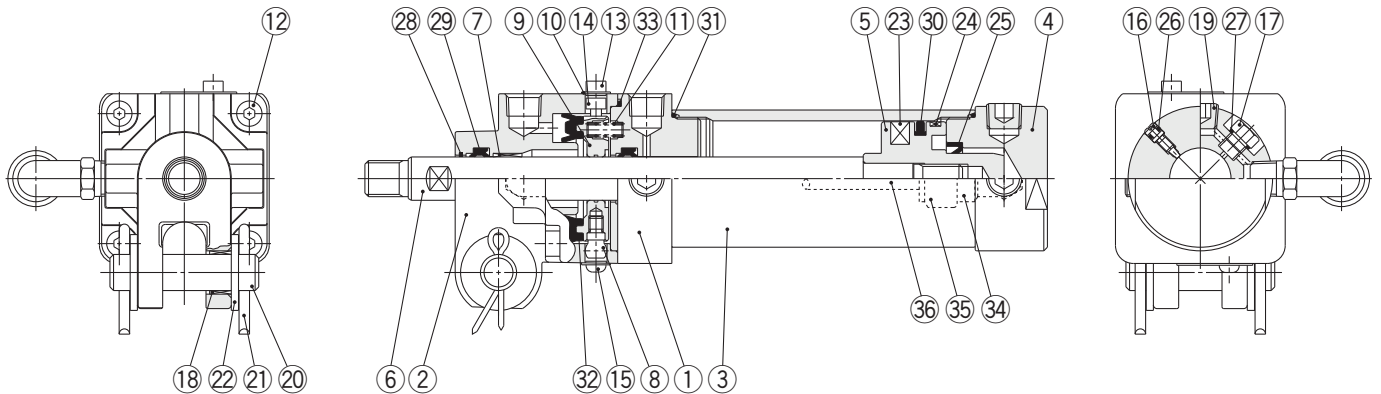
CLK2 Series

Construction: CLK2□A32

Retraction locking (B)



Extension locking (F)



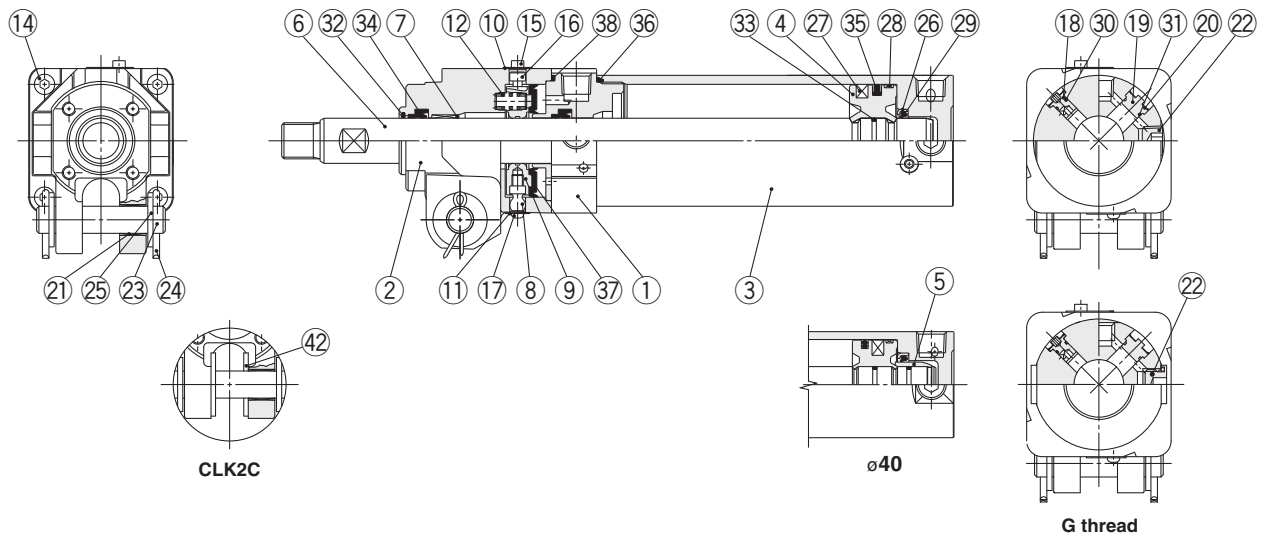
Component Parts

No.	Description	Material	Qty	Note
1	Rod cover	Aluminum alloy	1	Hard anodized
2	Cover	Aluminum alloy	1	Hard anodized
3	Cylinder tube	Aluminum alloy	1	Hard anodized
4	Head cover	Aluminum alloy	1	Chromated
5	Piston	Aluminum alloy	1	Chromated
6	Piston rod	Carbon steel	1	Hard chrome plated
7	Bushing	Bearing alloy	1	
8	Pivot	Carbon steel	1	Heat treated, Electroless nickel plated
9	Lock ring	Carbon steel	1	Zinc chromated
10	Dust cover	Stainless steel	2	
11	Brake spring	Steel wire	2	Zinc chromated
12	Hexagon socket head cap screw	Chrome molybdenum steel	4	
13	Hexagon socket head cap screw	Chrome molybdenum steel	1	
14	Hexagon socket head cap screw	Chrome molybdenum steel	1	
15	Round head Phillips screw	Chrome molybdenum steel	1	
16	Cushion valve	Free-cutting brass	1	Electroless nickel plated
17	Plug	Free-cutting brass	1	
18	Clevis bushing	Bearing alloy	2	

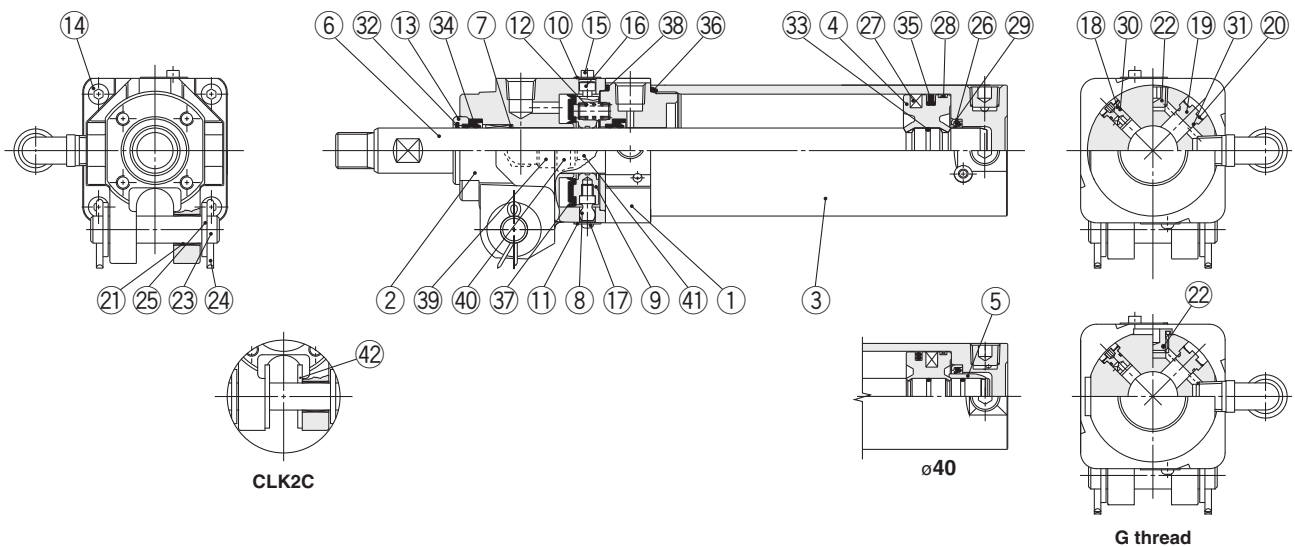
No.	Description	Material	Qty	Note
19	Hexagon socket head plug	Carbon steel	4(5)	Rc 1/8, 5 pcs. of extension locking
20	Pin	Carbon steel	1	
21	Cotter pin	Low carbon steel wire rod	2	
22	Flat washer	Rolled steel	2	
23	Magnet	—	1	CLK2GA32 only
24	Wear ring	Resin	1	
25	Cushion seal	NBR	1	
26	Cushion valve seal	NBR	1	
27	Plug seal	NBR	1	
28	Coil scraper	Phosphor bronze	1	
29	Rod seal	NBR	2	
30	Piston seal	NBR	1	
31	Tube gasket	NBR	2	
32	Lock ring seal	NBR	1	
33	O-ring	NBR	1	
34	FR One-touch fitting		2	Extension locking only
35	Spatter cover		2	Extension locking only
36	FR double layer tube		1	Extension locking only

Construction: CLK2□40/50/63

Retraction locking (B)



Extension locking (F)



MK

MK2T

CK□1

CLK2

CLKG

CKQ

CLKQ

CK□

CLK□

CKQ□

Component Parts

No.	Description	Material	Qty	Note
1	Rod cover	Aluminum alloy	1	Hard anodized
2	Cover	Aluminum alloy	1	Hard anodized
3	Tube cover	Aluminum alloy	1	Hard anodized
4	Piston	Aluminum alloy	1	Chromated
5	Cushion ring	Aluminum alloy	1	ø40 Anodized
6	Piston rod	Carbon steel	1	Hard chrome plated
7	Bushing	Bearing alloy	1	
8	Pivot	Carbon steel	1	Heat treated, Electroless nickel plated
9	Lock ring	Carbon steel	1	Zinc chromated
10	Dust cover	Stainless steel	1	
11	Dust cover	Stainless steel	1	
12	Brake spring	Steel wire	2	Zinc chromated
13	Retainer plate	Aluminum alloy	1	Anodized, Extension locking only
14	Hexagon socket head cap screw	Chrome molybdenum steel	4	
15	Hexagon socket head cap screw	Chrome molybdenum steel	1	
16	Hexagon socket head cap screw	Chrome molybdenum steel	1	
17	Round head Phillips screw	Chrome molybdenum steel	1	
18	Cushion valve	Aluminum alloy	1	
19	Plug	Aluminum alloy	1	
20	Retaining ring	Spring steel	2	
21	Clevis bushing	Bearing alloy	2	

No.	Description	Material	Qty	Note
22	Hexagon socket head plug	Carbon steel	4(5)	Rc 1/4, 5 pcs. of extension locking
23	Pin	Carbon steel	1	
24	Cotter pin	Low carbon steel wire rod	2	
25	Flat washer	Rolled steel	2	
26	Cushion seal retainer	Rolled steel	1	Zinc chromated
27	Magnet	—	1	CLK2G only
28	Wear ring	Resin	1	
29	Cushion seal	Urethane	1	
30	Cushion valve seal	NBR	1	
31	Plug gasket	NBR	1	
32	Coil scraper	Phosphor bronze	1	
33	Piston gasket	NBR	1(2)	2 pcs. for ø40
34	Rod seal	NBR	2	
35	Piston seal	NBR	1	
36	Tube gasket	NBR	1	
37	Lock ring seal	NBR	1	
38	O-ring	NBR	1	
39	FR One-touch fitting		2	Extension locking only
40	Spatter cover		2	Extension locking only
41	FR double layer tube		1	Extension locking only
42	Spacer	Bearing alloy	2	CLK2C only

D-□

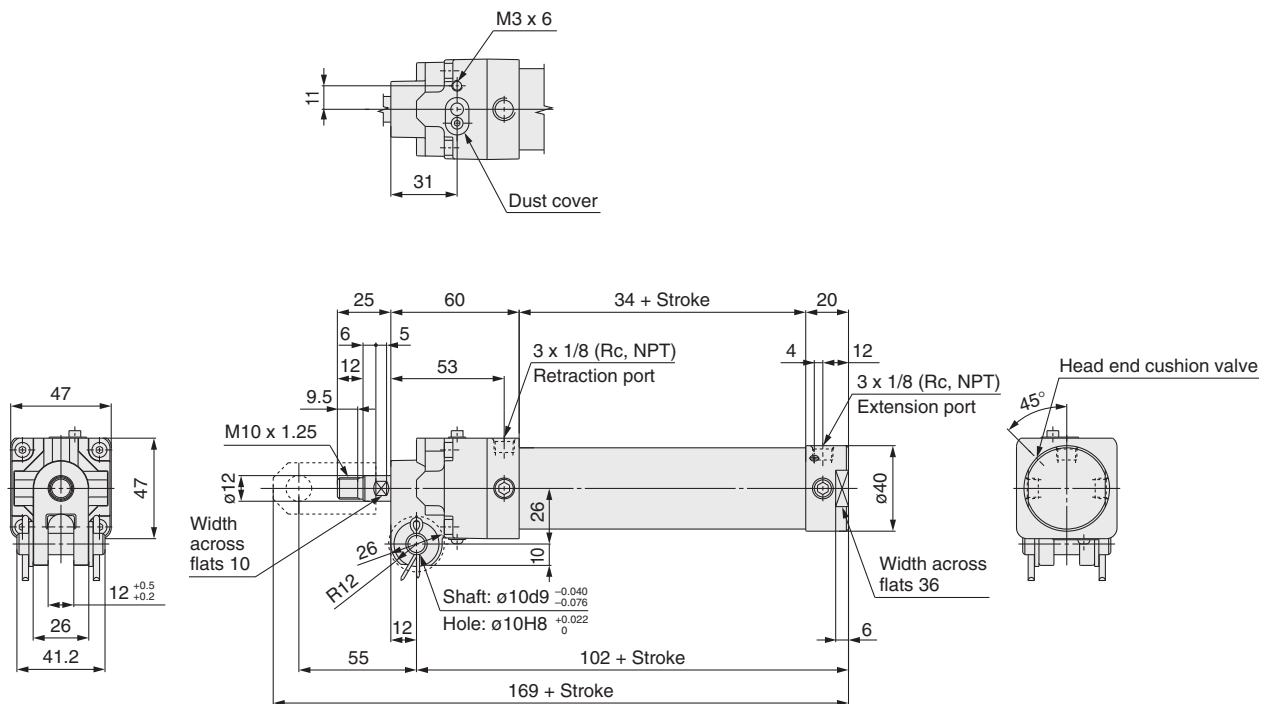
-X□

CLK2 Series

Dimensions: CLK2□A32

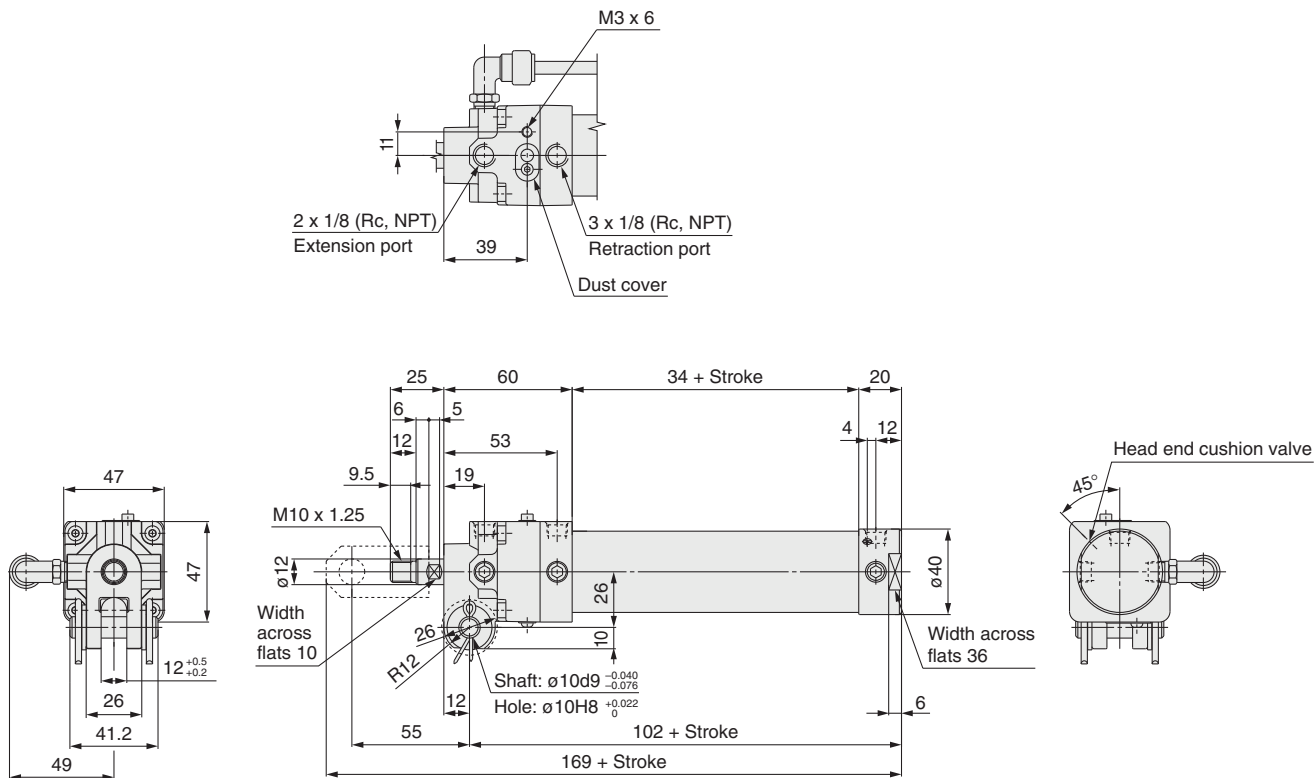
Refer to pages 464-1 and 464-2 for details about auto switch mounting of the band mounting type.

Retraction locking (B)



Note) Refer to pages 461 and 462 for Accessories.

Extension locking (F)

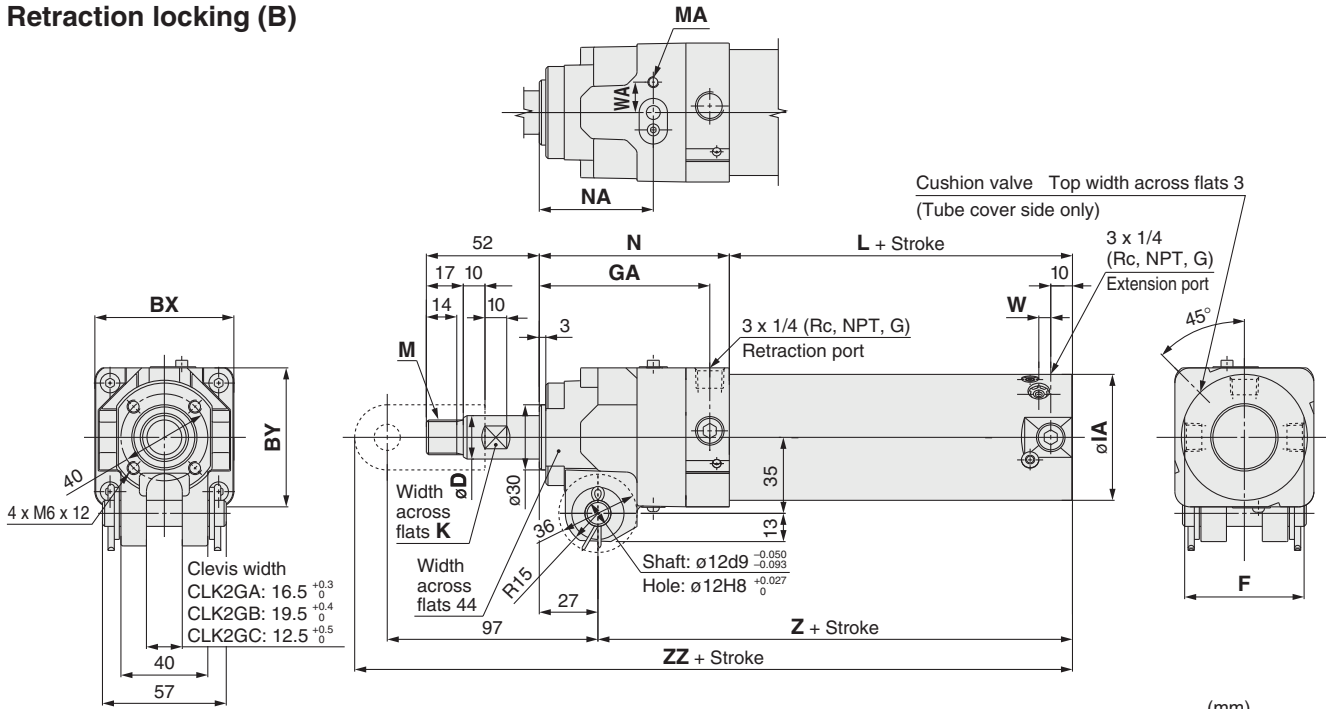


Note) Refer to pages 461 and 462 for Accessories.

Dimensions: CLK2□40/50/63

· Refer to pages 464-1 and 464-2 for details about auto switch mounting of the band mounting type.
· Refer to pages 463 and 464 for details about auto switch mounting of the rod mounting type.

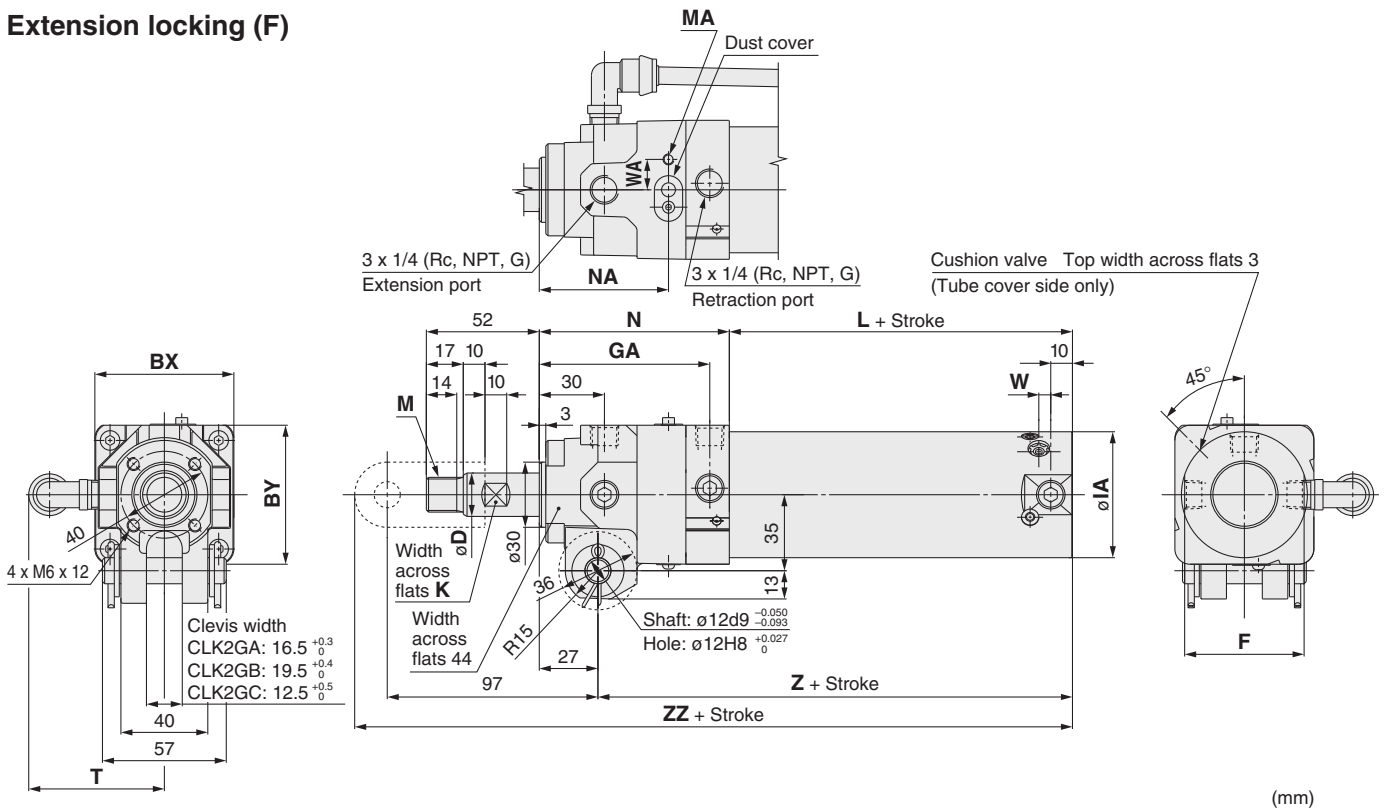
Retraction locking (B)



Symbol	BX	BY	D	F	GA	IA	K	L	M	MA	N	NA	W	WA	Z	ZZ
Bore size																
40	56	54	16	44	77	47	14	55	M12 x 1.5	M4 x 7	86	51.5	5	12.5	114	226
50	64	64	20	55	78.5	58	17	58	M16 x 1.5	M4 x 7	87.5	52.5	5.5	14	118.5	230.5
63	74	74	20	69	82	72	17	58	M16 x 1.5	M5 x 7	91	53.5	5.5	19	122	234

Note) Refer to pages 461 and 462 for Accessories.

Extension locking (F)



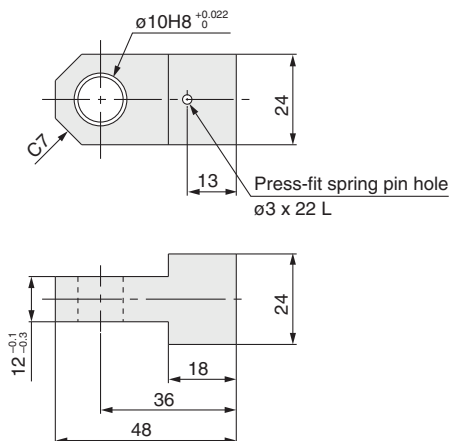
Symbol	BX	BY	D	F	GA	IA	K	L	M	MA	N	NA	T	W	WA	Z	ZZ
Bore size																	
40	56	54	16	44	77	47	14	55	M12 x 1.5	M4 x 7	86	59	57	5	12.5	114	226
50	64	64	20	55	78.5	58	17	58	M16 x 1.5	M4 x 7	87.5	59.5	60	5.5	14	118.5	230.5
63	74	74	20	69	82	72	17	58	M16 x 1.5	M5 x 7	91	61	67	5.5	19	122	234

Note) Refer to pages 461 and 462 for Accessories.

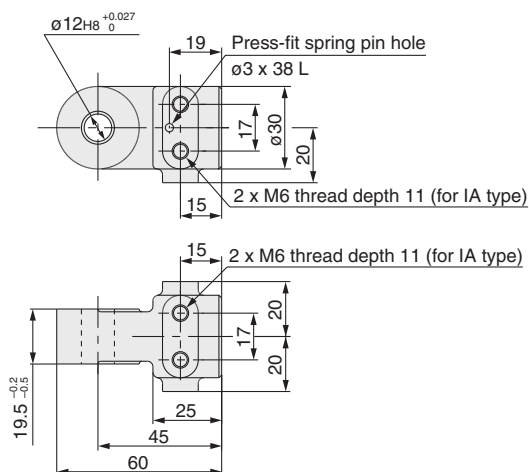
CLK2 Series Accessories 1

Single Knuckle Joint

For $\phi 32$



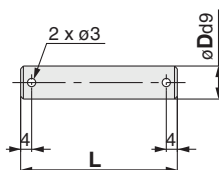
For $\phi 40, \phi 50, \phi 63$



Part no.	Rod end bracket symbol	Applicable clamp cylinder
CLK-I03	I (M6 without tap)	CLK2□A32 series
CLK-I04	I (M6 without tap)	CLK2□A40 series
CLK-IA04	IA (M6 with tap)	CLK2□B40 series
CKB-I04	I (M6 without tap)	CLK2□A50 to 63 series
CKB-IA04	IA (M6 with tap)	CLK2□B50 to 63 series

Note) The current model (the CLK1 series) is equivalent to the component part no. CLK-IA04, CKB-IA04 (rod end bracket symbol IA).

Pin (for Clevis/Double Knuckle Joint)

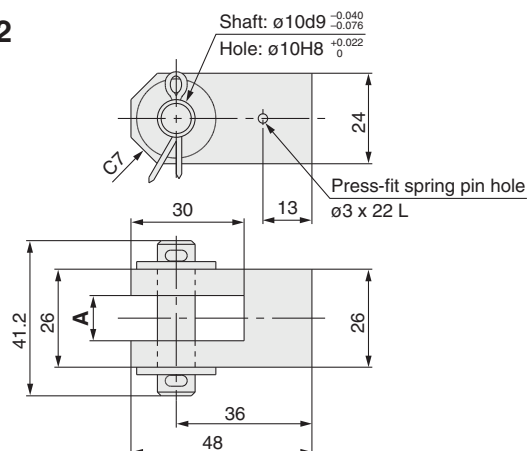


Part no.	D	L	Applicable clamp cylinder
CLK-P03	10 $\begin{smallmatrix} -0.040 \\ -0.076 \end{smallmatrix}$	41.2	CLK2□A32 series
CK-P04	12 $\begin{smallmatrix} -0.050 \\ -0.093 \end{smallmatrix}$	57	CLK2□□40 to 63 series

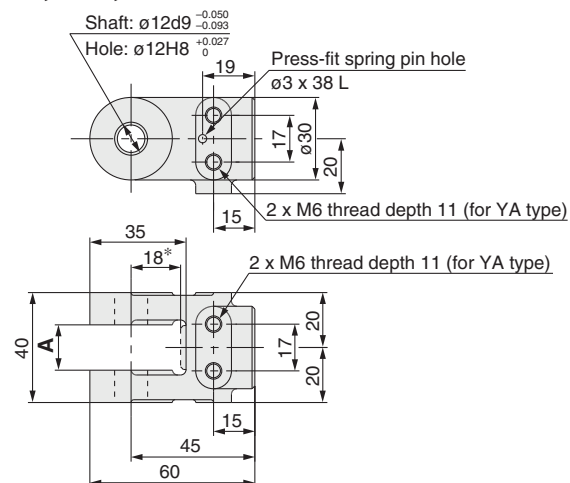
Note) Cotter pin and flat washer are provided as a standard.

Double Knuckle Joint

For $\phi 32$



For $\phi 40, \phi 50, \phi 63$



Part no.	Rod end bracket symbol	A	Applicable clamp cylinder
CLK-Y03	Y (M6 without tap)	12 $\begin{smallmatrix} +0.5 \\ +0.2 \end{smallmatrix}$	CLK2□A32 series
CLK-Y04	Y (M6 without tap)	16.5 $\begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	CLK2□A40 series
CLK-YA04	YA (M6 with tap)		CLK2□A50 to 63 series
CKA-Y04	Y (M6 without tap)		
CKA-YA04	YA (M6 with tap)	19.5 $\begin{smallmatrix} +0.4 \\ 0 \end{smallmatrix}$	CLK2□B50 to 63 series
CKB-Y04	Y (M6 without tap)		CLK2□C40 series
CLKC-Y04	Y (M6 without tap)		
CLKC-YA04	YA (M6 with tap)	12.5 $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$	CLK2□C50 to 63 series
CKC-Y04	Y (M6 without tap)		CLK2□C50 to 63 series
CKC-YA04	YA (M6 with tap)		

Note 1) Pin (for knuckle), cotter pin and flat washer are attached to the double knuckle joint as a standard.

Note 2) The current model (the CLK1 series) is equivalent to the component part no. CLK-YA04, CKA-YA04, CKB-YA04 (rod end bracket symbol YA).

Note 3) The dimension with * shows the value when mounted on the piston rod.

MK

MK2T

CK□1

CLK2

CLKG

CKQ

CLKQ

CK□

CLK□

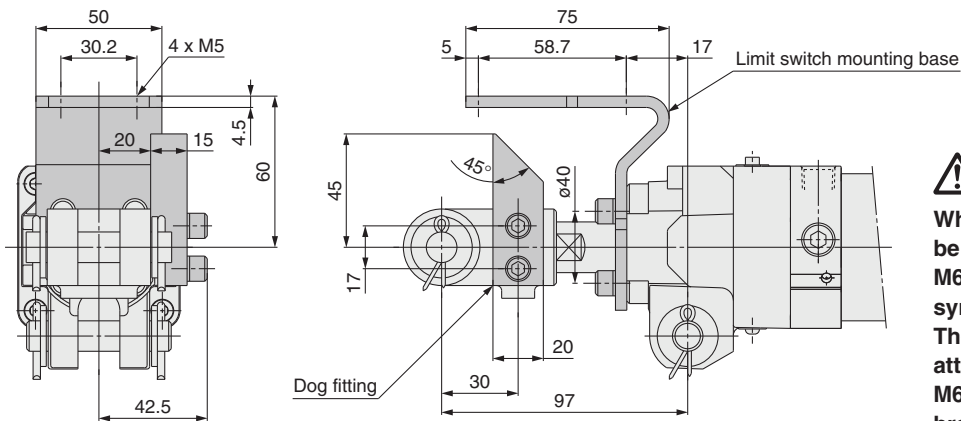
CKQ□

D-□

-X□

CLK2 Series Accessories 2

Limit Switch Mounting Base/Dog Fitting



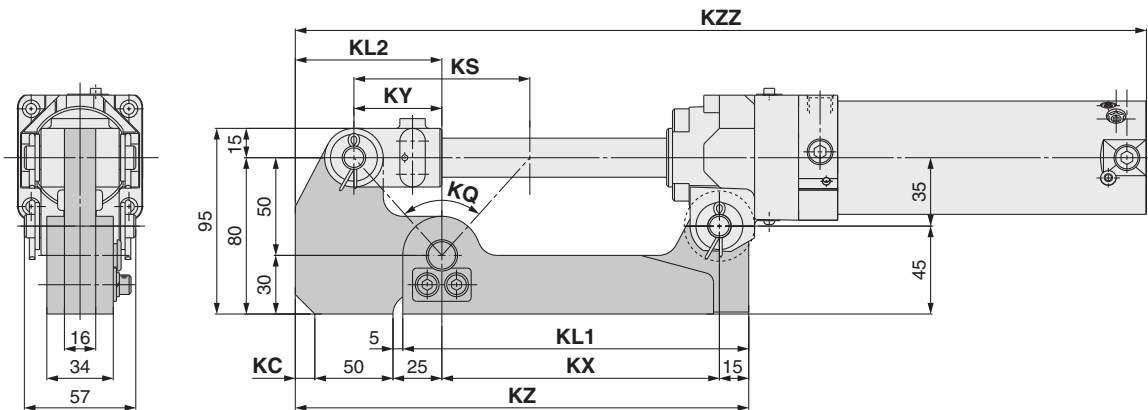
When you attach a dog fitting, be sure to use a knuckle joint, M6 with tap (rod end bracket symbol IA or YA). The dog fitting cannot be attached to the knuckle joint, M6 without tap (rod end bracket symbol I or Y).

Part no.	Option symbol	Name	Applicable clamp cylinder
CK-B04	B	Limit switch mounting base	CLK2□40 to 63 series
CK-D04	D	Dog fitting	

Note 1) Limit switch mounting base and dog fitting can be repositioned by removing the hexagon socket head cap screw.

Note 2) When ordering the limit switch base and the dog bracket individually, a spring washer for the mounting bolt (hexagon socket head cap screw) will be attached as a standard.

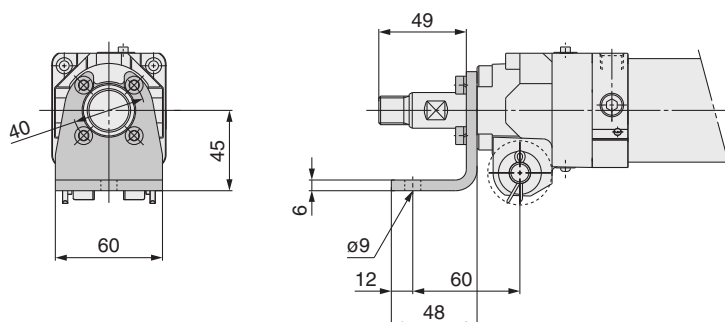
Pedestal



Type	KL1	KL2	KX	KZ	KY	KS	KQ	KC	KZZ			Applicable cylinder
									Bore size			
									40	50	63	
CKA-K075	167	75	132	222	35	70	69° 59'	0	396 (406)	400.5	404	CLK2□A40-75Y, CLK2□A50-75Y, CLK2□A63-75Y
CKA-K100	177	75	142	232	45	90	83° 58'	0	431 (441)	435.5	439	CLK2□A40-100Y, CLK2□A50-100Y, CLK2□A63-100Y
CKA-K150	202	85	167	267	70	140	108° 55'	10	516 (526)	520.5	524	CLK2□A40-150Y, CLK2□A50-150Y, CLK2□A63-150Y

Note) () denotes the dimensions for CLK2PA40.

Foot



Part no.	Option symbol	Applicable clamp cylinder
CK-L04	L	CLK2□40 to 63 series

Note 1) Mounting bolts (hexagon socket head cap screws) and spring washers are attached to the foot as standard.

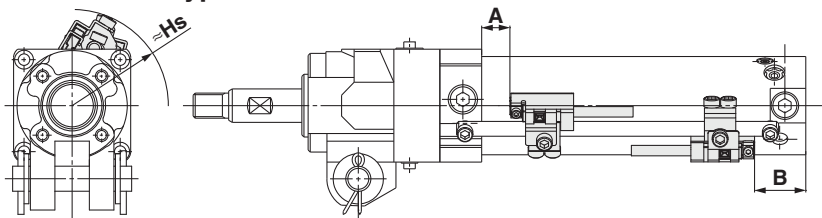
Note 2) When mounting the cylinder, use both the foot and clevis pin. Please avoid using the foot by itself as this may result in damage.

CLK2 Series

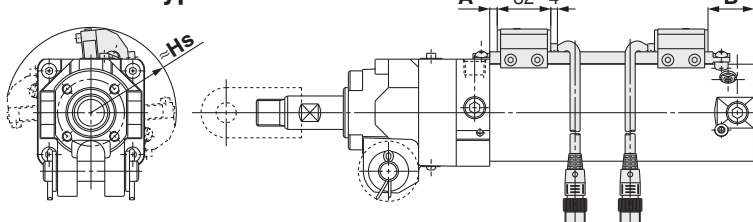
Auto Switch Mounting (Rod Mounting Type)

Auto Switch Proper Mounting Position (Detection at Stroke End) and Its Mounting Height

Rod mounting D-P3DWA□ type

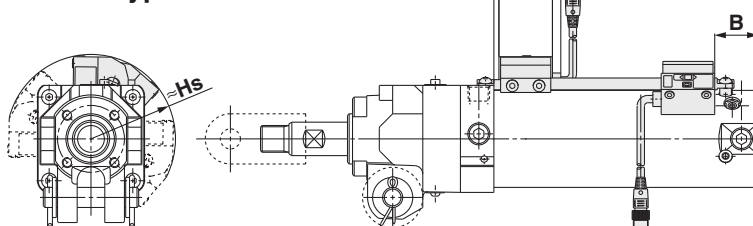


D-P4DW□ type



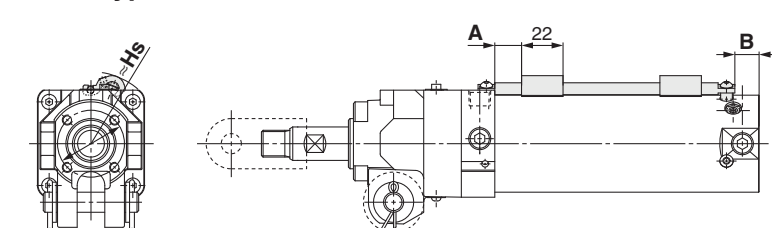
Note) The above drawing is the auto switch rod mounting example for the D-P4DWS□ type.

D-P79WSE type P74□ type



Note) The above drawing is the auto switch rod mounting example for the D-P79WSE type.

D-M9□ type D-A9□ type



Auto Switch Mounting Position and Its Height: Rod Mounting

Unit: mm

Auto switch model	Symbol	Auto switch set value and its height		
		40	50	63
D-P3DWA□	A	10.5	7	7
	B	23	30	30
	Hs	46.5	52	59
D-P4DW□	A	8	4.5	4.5
	B	20.5	27.5	27.5
	Hs	45.5	51	58.5
D-P79WSE D-P74□	A	5.5	0	0
	B	27.5	26	26
	Hs	46	51	58
D-M9□	A	15	11.5	11.5
	B	27.5	34.5	34.5
	Hs	39	44.5	51.5
D-A9□	A	11	8.5	8.5
	B	23.5	30.5	30.5
	Hs	39	44.5	51.5

Note 1) The mounting position should be referred for reference only for the auto switch mounting position at the stroke end detection. Adjust the auto switch after confirming the operation to set actually.

Note 2) The applicable bore sizes of the CLK2GB (Cleviss width 19.5 mm) are ø50 and ø63.

Note 3) A/B dimensions are the distance from the standard position (above drawing) to the end surface of the auto switch.

Note 4) The auto switch mounting position is temporarily set at the time of shipping from our factory. Change it to the desired position in accordance to your facility.

Operating Range

Unit: mm

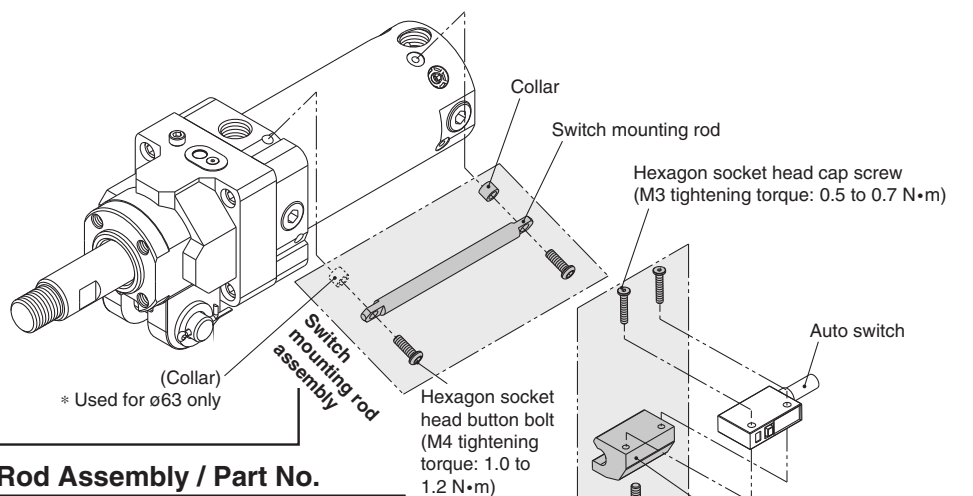
Auto switch model	Bore size		
	40	50	63
D-P3DWA□	6	5.5	6
D-P4DW□	4	4	4.5
D-P79WSE	8	9	9.5
D-P74□	8	9	9.5
D-M9□	4	4.5	5
D-A9□	8	8	9

* Since this is a guideline including hysteresis, not meant to be guaranteed. (Assuming approximately ±30% dispersion.)

There may be the case it will vary substantially depending on an ambient environment.

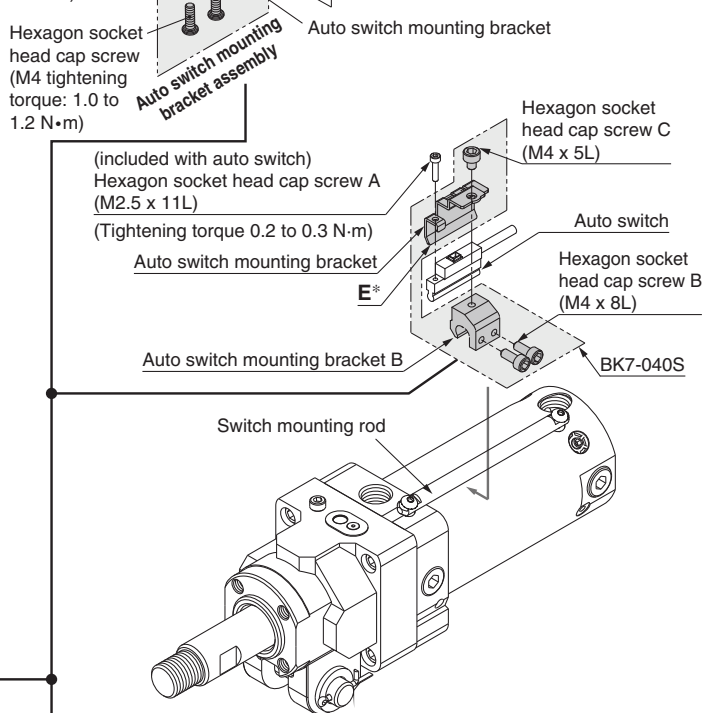
Auto Switch Mounting Bracket / Part No.

Switch mounting rod assembly / Auto switch mounting bracket assembly



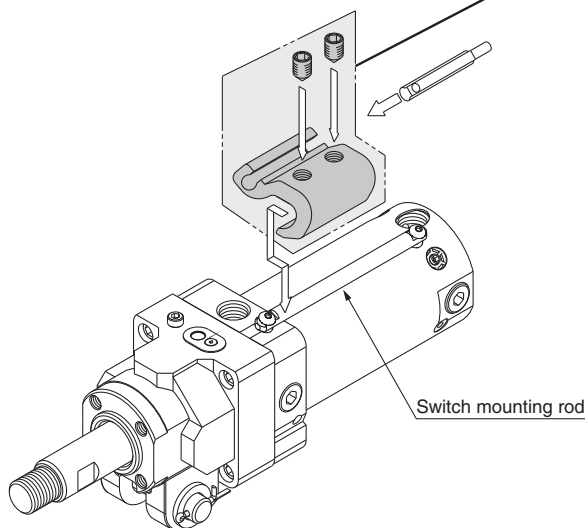
Switch Mounting Rod Assembly / Part No.

Applicable series	Applicable clamp cylinder	Part no.
Dedicated to CLK2G□40 series	CLK2G□40-50	CLKG40-R050
	CLK2G□40-75	CLKG40-R075
	CLK2G□40-100	CLKG40-R100
	CLK2G□40-125	CLKG40-R125
	CLK2G□40-150	CLKG40-R150
Dedicated to CLK2P□40 series	CLK2P□40-50	CLKP40-R050
	CLK2P□40-75	CLKP40-R075
	CLK2P□40-100	CLKP40-R100
	CLK2P□40-125	CLKP40-R125
	CLK2P□40-150	CLKP40-R150
CLK2G□50 series CLK2P□50 series Common	CLK2G□50-50/CLK2P□50-50	CLKG50-R050
	CLK2G□50-75/CLK2P□50-75	CLKG50-R075
	CLK2G□50-100/CLK2P□50-100	CLKG50-R100
	CLK2G□50-125/CLK2P□50-125	CLKG50-R125
	CLK2G□50-150/CLK2P□50-150	CLKG50-R150
CLK2G□63 series CLK2P□63 series Common	CLK2G□63-50/CLK2P□63-50	CKG40-R050
	CLK2G□63-75/CLK2P□63-75	CKG40-R075
	CLK2G□63-100/CLK2P□63-100	CKG40-R100
	CLK2G□63-125/CLK2P□63-125	CKG40-R125
	CLK2G□63-150/CLK2P□63-150	CKG40-R150



Auto Switch Mounting Bracket Assembly / Part No.

Applicable cylinder series	Applicable auto switch	Auto switch mounting bracket part no.		
		40	50	63
CLK2G series	D-P3DWA□	BK7-040S		
	D-P4DW□	BK1T-040		
	D-M9□ D-A9□	BA7-040		
CLK2P series	D-P79WSE D-P74L/Z	BAP1T-040		



MK

MK2T

CK□1

CLK2

CLKG

CKQ
CLKQ

CK□
CLK□

CKQ□

D-□

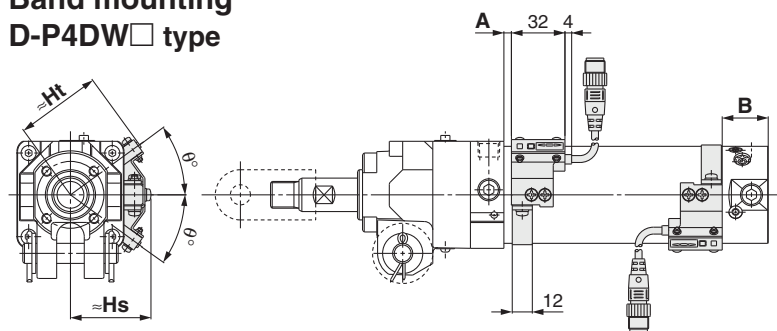
-X□

CLK2 Series

Auto Switch Mounting (Band Mounting Type)

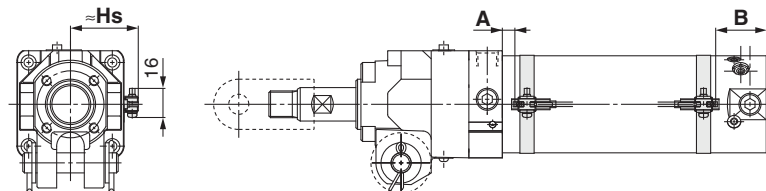
Auto Switch Proper Mounting Position (Detection at Stroke End) and Its Mounting Height

Band mounting D-P4DW□ type

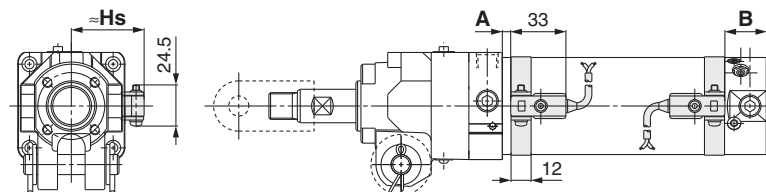


Note) The above drawing is the auto switch band mounting example for the D-P4DWS□ type.

D-A9□/M9□ (W) type



D-B54 type



Auto Switch Mounting Position and Its Height: Band Mounting

Unit: mm

Auto switch model	Symbol	Auto switch set value and its height			
		32	40	50	63
D-P4DW□	A	0	8	4.5	4.5
	B	27.5	20.5	27.5	27.5
	Hs	38	43	48	55
	Ht	41.5	46	51.5	58.5
	θ	45°	40°	36°	33°
D-M9□ D-M9□W D-M9□A	A	7	15	11.5	11.5
	B	34.5	27.5	34.5	34.5
	Hs	30	34.5	40	47
D-A9□	A	3	11	7.5	7.5
	B	30.5	23.5	30.5	30.5
	Hs	30	34.5	40	47
D-B54	A	0	5.5	2	2
	B	25	18	25	25
	Hs	33.5	38	43.5	50.5

Note 1) The mounting position should be referred for reference only for the auto switch mounting position at the stroke end detection. Adjust the auto switch after confirming the operation to set actually.

Note 2) A/B dimensions are the distance from the standard position (above drawing) to the end surface of the auto switch.

Note 3) As for the D-P4DW type, band mounting type, the auto switch mounting bracket and the auto switch have to be ordered separately. For details, refer to page 454.

Operating Range

Unit: mm

Auto switch model	Bore size			
	32	40	50	63
D-P4DW□	4.5	5	5	5.5
D-M9□	4	3.5	4	4
D-M9□W D-M9□A	5	5.5	6.5	7
D-A9□	8	8	8	9
D-B54	9	10	10	11

* Since this is a guideline including hysteresis, not meant to be guaranteed.
(Assuming approximately ±30% dispersion.) There may be the case it will vary substantially depending on an ambient environment.

Auto Switch Mounting Brackets/Part No.

Auto switch model	Bore size (mm)			
	32	40	50	63
D-P4DW □	BA8-032	BA8-040	BA8-050	BA8-063

Auto switch mounting bracket B

Auto switch mounting bracket D

Cross recessed round head screw (M4 tightening torque: 1.0 to 1.2 N·m)

Cross recessed round head screw (M3 tightening torque: 0.5 to 0.7 N·m)

Spring washer

D-P4DW□ auto switch

Auto switch mounting band

Auto switch model	Bore size (mm)			
	32	40	50	63
D-M9 □ D-M9 □W D-A9 □	①BMA3-032 (A set of a, b, c, d)	BMA3-040 (A set of a, b, c, d)	BMA3-050 (A set of a, b, c, d)	BMA3-063 (A set of a, b, c, d)
D-M9 □A ^{Note 2)}	BMA3-032S (A set of a, b, c, e)	BMA3-040S (A set of a, b, c, e)	BMA3-050S (A set of a, b, c, e)	BMA3-063S (A set of a, b, c, e)

Switch bracket (Resin)
d Transparent (Nylon)^{Note 1)}
e White (PBT)

Auto switch

c Switch holder

b Auto switch mounting screw

a Auto switch mounting band

* Band (a) is mounted so that the projected part is on the internal side (contact side with the tube).

Note 1) Since the switch bracket (made from nylon) are affected in an environment where alcohol, chloroform, methylamines, hydrochloric acid or sulfuric acid is splashed over, so it cannot be used. Please contact SMC regarding other chemicals.

Note 2) As the indicator LED is projected from the switch unit, indicator LED may be damaged if the switch bracket is fixed on the indicator LED.