

CAC-N32/40 UCAC-N32/40

Lightweight Clamp Cylinder

Clamp Cylinder

ø32, ø40



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Clamping

CAC4

UCAC2

CAC-N

UCAC-N

RCS2

RCC2

PCC

Cylinder Switch

Ending

Clamping

CAC4

UCAC2

CAC-N

UCAC-N

RCS2

RCC2

PCC

Cylinder Switch

Ending

Compact and lightweight clamp cylinder contributing to weight reduction of welding jigs, etc.

Clamp Cylinder CAC-N Series

Inner diameter $\phi 32, \phi 40$

- The Cylinder Body adopts the highly reliable and lightweight CMK2 series.
- A variety of switches can be mounted including reed, proximity, 2-color display, and strong magnetic field.

CAC-N-40-150-Y Weight Approx. **950 g**

Achieved Approx. **56%** of conventional ratio *

* (CAC4-A-40-150-Y1)



Clamp cylinder with drop prevention UCAC-N Series

Inner diameter $\phi 32, \phi 40$

- CAC-N series with free position locking mechanism
- Can be locked at any position when the cylinder is stationary.
- Free in the opposite direction of lock



Selectable switch mounting method

Band mounting method



Tie rod mounting method



Variation Table

Lightweight Clamp Cylinder/Lightweight Clamp Cylinder with Fall Prevention
CAC-N32/40 / UCAC-N32/40 Series

●: Standard ○: Option

Variation	Model No. Circuit Diagram Code	Bore Size (mm)	Stroke (mm)	Min Stroke (mm)	Max Stroke (mm)	Accessories		Page
						Double Knuckle Y	Switch	
Lightweight Clamp Cylinder	CAC-N32/40 	$\phi 32, \phi 40$	50, 75, 100, 125, 150	5	150	○	○	792
Lightweight clamp cylinder with drop prevention	UCAC-N32/40 	$\phi 32, \phi 40$	50, 75, 100, 125, 150	5	150	○	○	798

Clamping

CAC4

UCAC2

CAC-N

UCAC-N

RCS2

RCC2

PCC

Clamping

CAC4

UCAC2

CAC-N

UCAC-N

RCS2

RCC2

PCC

Cylinder Switch

Ending

Cylinder Switch

Ending



Lightweight clamp cylinder Double Acting/Single rod type

CAC-N32/N40 Series

● Bore Size: ø32, ø40

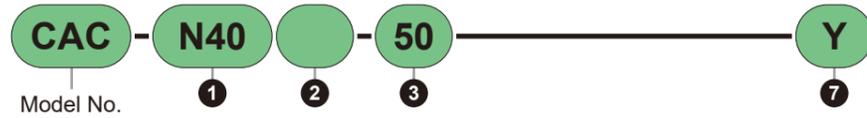


CAC-N32/N40 Series

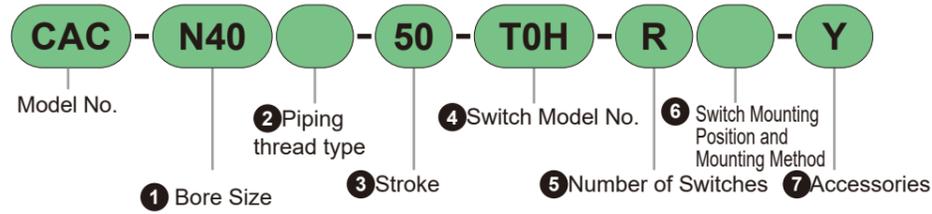
Model No. Notation

Model No. Notation

Without switch
(Built-in magnet for switch)



With Switch
(Built-in magnet for switch)



5 Number of Switches

Code	Content
R	With 1 pc on rod side
H	With 1 pc on head side
D	With 2 pcs

6 Switch Mounting Position and Mounting Method

Code	Content
A	Tie rod mounting
C	
Blank	Band mounting

*1: If the switch model No. is not specified, only the tie rod is installed.
*2: Tie rods cannot be retrofitted to cylinders with blank switch mounting position and mounting method.

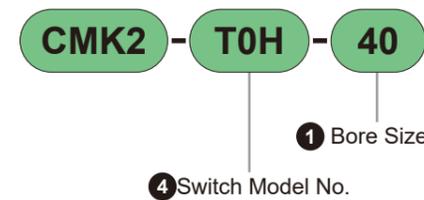
7 Accessories

Code	Content
Blank	Accessories (knuckle) None
Y	Double knuckle joint (Pin, split pin, and flat washer are attached)

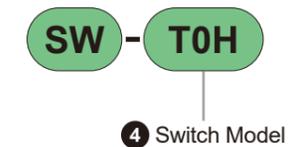
Switch Single Unit Model No. Notation

[Switch mounting: Band Type]

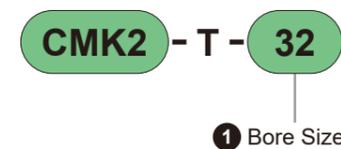
A) Switch body+Mounting bracket set



B) Switch body only

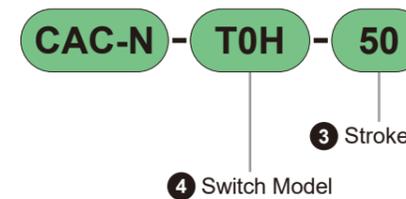


C) Mounting bracket set

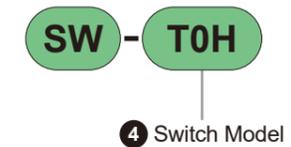


[Switch mounting: Tie rod method]

A) Switch body+Mounting bracket set (=B+C+D)



B) Switch body only



C) Mounting bracket kit



D) Mounting tie rod kit



1 Bore Size (mm)

Code	Content
N32	ø32
N40	ø40

2 Piping thread type

Code	Content
Blank	Rc Thread
N	NPT Thread (Custom Order Product)
G	G thread (Custom product)

3 Stroke (mm)

Bore Size	Code	Intermediate Stroke
ø32 ø40	50	in 1mm increments
	75	
	100	
	125	
	150	

4 Switch Model No.

For switch details, refer to P. 1457. Switches are shipped with the product.

Contact	Indicator LED Special Function	Wiring (Output)	Load Voltage (V)		Load Current (mA)		Lead wire *1		Image	
			AC	DC	AC	DC	Straight	L-shape		
Solid State	1-Color	2-wire	85 to 265	—	5 to 100	—	T1H□	T1V□		
			—	10 to 30	—	5 to 20 *2	T2H□	T2V□		
		3-wire (NPN)	—	30 or less	—	100 or less	T3H□	T3V□		
			—	—	—	—	T3PH□	T3PV□		
		3-wire (PNP)	—	—	—	—	T2WH□	T2WV□		
			—	—	—	—	T3WH□	T3WV□		
	2-color	2-Color Improved Water Resistance	2-wire	—	24 ± 10%	—	5 to 20	T2WLH□	T2WLV□	
				—	24 ± 10%	—	—	T2YD□	—	
		2-Color for AC Magnetic Field	2-wire	—	—	—	—	T2YDT□	—	
				—	—	—	—	T2JH□	T2JV□	
1-Color Off-Delay Type	1-color Flexible Lead Wire Type	2-wire	—	10 to 30	—	5 to 20 *2	T2JH□	T2JV□		
			—	10 to 30	—	5 to 20 *2	T2HR3	T2VR3		
Reed	1-Color No Indicator LED	2-wire	110	12/24	7 to 20	5 to 50	T0H□	T0V□		
			110	5/12/24	20 or less	50 or less	T5H□	T5V□		
	1-color	110/220	12/24	7 to 20 / 7 to 10	5 to 50	T8H□	T8V□			

*Lead wire length, connector specification

Code	Content
Blank	1 m (Standard)
3	3 m (Option)
5	5 m (Option)
W	M8 Connector, 1PIN (+), 4PIN (-) Lead Wire 0.3 m

*5: Only T2WLH and T2WLV can be selected.

Example) Lead wire length
1 m T0H
3 m T0H[3]
5 m T0H[5]

*1: For "□" in the switch model number, enter the code selected from the "Lead wire length, connector specification" table.
*2: The maximum load current value above, 20 mA, is at 25°C. If the switch operating Ambient Temperature is higher than 25°C, it will be lower than 20 mA. (At 60°C, it will be 5 to 10 mA.)
*3: This does not guarantee the water resistance of the cylinder.
*4: Switches other than the model numbers listed above are also available. (Custom Product) For details, refer to P. 1457.

Clamping

Clamping

CAC4

CAC4

UCAC2

UCAC2

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

Cylinder Switch

Cylinder Switch

Ending

Ending

Specifications

Item		CAC-N32	CAC-N40
Bore Size	mm	ø32	ø40
Operation type		Double Acting Type	
Max Operating Pressure	MPa	1.0	0.7
Min Operating Pressure	MPa	0.15	
Proof Pressure	MPa	1.6	1.05
Ambient Temperature	°C	-10 to 60 (however, no freezing)	
Port Size		Rc1/8	
Operating piston speed	mm/s	50 to 500	50 to 400
Cushion		Rubber Cushion	
Lubrication		Not required (When lubricating, use turbine oil ISO VS32)	
Mounting Style		Double Clevis	
Allowable Absorbed Energy	PUSH	0.424	
	PULL	0.424	0.639

Stroke

Bore Size (mm)	Standard Stroke (mm)	Maximum Stroke (mm)	Min Stroke (mm)	Minimum stroke with switch (mm)
ø32	50, 75, 100, 125, 150	150	5	10
ø40				

Note: Intermediate strokes can be produced in 1 mm increments.

Cylinder Weight

(Unit: kg)

Bore Size (mm)	Product weight per stroke = 0 mm	Added weight per stroke = 100 mm	Weight per Switch	Switch rail+Band weight (Per Switch)	Mounting Bracket Weight (Tie rod mounting)	Mounting tie rod weight at stroke = 0 mm	Additional weight per S = 10 mm of mounting tie rod
ø32	0.45	0.15	Refer to the Weight listed in the Switch Specifications on P. 1457.	0.009	0.021	0.019	0.003
ø40	0.53	0.17					

(Example) Product weight of CAC-N40-50-TOH-R

- Product weight for 0 mm stroke0.53 kg
- Additional weight for 50 mm stroke $0.17 \times \frac{50}{100} = 0.085$ kg
- Weight of TOH switch0.018 kg
- Weight of switch rail + 1 band0.009 kg
- Product weight $0.53+0.085+0.018+0.009=0.642$ kg

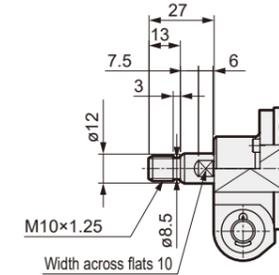
Theoretical Thrust Table

(Unit: N)

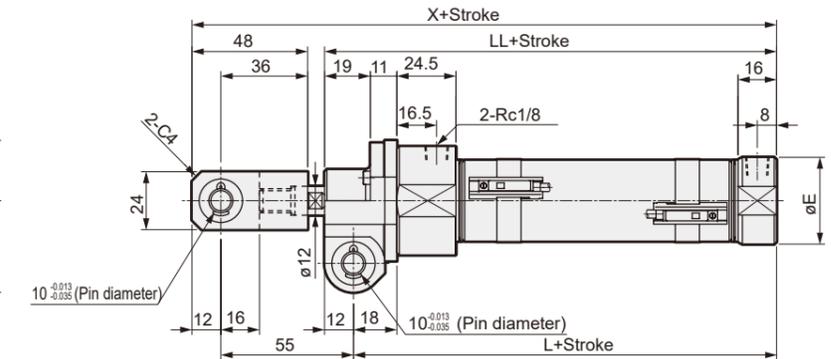
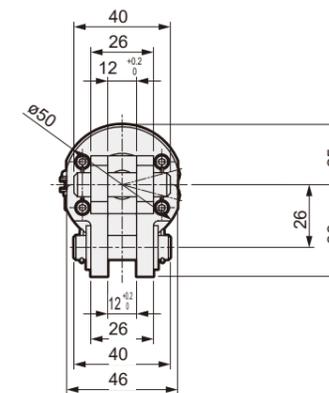
Bore Size (mm)	Operating Direction	Operating Pressure MPa									
		0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø32	Push	1.21×10^2	1.61×10^2	2.41×10^2	3.22×10^2	4.02×10^2	4.83×10^2	5.63×10^2	6.43×10^2	7.24×10^2	8.04×10^2
	Pull	1.04×10^2	1.38×10^2	2.07×10^2	2.76×10^2	3.46×10^2	4.15×10^2	4.84×10^2	5.53×10^2	6.22×10^2	6.91×10^2
ø40	Push	1.88×10^2	2.51×10^2	3.77×10^2	5.03×10^2	6.28×10^2	7.54×10^2	8.80×10^2	—	-	—
	Pull	1.65×10^2	2.21×10^2	3.31×10^2	4.41×10^2	5.51×10^2	6.62×10^2	7.72×10^2	—	-	—

Dimensional Drawings

● Without knuckle



● With double yoke knuckle (Y)

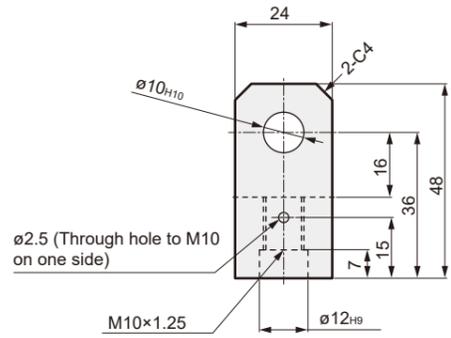


Code	E	L	LL	X
ø32	36	95.5	107.5	162.5
ø40	45	99.5	111.5	166.5

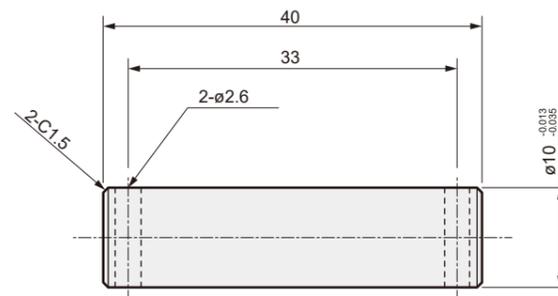
Note: For dimensions with each switch, please refer to P. 804.

Accessory External Dimensions

●Double Knuckle (Y) Material: Steel
Zinc Chromate



●Clevis pin Material: Steel
Zinc Chromate



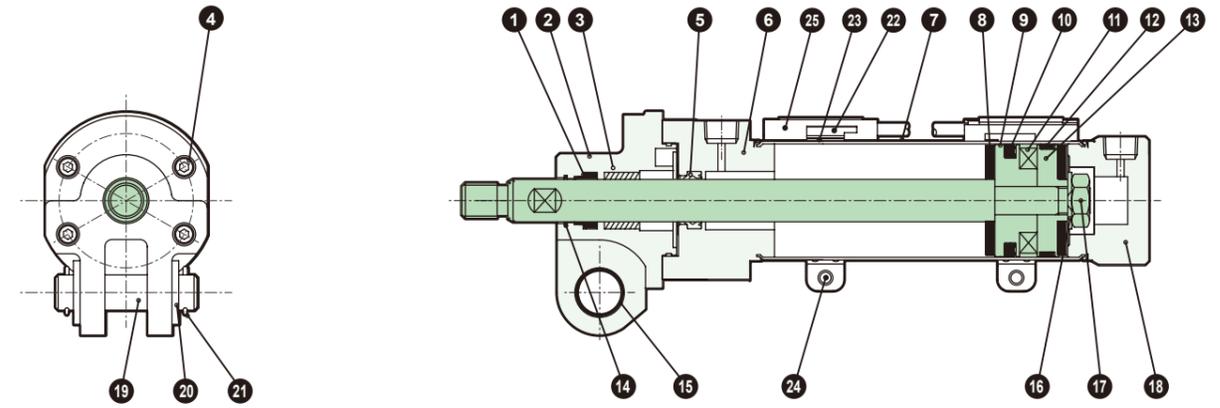
Model No.	Weight (kg)
CAC-N-Y	0.15

* Pin, split pin, spring pin, and flat washer are included.

Model No.	Weight (kg)
CAC-N-P	0.02

* Split pin and flat washer are included.

Internal Structure Diagram/Material



Do not disassemble

Part No.	Part Name	Material	Remarks	Part No.	Part Name	Material	Remarks
1	Scraper	Nitrile Rubber		14	Metal Scraper	Copper	
2	Front clevis	Aluminum Alloy	Alumite	15	Bushing for clevis	Bearing Alloy	
3	Bushing	Oil-Impregnated Bearing Alloy		16	Plain Washer	Steel	Chromate (ø32 only)
4	Hexagon Socket Head Cap Screw	Steel		17	Hexagon Nut	Steel	Chromate
5	Rod Packing	Nitrile Rubber		18	Head Cover	Aluminum Alloy	
6	Rod Cover	Aluminum Alloy		19	Pin	Steel	Chromate
7	Cylinder Tube	Stainless Steel		20	Plain Washer	Steel	Chromate
8	Cushion Rubber	Urethane Rubber		21	Split pin	Steel	Chromate
9	Piston A	Aluminum Alloy		With Switch			
10	Piston Packing	Nitrile Rubber		22	Switch		
11	Magnet	Plastic		23	Band	Stainless Steel	
12	Wear ring	Acetal		24	Pan Head Screw	Stainless Steel	
13	Piston B	Aluminum Alloy		25	Switch Rail	Stainless Steel	

Clamping

Clamping

CAC4

CAC4

UCAC2

UCAC2

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

Cylinder Switch

Cylinder Switch

Ending

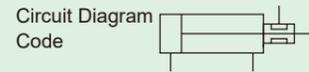
Ending



Lightweight clamp cylinder with drop prevention

UCAC-N32/N40 Series

● Bore Size: ø32, ø40

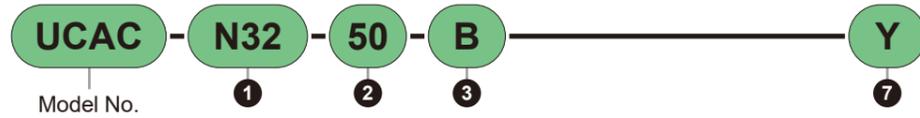


UCAC-N32/N40 Series

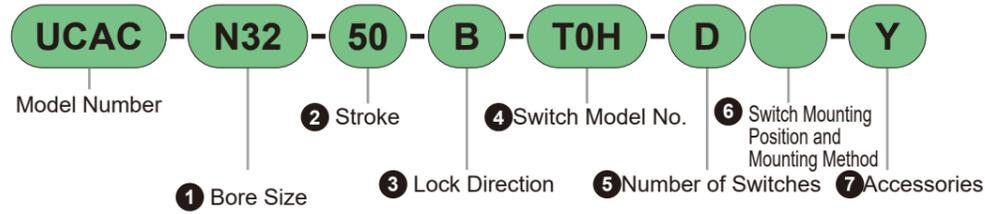
Model No. Notation

Model No. Notation

Without switch
(Built-in magnet for switch)



With Switch
(Built-in magnet for switch)



5 Number of Switches

Code	Content
R	With 1 pc on rod side
H	With 1 pc on head side
D	With 2 pcs

6 Switch Mounting Position and Mounting Method

Code	Content
A	Tie rod mounting
C	
Blank	Band mounting

*1: If the switch model No. is not specified, only the tie rod is installed.
*2: Tie rods cannot be retrofitted to cylinders with blank switch mounting position and mounting method.

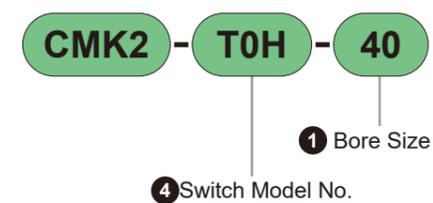
7 Accessories

Code	Content
Blank	Accessories (knuckle) None
Y	Double knuckle joint (Pin, split pin, and flat washer attached)

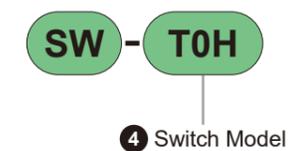
Switch Single Unit Model No. Notation

[Switch mounting: Band Type]

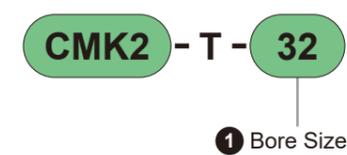
A) Switch body+Mounting bracket set



B) Switch body only

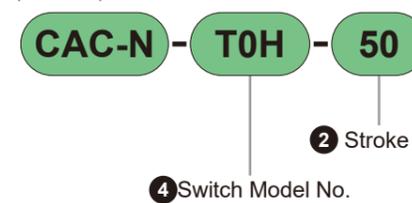


C) Mounting bracket set

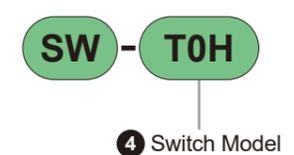


[Switch mounting: Tie rod method]

A) Switch body+Mounting bracket set (=B+C+D)



B) Switch body only



C) Mounting bracket kit



D) Mounting tie rod kit



1 Bore Size (mm)

Code	Content
N32	ø32
N40	ø40

2 Stroke (mm)

Bore Size	Code	Intermediate Stroke
ø32 ø40	50	in 1mm increments
	75	
	100	
	125	
	150	

3 Lock Direction

Code	Content
F	Forward Direction Lock
B	Reverse Direction Lock

4 Switch Model

For switch details, refer to P. 1457. Switches are pre-assembled on the product before shipment.

Contact	Indicator LED Special Function	Wiring (Output)	Load Voltage (V)		Load Current (mA)		Lead wire *1		Image
			AC	DC	AC	DC	Straight	L-shape	
Solid State	1-Color	2-wire	85 to 265	—	5 to 100	—	T1H□	T1V□	
			—	10 to 30	—	5 to 20 *2	T2H□	T2V□	
		3-wire (NPN)	—	30 or less	—	100 or less	T3PH□	T3V□	
	3-wire (PNP)	—	—	—	—	T3PH□	T3PV□		
	For 2-color AC Magnetic Field	—	24 ± 10%	—	5 to 20	—	T2YD□	—	
	1-Color Off-Delay Type	2-wire	—	—	—	5 to 20 *2	T2JH□	T2JV□	
—			—	—	5 to 20 *2	T2YD□	—		
—			—	—	5 to 20 *2	T2HR3	T2VR3		
Reed	1-Color Without Indicator Lamp	2-wire	110	12/24	7 to 20	5 to 50	T0H□	T0V□	
			110	5/12/24	20 or less	50 or less	T5H□	T5V□	
			110/220	12/24	7 to 20 / 7 to 10	5 to 50	T8H□	T8V□	

*Lead Wire Length

Code	Content
Blank	1 m (Standard)
3	3 m (Option)
5	5 m (Option)

Example) Lead wire length
1 m T0H
3 m T0H[3]
5 m T0H[5]

*1: Insert the code selected in the "Lead wire length" table into "□" of the switch model number.

*2: The maximum load current value above, 20 mA, is at 25°C. If the switch operating Ambient Temperature is higher than 25°C, it will be lower than 20 mA. (At 60°C, it will be 5 to 10 mA.)

*3: Switches other than the above models are also available. (Custom Product) For details, refer to P. 1457.

Specifications

Item	UCAC-N32		UCAC-N40	
Bore Size	mm	ø32	ø40	
Operation type	Double Acting Type			
Max Operating Pressure	MPa	1.0	0.7	
Min Operating Pressure	MPa	0.25 (36 psi)		
Proof Pressure	MPa	1.6	1.05	
Ambient Temperature	°C	-10 to 60 (however, no freezing)		
Port Size	Rc1/8			
Operating piston speed	mm/s	50 to 500	50 to 400	
Cushion	Rubber Cushion			
Lubrication	Not required (When lubricating, use turbine oil ISO VS32)			
Mounting Style	Double Clevis			
Fall prevention mechanism	Forward direction lock or reverse direction lock			
Locking Force	N	631		
Allowable Absorbed Energy J	PUSH	0.424		0.639
	PULL	0.424		

Stroke

Bore Size (mm)	Standard Stroke (mm)	Maximum Stroke (mm)	Min Stroke (mm)	Minimum stroke with switch (mm)
ø32	50, 75, 100, 125, 150	150	5	10
ø40				

Note: Intermediate strokes can be produced in 1 mm increments.

Cylinder Weight

(Unit: kg)

Bore Size (mm)	Product weight per stroke = 0 mm	Added weight per stroke = 100 mm	Weight per Switch	Switch rail+Band weight (Per Switch)	Mounting Bracket Weight (Tie rod mounting)	Mounting tie rod weight at stroke = 0 mm	Additional weight per S = 10 mm of mounting tie rod
ø32	Forward direction lock: F	0.71	Refer to the Weight listed in the Switch Specifications on P. 1457.	0.009	0.024	0.019	0.003
	Backward direction lock: B	0.65					
ø40	Forward direction lock: F	0.78					
	Backward direction lock: B	0.72					

(Example) Product weight of UCAC-N32-50-B-TOH-D

- Product weight for 0 mm stroke (Backward Locking: B) ... 0.65 kg
- Additional weight for 50 mm stroke $0.15 \times \frac{50}{100} = 0.075$ kg
- Weight of 2 TOH switches $0.018 \times 2 = 0.036$ kg
- Weight of switch rail + 2 bands $0.009 \times 2 = 0.018$ kg
- Product weight $0.65 + 0.075 + 0.036 + 0.018 = 0.779$ kg

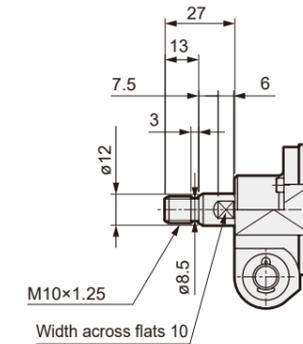
Theoretical Thrust Table

(Unit: N)

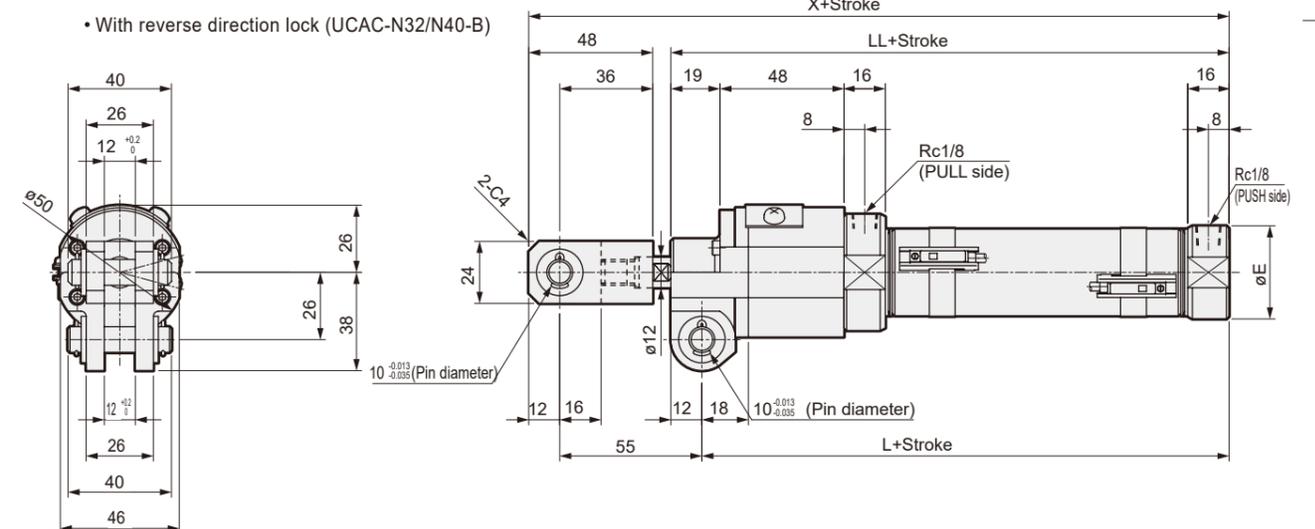
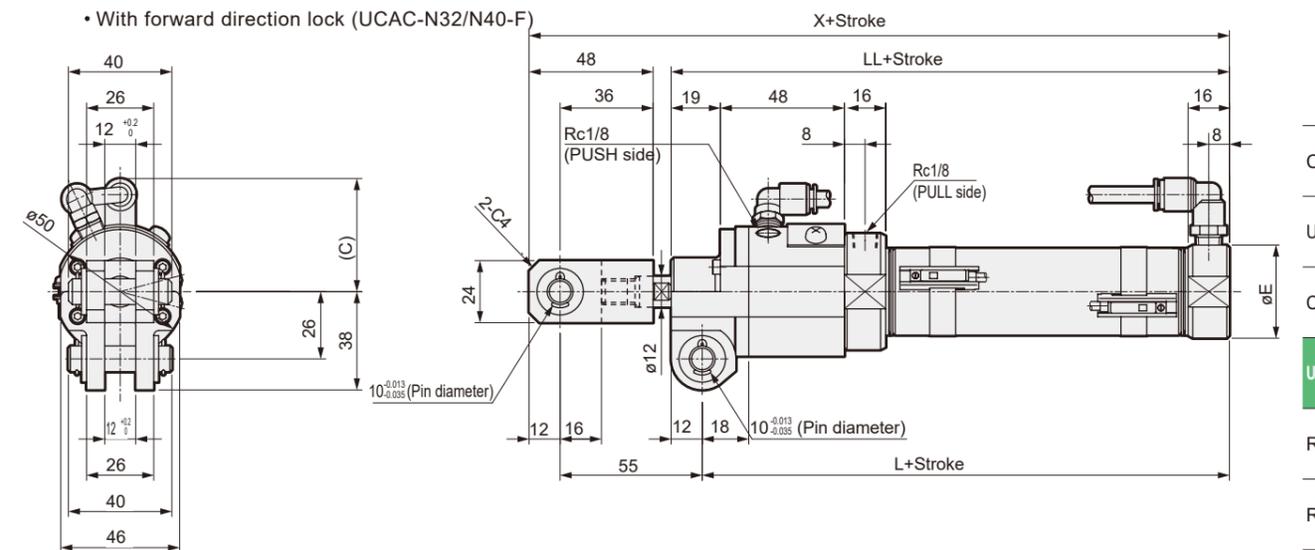
Bore Size (mm)	Operating Direction	Operating Pressure MPa								
		0.25 (36 psi)	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø32	Push	2.01×10^2	2.41×10^2	3.22×10^2	4.02×10^2	4.83×10^2	5.63×10^2	6.43×10^2	7.24×10^2	8.04×10^2
	Pull	1.73×10^2	2.07×10^2	2.76×10^2	3.46×10^2	4.15×10^2	4.84×10^2	5.53×10^2	6.22×10^2	6.91×10^2
ø40	Push	3.14×10^2	3.77×10^2	5.03×10^2	6.28×10^2	7.54×10^2	8.80×10^2	—	-	—
	Pull	2.76×10^2	3.31×10^2	4.41×10^2	5.51×10^2	6.62×10^2	7.72×10^2	—	-	—

Dimensional Drawings

● Without knuckle



● With double yoke knuckle (Y)

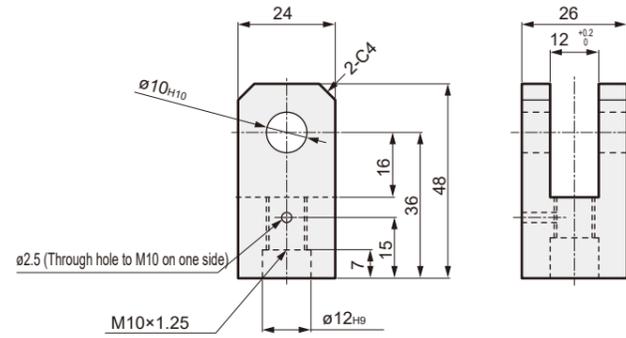


Code	C	E	L	LL	X
ø32	44	36	124	136	191
ø40	49	45	128	140	195

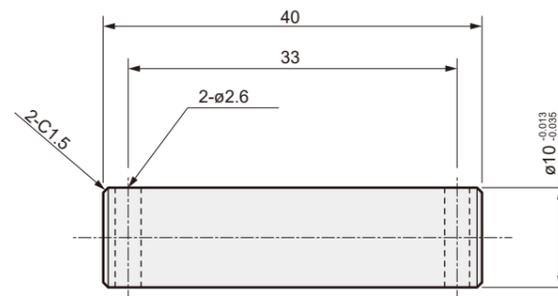
Note: For dimensions of models with switches, refer to P. 804.

Accessory External Dimensions

●Double Knuckle (Y) Material: Steel, Zinc Chromate



●Clevis pin Material: Steel, Zinc Chromate



Model No.	Weight (kg)
CAC-N-Y	0.15

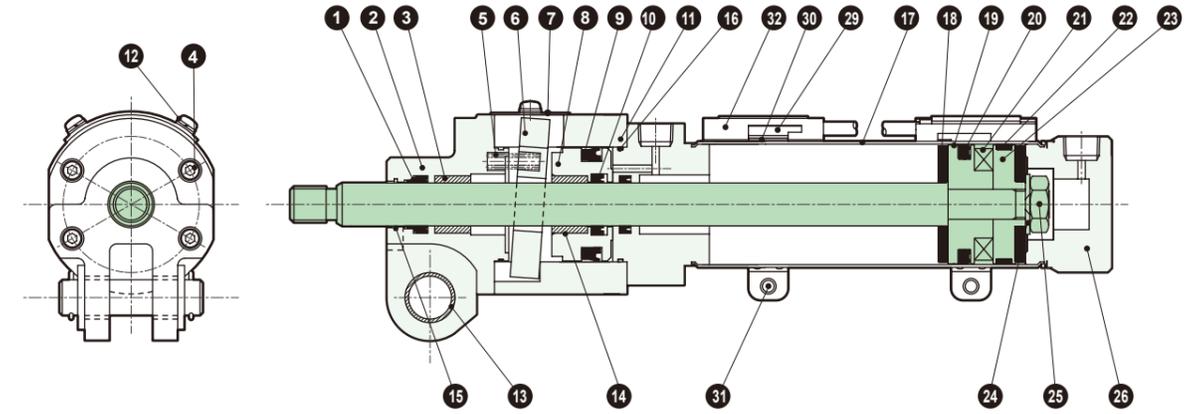
* Pin, split pin, spring pin, and flat washer are attached.

Model No.	Weight (kg)
CAC-N-P	0.02

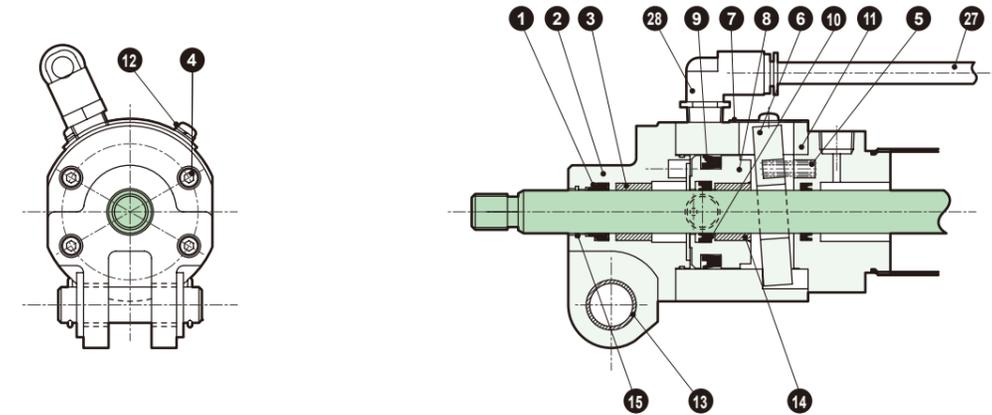
* Split pin and flat washer are included.

Internal Structure / Materials

●With reverse direction lock (UCAC-N32/N40-B)



●With forward direction lock (UCAC-N32/N40-F)



Do not disassemble

Part No.	Part Name	Material	Remarks	Part No.	Part Name	Material	Remarks
1	Scraper	Nitrile Rubber		18	Cushion Rubber	Urethane Rubber	
2	Rod Cover	Aluminum Alloy	Alumite	19	Piston A	Aluminum Alloy	
3	Metal	Oil-Impregnated Bearing Alloy		20	Piston Packing	Nitrile Rubber	
4	Hexagon Socket Head Cap Screw	Steel		21	Magnet	Plastic	
5	Coil Spring	Steel	Black Oxide	22	Wear ring	Polyacetal	
6	Lock plate	Cast Iron		23	Piston B	Aluminum Alloy	
7	Dust cover	Stainless Steel		24	Metal Scraper	Copper	
8	Release Piston	Aluminum Alloy	Alumite	25	Bushing for clevis	Bearing Alloy	
9	Lock Piston Packing	Nitrile Rubber		26	Plain Washer	Steel	Chromate ($\phi 32$ only)
10	Lock Rod Packing	Nitrile Rubber		27	Tube		
11	Intermediate Cover	Aluminum Alloy	Alumite	28	Push-in Fitting		
12	Cross-Recessed Pan Head Screw	Steel	Chromate	With Switch			
13	Bushing for clevis	Bearing Alloy		29	Switch		
14	Metal	Oil-Impregnated Bearing Alloy		30	Band	Stainless Steel	
15	Metal Scraper	Copper Alloy		31	Pan Head Screw	Stainless Steel	
16	Gasket	Nitrile Rubber		32	Switch Rail	Stainless Steel	
17	Cylinder Tube	Stainless Steel					

Clamping

Clamping

CAC4

CAC4

UCAC2

UCAC2

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

Cylinder Switch

Cylinder Switch

Ending

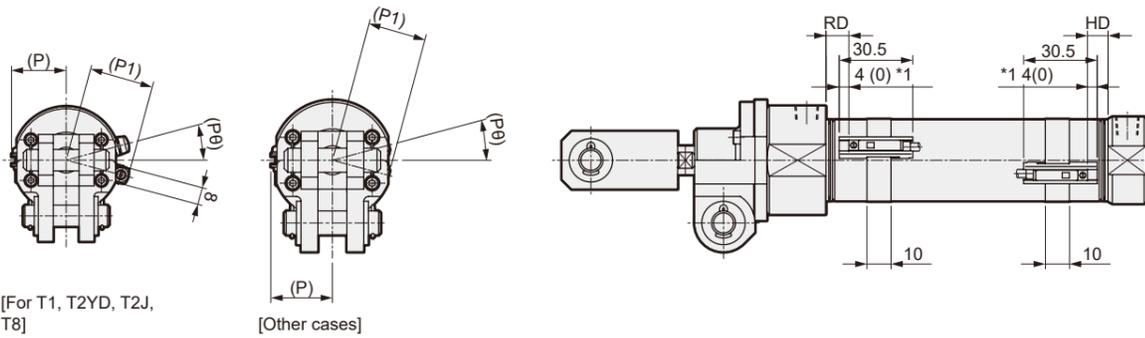
Ending

CAC-N32/N40, UCAC-N32/N40 Series

CAC-N/UCAC-N Series External Dimensions Diagram with Switch

● T0H/V, T5H/V, T2H/V, T3H/V, T2□ R3, T3PH/V, T2WH/V, T3WH/V, T2WLH/V, T1H/V, T2YD□, T2JH/V, T8H/V

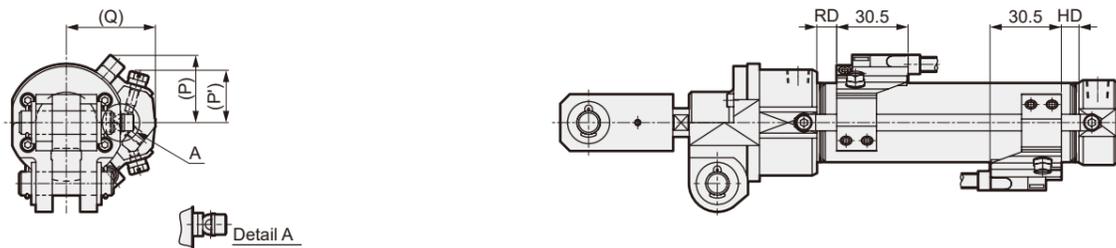
- Switch mounting method: Band Type



Code	Bore Size	P	P ϕ	CAC-N, UCAC-N														
				T0, T5, T2, T3, T3P			T2W, T3W, T2WL			T1, T2YD			T2J			T8		
				P1	RD	HD	P1	RD	HD	P1	RD	HD	P1	RD	HD	P1	RD	HD
CAC4	ϕ 32	25.5	15	24.3	9.5	8.5	24.3	11.5	10.5	35.1	8.5	7.5	30.1	8.5	7.5	30.1	3.5	2.5
UCAC2	ϕ 40	29.5	12	28.3	11.5	10.5	28.3	13.5	12.5	39.1	10.5	9.5	34.1	10.5	9.5	34.1	5.5	4.5

Note: The dimension is () for T1*, T2J*, T2YD*, T8* switches with a stroke of 35 mm or more.

- Switch mounting method: Tie rod method



Code	Bore Size	Q	CAC-N, UCAC-N														
			T0, T5, T2, T3, T3P			T2W, T3W, T2WL			T1, T2YD			T2J			T8		
			P'	RD	HD	P'	RD	HD	P	RD	HD	P	RD	HD	P	RD	HD
RCS2	ϕ 32	38	22	9.5	8.5	22	11.5	10.5	29	8.5	7.5	26	8.5	7.5	26	3.5	2.5
RCC2	ϕ 40	42	22	11.5	10.5	22	13.5	12.5	30	10.5	9.5	26	10.5	9.5	26	5.5	4.5

MEMO

Clamping

Clamping

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

Cylinder Switch

Cylinder Switch

Ending

Ending



To Use This Product Safely

Be sure to read this before use. For general cylinder information, see Intro 41, and for cylinder switches, see P. 1512.

Individual Precautions: Lightweight clamp cylinder CAC-N32/40 / Lightweight clamp cylinder with drop prevention UCAC-N32/N40

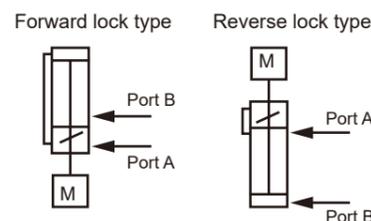
Design / Selection

UCAC-N32/N40

Warning

Make sure to supply pressure to port B, and before unlocking, check that load is not applied to the lock mechanism.

If pressure is supplied to port A while both ports A and B are exhausted and the piston is locked, the lock may not be released, or the Piston rod may extend suddenly even if the lock is released, which is very dangerous.



If the cylinder is held with pressure applied on the locking mechanism, the lock could be released. Do not use 3-position closed center and 3-position P-A-B connection solenoid valves.

If a back pressure is applied while locked, the lock may be released. Use a discrete solenoid valve for brake release, or use an individual exhaust manifold.

Do not use with the by-pass tube disconnected as lock response could be delayed.

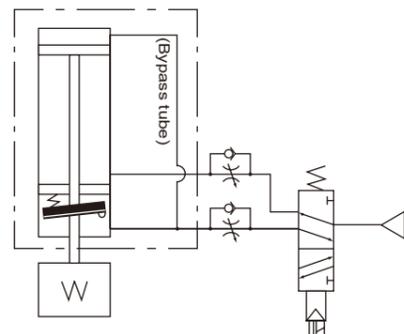
Note that due to the structure, a 1 mm deviation may occur when stopped with the lock.

CAUTION

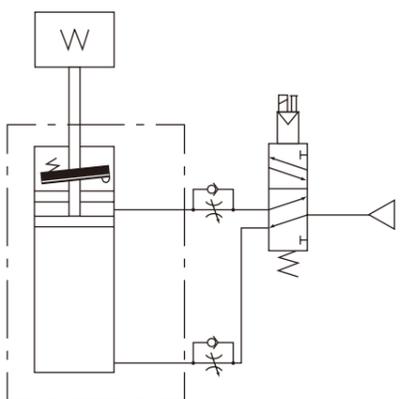
Basic Circuit Diagram

If you want to control each speed separately, installation of a speed controller is necessary.

Forward Locking F type



Backward Locking B type



When an emergency stop or urgent stop is performed, the forward direction lock type will continue to retract, and the reverse direction lock type will continue to advance and return to the home position. (It will stop at that position when residual pressure is gone)

During Use

1. Common

CAUTION

Flush the connected pipe sufficiently to prevent foreign materials or cutting chips from entering the cylinder when installing the product.

Be careful not to scratch or dent the Piston Rod sliding part.

This can lead to damage to packings and cause air leakage.

2. UCAC-N32/N40

Warning

During equipment maintenance, please take separate measures for safety so that the load does not fall due to its own weight. Since the locking force will decrease and it is dangerous, do not apply rotational force (torque) to the rod during lock operation.

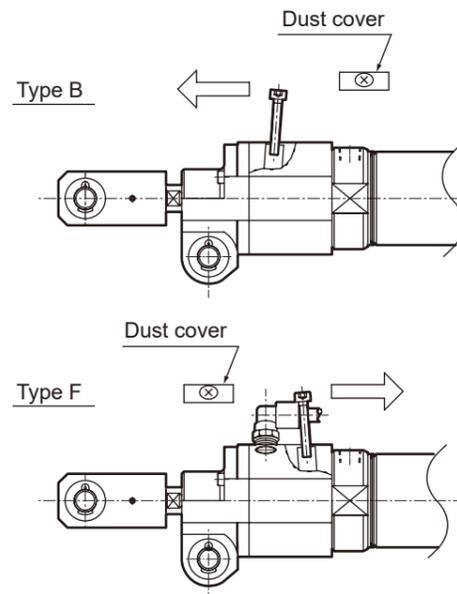
Also, use with a mechanism that prevents rod rotation.

UCAC-N32/N40 Series

Specific Precautions

How to unlock manually

1. Remove dust cover A.
2. Hexagon Socket Head Cap Screw in screw hole M4 of lock metal (Length 40 or more recommended) Screw in all the way.
3. Tilt the Hexagon Socket Head Cap Screw in the direction of the arrow to free the rod.



Do not disassemble the unit, as doing so may be dangerous.

3. Common (With T-type switch)

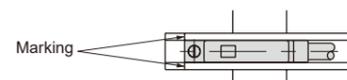
CAUTION

When Moving the Switch Position in the Stroke Direction

- The 1-color indicator switch can be finely adjusted by about ±3 mm from the mounting position at the time of shipment. If the adjustment range exceeds ±3 mm, or if fine-tuning the position of a 2-color indicator switch, move the band position.

- Loosen the switch mounting screw, move the switch along the rail, and tighten at the specified position. For T2, T3, T0, T5, use a flat-head screwdriver (watchmaker's screwdriver, precision screwdriver, etc.) with a grip diameter of 5 to 6 mm, tip shape width of 2.4 mm or less, and thickness of 0.3 mm or less to tighten the switch fixing screw with a tightening torque of 0.1 to 0.2 N·m. For T1, T□C, T2J, T2Y, T3Y, T8, tighten with a tightening torque of 0.5 to 0.7 N·m.

- The switch rail has a marking 4 mm from the end face of the rail. Use it as a guide for mounting position when replacing the switch. The switch rail marking is set to the switch maximum sensitivity position at factory shipment. If the switch type changes or the band is moved, the maximum sensitivity position changes, so adjust the position each time.

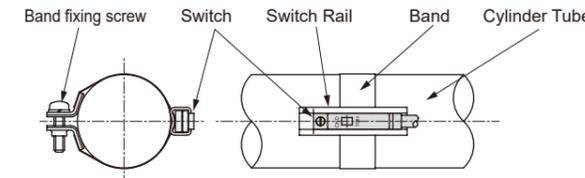


When Moving the Switch Position in the Circumferential Direction

- Loosen the band fixing screw, move the switch rail circumferentially, and tighten it at the specified position. The tightening torque is 0.6 to 0.8 N·m.

When Moving the Band Position

- Loosen the band fixing screw, move the switch rail and band along the cylinder tube, and tighten them at the specified position. The tightening torque is 0.6 to 0.8 N·m.



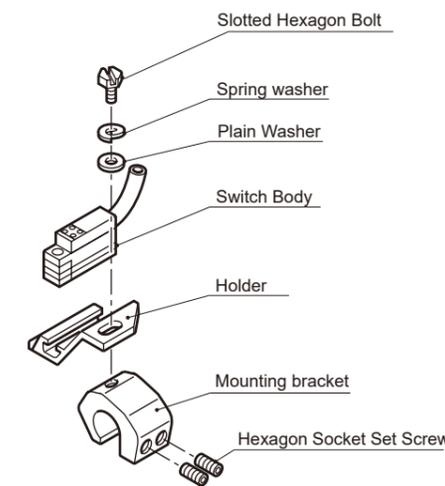
Switch mounting and travel method for tie rod mounting (A/C)

Mounting method

- 1) Pass a spring washer and flat washer through the slotted Hexagon Bolt and set the holder.
- 2) Fit the mounting bracket onto the cylinder tie rod and tighten the Hexagon Socket Head Cap Screw. Tightening torque is 0.5 to 0.7 N·m.
- 3) Finally, tighten the Hexagon Socket head Set Screw. Tightening torque is 1.7 to 2.0 N·m.

Movement method

- 1) Fine adjustment
Loosen the slotted Hexagon Bolt, move only the switch body, and tighten it at the specified position. Tightening torque is 0.5 to 0.7 N·m.
- 2) Coarse adjustment
Loosen all slotted Hexagon Bolts and Set Screws, move the entire mounting bracket to the specified position, and then tighten the slotted Hexagon Bolts. Tightening torque is 0.5 to 0.7 N·m. Then, tighten the Set Screw. Tightening torque is 1.7 to 2.0 N·m.



For precautions during mounting, installation, adjustment, use, and maintenance, refer to "During Use" in this catalog and the CKD Components Product website (<https://www.ckd.co.jp/kiki/en/>) -> "Model No." -> "Instruction Manual".