

CAC4

Clamp Cylinder

ø40, ø50, ø63, ø80

Clamp Cylinder

Overview

Clevis mounting with double yoke knuckle. This is a dedicated cylinder for clamping.

Features

Optimization of cover shape achieves product weight reduction and slimming. Minimizes needle protrusion, achieving both ease of adjustment and high safety. Sputter adhesion prevention type CAC4-G4 series also selectable.

- **Selectable Switch Mounting Method**
In addition to the conventional tie rod method, a band method that allows free rotation (circumferential direction) and movement adjustment of the switch has been added.
- **Switch mounting position can be found at a glance**
The switch rail has markings for mounting at the highest sensitivity position, significantly reducing switch position setting time during maintenance. (Limited to stroke end detection. Excluding two-color indicator type and for strong magnetic fields)



- **Capable of free rotation of switch**
By simply loosening the fixing screw, the switch rail can be freely rotated and moved in the circumferential direction without changing the position of the band fixing part. On-site position adjustment of the switch position becomes easier.
- **Fixing screw fallout prevention**
Anti-slip rubber is included with the inside of the band. It will not fall off even if the screw is loosened.



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Variation Table

Clamp Cylinder CAC4 Series

●: Standard, ○: Option, ■: Not available

| Variation | Model No. Circuit Diagram Code | Bore Size (mm) | Standard Stroke (mm) | | | | | Max Stroke (mm) | Option | | | Accessories | | | | Page | | |
|---|-----------------------------------|-------------------|-------------------------|----|-----|-----|-----|-----------------|------------------|-------------------------------------|--|---------------|-------------------------------|---------------------------|----------------------------|------|--------|-----|
| | | | 50 | 75 | 100 | 125 | 150 | | Bellows (100 °C) | Limit switch mounting base with dog | Limit switch mounting base without dog | Clamp fitting | Double yoke knuckle Cast Iron | Double yoke knuckle Steel | Single knuckle joint Steel | | Switch | |
| | | | K | D | D1 | Q | Y | | | | | | | | | | | Y1 |
| Double Acting, Single Rod Type | CAC4 | ø40, ø50, ø63 | ● | ● | ● | ● | ● | 150 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 742 |
| | | ø80 | ● | ● | ● | ● | ● | 150 | ■ | ■ | ■ | ■ | ○ | ○ | ○ | ○ | ○ | |
| Double Acting, Spatter Adhesion Prevention Type | CAC4-G4 | ø40, ø50, ø63 | ● | ● | ● | ● | ● | 150 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 756 |
| | | ø80 | ● | ● | ● | ● | ● | 150 | ■ | ■ | ■ | ■ | ○ | ○ | ○ | ○ | ○ | |

Variation Combination Availability Table

| Category | Code | Variation | | Piping thread | | Switch | |
|--|---------------|--|----------------------------------|---------------|---|---------------|-----------|
| | | Double Acting type (Built-in magnet for T-type switch) | Sputter adhesion prevention type | NPT | G | T-type Switch | HO switch |
| Double Acting type (Built-in magnet for T-type switch) | Blank | ○ | x | ○ | ○ | ○ | x |
| Sputter adhesion prevention type | G4 | ○ | ○ | ○ | ○ | ○ | x |
| Double Acting type (Built-in magnet for strong magnetic field switch HO) | L2 | ○ | ○ | ○ | ○ | x | ○ |
| Piping thread | N | | | | x | - | - |
| | G | | | | | - | - |
| Switch | T-type Switch | Separately Shown | | | | | x |
| | H0 switch | Separately Shown | | | | | |

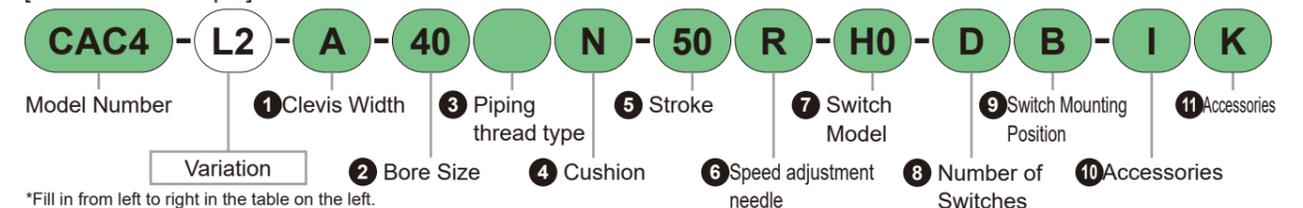
○Mark : Option
 ○Mark : Custom-made
 x Mark : Not Available

Accessory Combination Availability Table

| Category | Code | Accessories | | | | | | |
|-------------|-------|-----------------------------------|----------------------------|-------------------------------|--------------------------|--|---|-----------------------|
| | | Double knuckle joint Cast Iron *1 | Double yoke knuckle, Steel | Single knuckle joint Steel *1 | With bellows Neoprene *1 | Limit switch mounting base with dog *1 | Limit switch mounting base without dog *1 | With clamp fitting *1 |
| Accessories | Blank | ○ | ○ | ○ | x | x | ○ | x |
| | Y | x | x | ○ | ○ | ○ | ○ | ○ |
| | Y1 | | x | ○ | ○ | ○ | ○ | ○ |
| | I | | | ○ | ○ | ○ | x | |
| | K | | | | x | x | x | |
| | D | | | | | x | x | |
| | D1 | | | | | | x | |
| | Q | | | | | | | x |

*1: Excluding ø80

[Model No. Example]



Model No.: Clamp Cylinder

●Variation : With Strong Magnetic Field Resistant Switch

- 1 Clevis Width : 16.5 mm
- 2 Bore Size : ø40 mm
- 3 Port thread : Rc Thread
- 4 Cushion : Without cushion
- 5 stroke : 50 mm

- 6 Speed adjustment needle : Rod side included
- 7 Switch model No. : Reed HO switch, lead wire 1 m
- 8 Switch quantity : With 2 pcs
- 9 Switch mounting position : B
- 10 Accessory : Single knuckle joint Steel
- 11 Accessory : Bellows (Neoprene) 100°C



Clamp cylinder Double Acting/Single rod type

CAC4 Series

● Bore Size: ø40, ø50, ø63, ø80

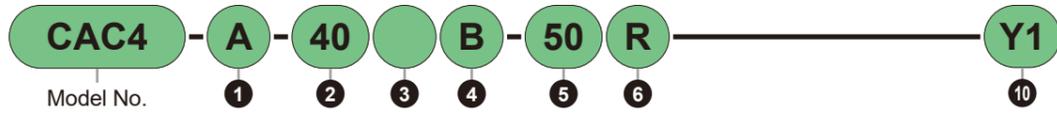


CAC4 Series

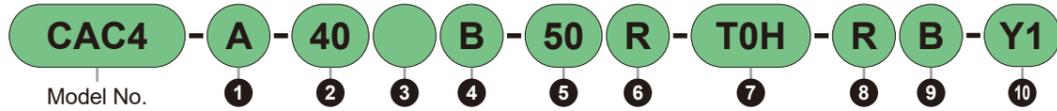
Model No. Notation

Model No. Notation

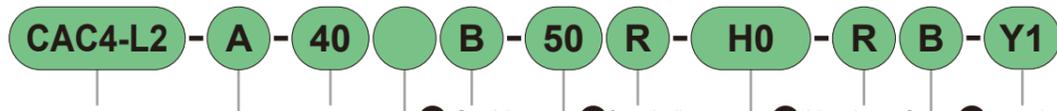
Without Switch
(Built-in magnet for switch)



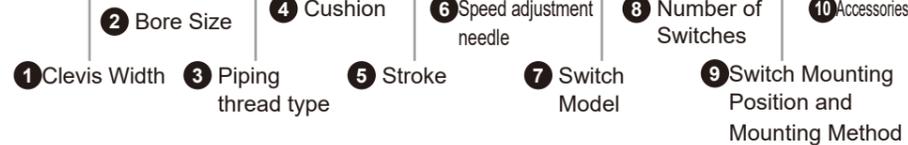
With switch
(Built-in magnet for switch)



Strong magnetic field resistant
(HO, HOY switch)



With switch
(Built-in magnet for switch)



1 Clevis Width (mm)

| Code | Content | Bore Size | | | |
|-------|------------------------|-----------|-----|-----|-----|
| | | ø40 | ø50 | ø63 | ø80 |
| Blank | 28 | | | | ● |
| A | 16.5 | ● | ● | ● | |
| B | 19.5 | ● | ● | ● | |
| AL | 16.5 (Axial foot type) | ● | ● | ● | |
| BL | 19.5 (Axial foot type) | ● | ● | ● | |

Note: Clevis pins, split pins, and flat washers are included to A, B, AL, and BL. Clevis width and double yoke knuckle width are the same dimension.

2 Bore Size (mm)

| Code | Contents |
|------|----------|
| 40 | ø40 |
| 50 | ø50 |
| 63 | ø63 |
| 80 | ø80 |

3 Piping thread type

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

4 Cushion

| Code | Content |
|-------|---|
| Blank | With Air Cushion on Head Side (Port thread: When blank) |
| H | With Air Cushion on Head Side (Port thread: When N, G) |
| B | With Air Cushion on Both Sides |
| N | Without cushion |

5 Stroke (mm)

| Code | Content |
|------|---------|
| 50 | 50 |
| 75 | 75 |
| 100 | 100 |
| 125 | 125 |
| 150 | 150 |

6 Speed adjustment needle

| Code | Content |
|-------|---------------------|
| Blank | Both sides included |
| R | Rod side included |
| H | Head side included |
| N | None |

7 Switch Model

For switch details, refer to P. 1457. Switches are pre-assembled on the product and shipped, except in the case of band mounting.

| Contact | Indicator LED Special Function | Wiring (Output) | Load Voltage (V) | | Load Current (mA) | | Lead wire *1 | |
|-------------|-----------------------------------|---|-----------------------------------|------------|-------------------|-------------|--------------|---------|
| | | | AC | DC | AC | DC | Straight | L-shape |
| Solid State | 1-Color | 2-wire | 85 to 265 | — | 5 to 100 | — | T1H□ | T1V□ |
| | | 3-wire (NPN) | — | 10 to 30 | — | 5 to 20 *2 | T2H□ | T2V□ |
| | | | — | 30 or less | — | 100 or less | T3H□ | T3V□ |
| | 2-color | 2-wire | — | 24 ± 10% | — | 5 to 20 | T2WH□ | T2WV□ |
| | | 3-wire (NPN) | — | 30 or less | — | 50 or less | T3WH□ | T3WV□ |
| | | | 2-color Improved Water Resistance | — | 24 ± 10% | — | 5 to 20 | T2WLH□ |
| Contact | 1-Color | 2-wire | — | 24 ± 10% | — | 5 to 20 | T2YD□ | — |
| | | 2-Color for AC Magnetic Field | — | — | — | — | T2YDT□ | — |
| | | With 2-color AC magnetic field proof connector (Custom order) | — | 24 ± 10% | — | — | T2YDU | — |
| | 1-Color | Off-Delay Type | — | 10 to 30 | — | 5 to 20 | T2JH□ | T2JV□ |
| | | Flexible Lead Wire Type | — | 10 to 30 | — | 5 to 20 *2 | T2HR3 | T2VR3 |
| | | | Without Indicator Lamp | 110 | 12/24 | 7 to 20 | 5 to 50 | T0H□ |
| 1-color | For 1-color strong magnetic field | — | 110/220 | 12/24 | 7 to 20 / 7 to 10 | 5 to 50 | T5H□ | T5V□ |
| | | — | 110 | 12/24 | 7 to 20 | 5 to 50 | T8H□ | T8V□ |
| | For 2-color strong magnetic field | — | — | 24 ± 10% | — | 5 to 20 | H0Y□ | — |

*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. Also, the T2WL□ switch is included with the product and shipped.

*4: Switches other than the model numbers listed above are also available. (Custom Product) For details, refer to P. 1457.

8 Number of Switches

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

9 Switch Mounting Position and Mounting Method

| Code | Content |
|---|------------------|
| Switch model number selection available | |
| Blank | Tie rod mounting |
| B | Tie rod mounting |
| C | Tie rod mounting |
| Z | Band mounting |
| No switch model number selection | |
| Blank | Without tie rod |
| A | Tie rod mounting |
| B | Tie rod mounting |
| C | Tie rod mounting |

*1: Cannot be selected for Switch Model No. "H0□" and "H0Y□".

*2: In the case of band mounting, the switch body + mounting bracket set + band are shipped attached to the product.

*3: When setting the switch mounting position to the same side as the port surface, a thick fitting cannot be installed. Estimated mountable fitting outer diameter Bore Size ø40 to ø63: ø17.5 or less Bore Size ø80: ø28 or less

10 Accessories

| Code | Content | Bore Size | | | |
|-------|---|-----------|-----|-----|-----|
| | | ø40 | ø50 | ø63 | ø80 |
| Blank | No accessories | ● | ● | ● | ● |
| Y | Double yoke knuckle, Cast Iron (Pin, split pin, flat washer included) | ● | ● | ● | ● |
| Y1 | Double yoke knuckle, Steel (Pin, split pin, flat washer included) | ● | ● | ● | ● |
| I | Single yoke knuckle, Steel | ● | ● | ● | ● |
| K | Bellows | ● | ● | ● | ● |
| D | With dog | ● | ● | ● | ● |
| D1 | Limit switch mounting base | ● | ● | ● | ● |
| | Without dog | ● | ● | ● | ● |
| Q | Clamp fitting | ● | ● | ● | ● |

*3

*4

*5

*1

*2

*1: Q cannot be mounted on the standard type because the Piston Rod projection length is different from the standard type.

*2: When selecting "Q", the 1 clevis width becomes "A".

*3: Bellows maximum Ambient Temperature 100°C, instantaneous maximum temperature 200°C.

*4: K (bellows) is not available for 1 clevis width AL and BL.

*5: For type with bellows, a knuckle joint must be selected.

*6: Refer to the accessory selection table on P. 741 if accessories are available for selection.

*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 TOH
3 m TOH[3]
5 m TOH[5]

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

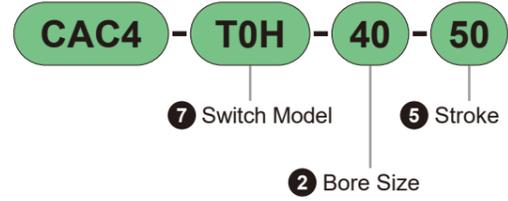
Switch Single Unit Model No. Notation [Switch mounting: Tie rod method]

*Pay attention to direction when installing tie rod. Please refer to P. 764 to 766.

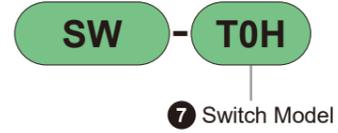
MEMO

●T-type Switch

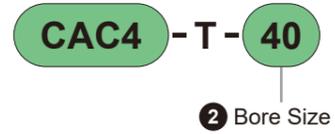
A) Switch body+Mounting bracket set
(=B+C+D)



B) Switch body only



C) Mounting bracket kit

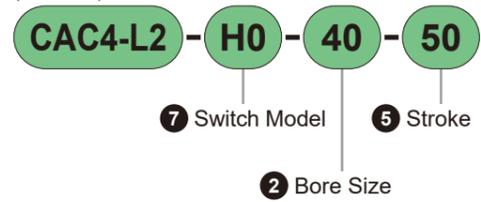


D) Mounting tie rod kit

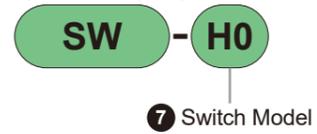


●H-type Switch

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



B) Switch body only



C) Mounting bracket kit

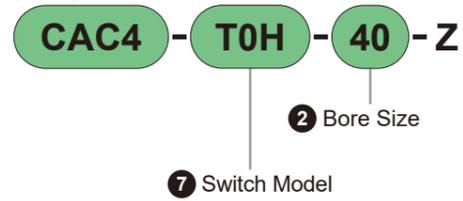


D) Mounting tie rod kit

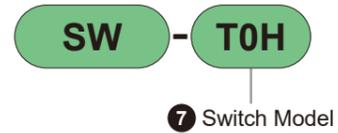


[Switch mounting: Band Type]

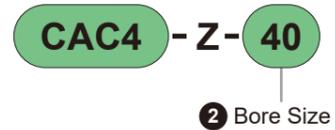
A) Switch body+Mounting bracket set+Band
(=B+C)



B) Switch body only



C) Mounting bracket set+Band



Specifications

| Item | CAC4 | | | | |
|------------------------------|---|-------------------------|-----------|-----------|-----|
| | mm | ø40 | ø50 | ø63 | ø80 |
| Bore Size | mm | ø40 | ø50 | ø63 | ø80 |
| Operating type | Double Acting Type | | | | |
| Operating Fluid | Compressed Air | | | | |
| Max Operating Pressure | MPa | 1.0 | | | |
| Min Operating Pressure | MPa | 0.1 | | | |
| Proof Pressure | MPa | 1.6 | | | |
| Ambient Temperature | °C | -10 to 60 (No freezing) | | | |
| Port Size | | Rc1/4 | | Rc3/8 | |
| Standard Stroke | mm | 50, 75, 100, 125, 150 | | | |
| Operating Piston Speed | mm/s | 50 to 500 | 50 to 400 | 50 to 300 | |
| Cushion | With Air Cushion on Head Side | | | | |
| Effective Air Cushion Length | mm | 13.5 | | 15.4 | |
| Lubrication | Not Required (When lubricating, use Turbine Oil ISO VG32) | | | | |
| Mounting Style | Double Clevis | | | | |

Note: Please use within the absorbed energy. Refer to the table below.

Stroke

| Bore Size (mm) | Standard Stroke (mm) | Maximum Stroke (mm) | Min Stroke (mm) | Minimum stroke with switch (mm) |
|----------------|-----------------------|---------------------|-----------------|---------------------------------|
| ø40 | 50, 75, 100, 125, 150 | 150 | 50 | 50 |
| ø50 | | | | |
| ø63 | | | | |
| ø80 | | | | |

Note: Strokes other than Standard Strokes are custom products.

Cushion Characteristic Table

| Bore Size (mm) | Effective Cushion Length (mm) | Allowable Energy (J) | |
|----------------|-------------------------------|----------------------|-----------------|
| | | With cushion | Without cushion |
| ø40 | 13.5 | 5.14 | 0.137 |
| ø50 | 13.5 | 6.41 | 0.137 |
| ø63 | 13.5 | 11.37 | 0.205 |
| ø80 | 15.4 | 25.4 | 0.360 |

●Air Cushion

The purpose of the air cushion is to absorb the kinetic energy held by the piston by utilizing the compressibility of air, and to prevent the piston and cover from forcefully striking at the stroke end. Therefore, the air cushion is not for operating the piston speed at low speed near the stroke end. Note that the table on the left shows the kinetic energy that can be absorbed by the air cushion. If the kinetic energy exceeds this value or if you want to avoid bouncing due to air compressibility, please consider a separate shock absorber.

$$\text{Kinetic Energy (J)} = \frac{1}{2} \times \text{Weight (kg)} \times [\text{Speed (m/s)}]^2$$

Cylinder Weight

(Unit: kg)

| Bore Size (mm) | Product weight per stroke = 0 mm | Added weight per stroke = 100 mm | Accessory Weight | | | | | Switch Weight | Switch Mounting Bracket Weight | | Mounting tie rod weight at stroke = 0 mm | Added weight per S = 10 mm of mounting tie rod |
|----------------|----------------------------------|----------------------------------|------------------|----------------|----------------|----------------------------|-------------|---|--------------------------------|---------------|--|--|
| | | | Axial foot | Double Knuckle | Single knuckle | Limit switch mounting base | Dog fitting | | T Type | | | |
| | | | | | | | | | Tie rod mounting | Band mounting | | |
| ø40 | 0.75 | 0.34 | 0.21 | 0.37 | 0.27 | 0.18 | 0.08 | Refer to the Weight listed in the Switch Specifications on P. 1457. | 0.021 | 0.007 | 0.019 | 0.003 |
| ø50 | 0.82 | 0.36 | | | | | | | | | | |
| ø63 | 1.03 | 0.39 | | | | | | | | | | |
| ø80 | 2.80 | 0.60 | - | 0.95 | - | - | - | | | | | |

(Example) Product weight of CAC4-A-40-150-Y

- Stroke for 0 mm 0.75 kg
- Additional weight for 150 mm stroke..... $0.34 \times \frac{150}{100} = 0.51$ kg
- Accessory weight (rod clevis) 0.37 kg
- Product weight $0.75+0.51+0.37=1.63$ kg

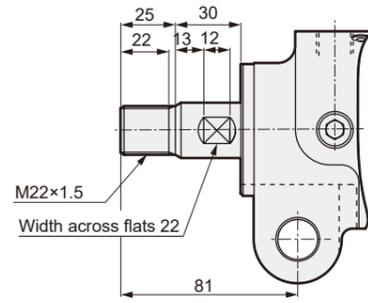
Theoretical Thrust Table

(Unit: N)

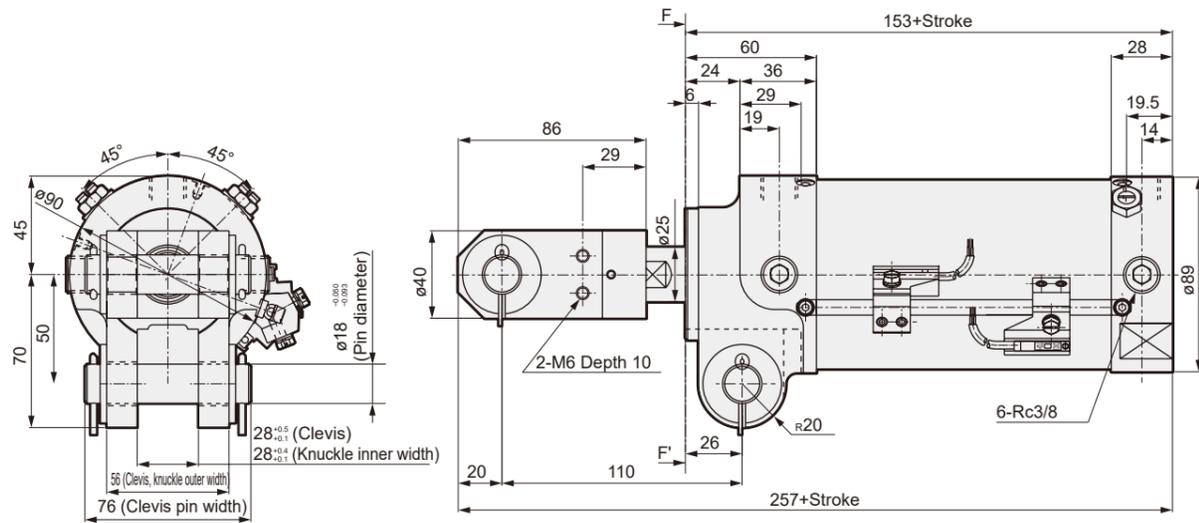
| Bore Size (mm) | Operating Direction | Operating Pressure MPa | | | | | | | | | | |
|----------------|---------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | | 0.1 | 0.15 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| ø40 | Push | 1.26×10 ² | 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 | 1.01×10 ³ | 1.13×10 ³ | 1.26×10 ³ |
| | Pull | 94.2 | 1.41×10 ² | 1.88×10 ² | 2.83×10 ² | 3.77×10 ² | 4.71×10 ² | 5.65×10 ² | 6.60×10 ² | 7.54×10 ² | 8.48×10 ² | 9.42×10 ² |
| ø50 | Push | 1.96×10 ² | 2.95×10 ² | 3.93×10 ² | 5.89×10 ² | 7.85×10 ² | 9.82×10 ² | 1.18×10 ³ | 1.37×10 ³ | 1.57×10 ³ | 1.77×10 ³ | 1.96×10 ³ |
| | Pull | 1.65×10 ² | 2.47×10 ² | 3.30×10 ² | 4.95×10 ² | 6.60×10 ² | 8.25×10 ² | 9.90×10 ² | 1.15×10 ³ | 1.32×10 ³ | 1.48×10 ³ | 1.65×10 ³ |
| ø63 | Push | 3.12×10 ² | 4.68×10 ² | 6.23×10 ² | 9.35×10 ² | 1.25×10 ³ | 1.56×10 ³ | 1.87×10 ³ | 2.18×10 ³ | 2.49×10 ³ | 2.81×10 ³ | 3.12×10 ³ |
| | Pull | 2.80×10 ² | 4.20×10 ² | 5.61×10 ² | 8.41×10 ² | 1.12×10 ³ | 1.40×10 ³ | 1.68×10 ³ | 1.96×10 ³ | 2.24×10 ³ | 2.52×10 ³ | 2.80×10 ³ |
| ø80 | Push | 5.03×10 ² | 7.54×10 ² | 1.01×10 ³ | 1.51×10 ³ | 2.01×10 ³ | 2.51×10 ³ | 3.02×10 ³ | 3.52×10 ³ | 4.02×10 ³ | 4.52×10 ³ | 5.03×10 ³ |
| | Pull | 4.54×10 ² | 6.80×10 ² | 9.07×10 ² | 1.36×10 ³ | 1.81×10 ³ | 2.27×10 ³ | 2.72×10 ³ | 3.17×10 ³ | 3.63×10 ³ | 4.08×10 ³ | 4.54×10 ³ |

External dimensions diagram (Bore Size: $\phi 80$)

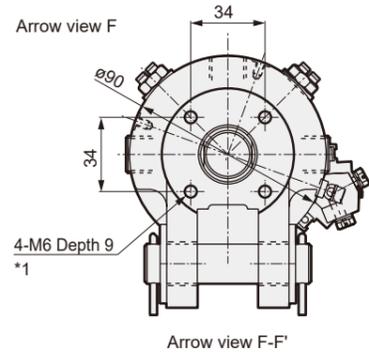
● Without knuckle



● With rod clevis (Y1)

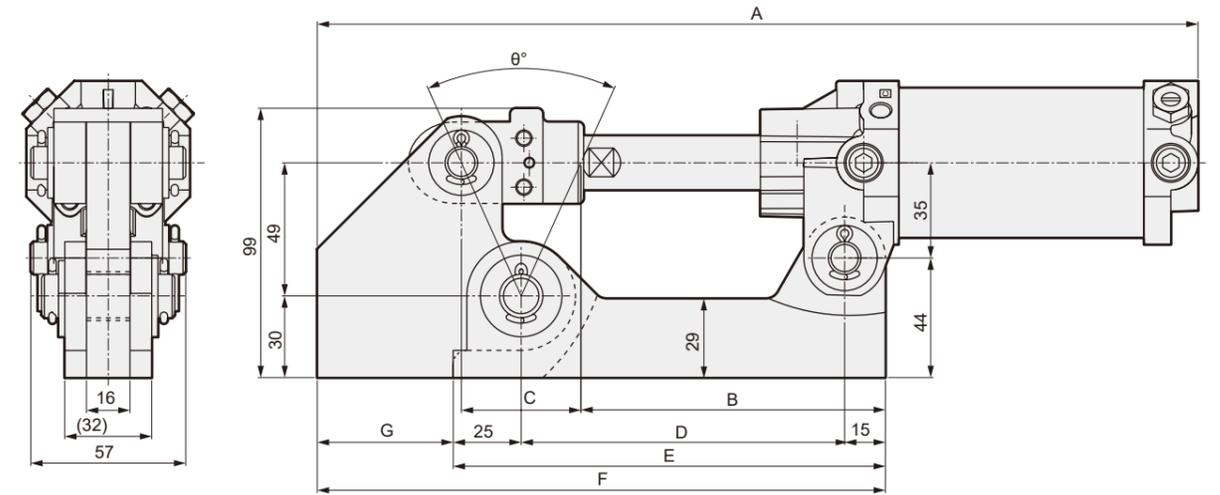


*1: 4-M6 is for fixing jigs that are not subjected to load. Cannot be used for fixing the product.



Dimensional Drawings

● Clamp bracket ($\phi 40$ to $\phi 63$)



| Code Model No. | Stroke | A | B | C | D | E | F | G | θ° |
|-------------------|--------|-----|-----|-----|-----|-----|-----|----|----------------|
| CAC4-A-50-Q | 50 | 324 | 97 | 44 | 119 | 159 | 209 | 50 | 48 |
| CAC4-A-75-Q | 75 | 372 | 107 | 70 | 142 | 182 | 232 | 50 | 71 |
| CAC4-A-100-Q | 100 | 415 | 115 | 90 | 160 | 200 | 250 | 50 | 85 |
| CAC4-A-125-Q | 125 | 468 | 128 | 120 | 188 | 228 | 278 | 50 | 101 |
| CAC4-A-150-Q | 150 | 513 | 128 | 140 | 198 | 238 | 298 | 60 | 110 |

*1: Since the rod protrusion dimension is different from the standard product, it cannot be included with the standard product.

*2: The diagram shows the dimensions when the rod is protruding. Dimension B represents the center position of the knuckle pin when the rod is retracted.

*3: With bellows also has the same dimensions.

*4: This product is a type that is mounted by welding.

*5: $\phi 80$ is not available.

*6: The diagram shows the external dimensions for CAC4-A-50-Q. The shape varies depending on the stroke.

Clamping

Clamping

CAC4

CAC4

UCAC2

UCAC2

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

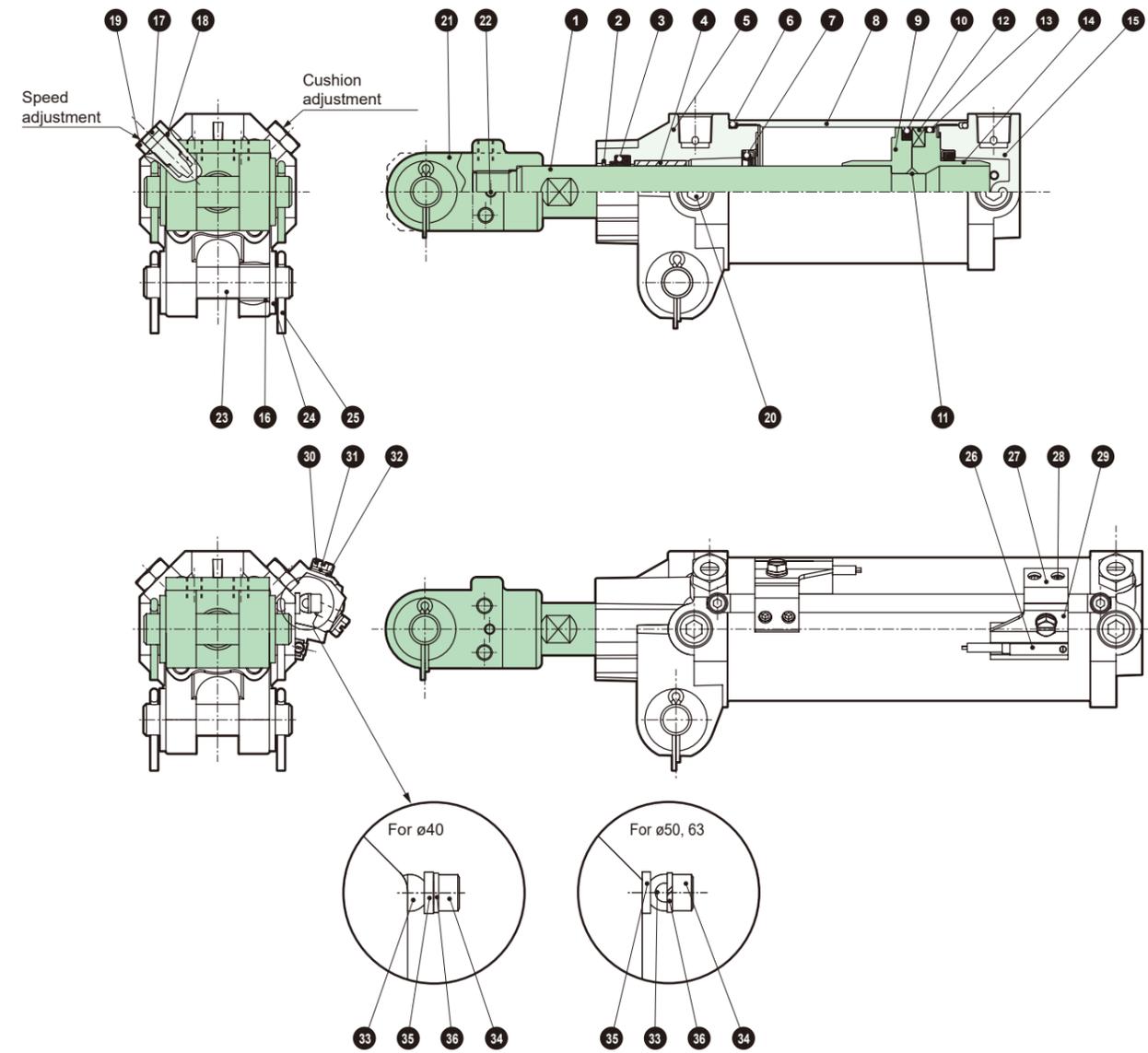
Cylinder Switch

Cylinder Switch

Ending

Ending

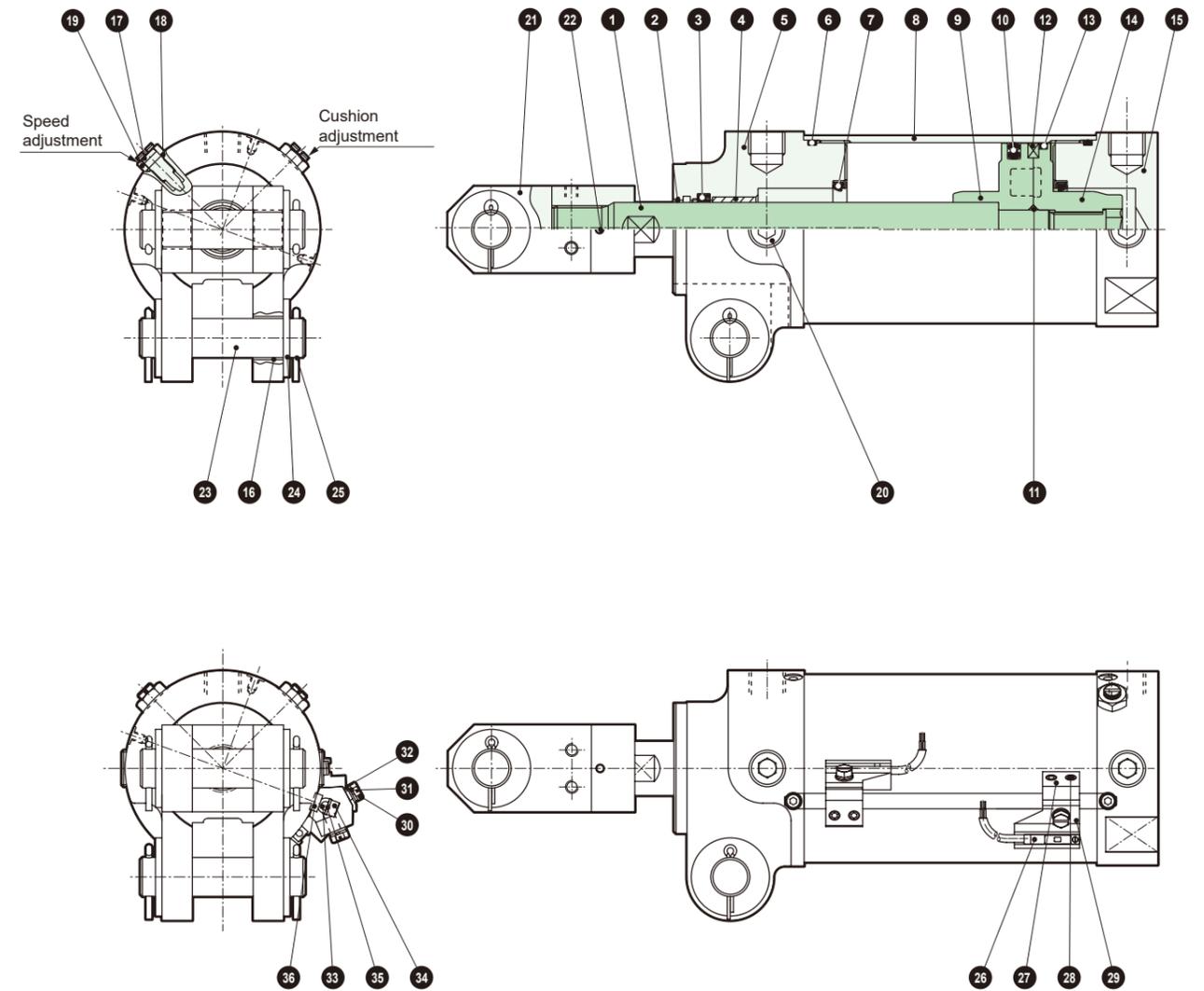
Internal structure diagram/materials (Bore Size: ø40 to ø63)



| No. | Part Name | Material | Remarks | No. | Part Name | Material | Remarks |
|-----|--------------------|-----------------------|---------------------------|-------------|--------------------------------------|---------------------------|--|
| 1 | Piston Rod | Steel | Industrial Chrome Plating | 20 | Hexagon Socket head countersunk plug | Steel | Black Oxide |
| 2 | Metal Scraper | Copper Alloy | | 21 | Double Knuckle | Y: Cast Iron Y1: Steel | Y: Manganese Phosphate Y1: Black Oxide finish |
| 3 | Rod Packing | Nitrile Rubber | | 22 | Spring pin | Steel | Black Oxide |
| 4 | Bushing | Copper Alloy | | 23 | Clevis pin | Steel | Black Oxide |
| 5 | Rod Cover | Aluminum Alloy | Chromate | 24 | Plain Washer | Steel | Chromate |
| 6 | Cylinder Gasket | Nitrile Rubber | | 25 | Split pin | Steel | Chromate |
| 7 | Cushion packing | Nitrile Rubber, Steel | Chromate | With switch | | | |
| 8 | Cylinder Tube | Aluminum Alloy | Hard Anodized | 26 | Switch | | |
| 9 | Piston (R) | Aluminum Alloy | | 27 | Switch mounting base | Aluminum Alloy | |
| 10 | Piston Packing | Nitrile Rubber | | 28 | Hexagon Socket Set Screw | Steel | Black Oxide |
| 11 | Piston Gasket | Nitrile Rubber | | 29 | Switch holder | Aluminum Alloy | |
| 12 | Magnet | Plastic | | 30 | Slotted Hexagon Bolt | Stainless Steel | |
| 13 | Wear Ring | Polyacetal | | 31 | Spring washer | Stainless Steel | |
| 14 | Piston (H) | Aluminum Alloy | | 32 | Plain Washer | Stainless Steel | |
| 15 | Head Cover | Aluminum Alloy | Chromate | 33 | Switch mounting rod | Steel | Zinc Chromate |
| 16 | Bushing for clevis | Steel, Copper | | 34 | Hexagon Socket Head Cap Screw | Steel | Black Oxide |
| 17 | Needle | Copper Alloy | | 35 | Spacer | Steel | Zinc Chromate |
| 18 | Needle Gasket | Nitrile Rubber | | 36 | Spring washer | Steel | Black Oxide |
| 19 | Hexagon Nut | Steel | Chromate | | | | |

*1: The 7 cushion packing of is included with the rod side only when cushions are provided on both sides.

Internal structure diagram / Material (Bore Size: ø80)



| No. | Part Name | Material | Remarks | No. | Part Name | Material | Remarks |
|-----|--------------------|-----------------------|---------------------------|-------------|--------------------------------------|-----------------|---------------|
| 1 | Piston Rod | Steel | Industrial Chrome Plating | 20 | Hexagon Socket head countersunk plug | Steel | Black Oxide |
| 2 | Metal Scraper | Copper Alloy | | 21 | Double Knuckle | Steel | Black Oxide |
| 3 | Rod Packing | Nitrile Rubber | | 22 | Spring pin | Steel | Black Oxide |
| 4 | Bushing | Copper Alloy | | 23 | Clevis pin | Steel | Black Oxide |
| 5 | Rod Cover | Aluminum Alloy | Chromate | 24 | Plain Washer | Steel | Chromate |
| 6 | Cylinder Gasket | Nitrile Rubber | | 25 | Split pin | Steel | Chromate |
| 7 | Cushion packing | Nitrile Rubber, Steel | Chromate | With switch | | | |
| 8 | Cylinder Tube | Aluminum Alloy | Hard Anodized | 26 | Switch | | |
| 9 | Piston (R) | Aluminum Alloy | | 27 | Switch mounting base | Aluminum Alloy | |
| 10 | Piston Packing | Nitrile Rubber | | 28 | Hexagon Socket Set Screw | Steel | Black Oxide |
| 11 | Piston Gasket | Nitrile Rubber | | 29 | Switch holder | Aluminum Alloy | |
| 12 | Magnet | Plastic | | 30 | Slotted Hexagon Bolt | Stainless Steel | |
| 13 | Wear Ring | Polyacetal | | 31 | Spring washer | Stainless Steel | |
| 14 | Piston (H) | Aluminum Alloy | | 32 | Plain Washer | Stainless Steel | |
| 15 | Head Cover | Aluminum Alloy | Chromate | 33 | Switch mounting rod | Steel | Zinc Chromate |
| 16 | Bushing for clevis | Steel, Copper | | 34 | Hexagon Socket Head Cap Screw | Steel | Black Oxide |
| 17 | Needle | Steel | Chromate | 35 | Spacer | Steel | Zinc Chromate |
| 18 | Needle Gasket | Nitrile Rubber | | 36 | Spring washer | Steel | Black Oxide |
| 19 | Hexagon Nut | Steel | Chromate | | | | |

*1: The 7 cushion packing of is included with the rod side only when cushions are provided on both sides.

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

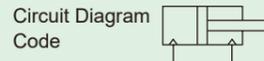
Ending



Clamp Cylinder, Sputter Adhesion Prevention Type

CAC4-G4 Series

● Bore Size: ø40, ø50, ø63, ø80



CAC4-G4 Series

Model No. Notation

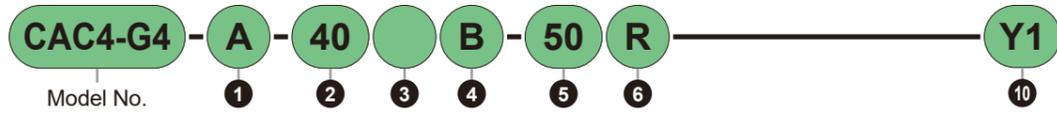
*Lead Wire Length

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

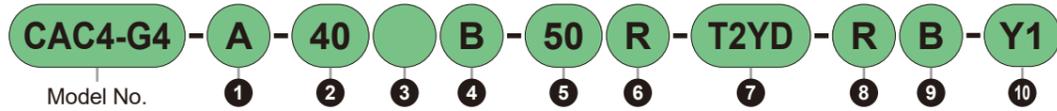
Example) Lead wire length
1 m H0³
3 m H0³
5 m H0⁵

Model No. Notation

Without Switch
(Built-in magnet for switch)

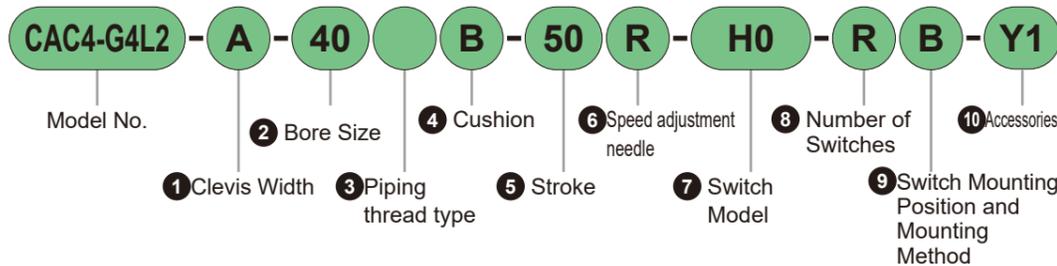


With Switch
(Built-in magnet for switch)



Strong magnetic field resistant
(H0, H0Y switch)

With switch
(Built-in magnet for switch)



1 Clevis Width (mm)

| Code | Content | Bore Size | | | | Clevis Width |
|-------|------------------------|-----------|-----|-----|-----|--------------|
| | | ø40 | ø50 | ø63 | ø80 | |
| Blank | 28 | | | | ● | |
| A | 16.5 | ● | ● | ● | | |
| B | 19.5 | ● | ● | ● | | |
| AL | 16.5 (Axial foot type) | ● | ● | ● | | |
| BL | 19.5 (Axial foot type) | ● | ● | ● | | |

Note: Clevis pins, split pins, and flat washers are included to A, B, AL, and BL. Clevis width and double yoke knuckle width are the same dimension.

4 Cushion

| Code | Content |
|-------|---|
| Blank | With Air Cushion on Head Side (Port thread: When blank) |
| H | With Air Cushion on Head Side (Port thread: When N, G) |
| B | With Air Cushion on Both Sides |
| N | Without cushion |

5 Stroke (mm)

| Code | Content |
|------|---------|
| 50 | 50 |
| 75 | 75 |
| 100 | 100 |
| 125 | 125 |
| 150 | 150 |

6 Speed adjustment needle

| Code | Content | Image |
|-------|---------------------|-------|
| Blank | Both sides included | |
| R | Rod side included | |
| H | Head side included | |
| N | None | |

2 Bore Size (mm)

| Code | Contents |
|------|----------|
| 40 | ø40 |
| 50 | ø50 |
| 63 | ø63 |
| 80 | ø80 |

Piping thread type

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

7 Switch Model

For switch details, refer to P. 1457. Switches are pre-assembled on the product and shipped, except in the case of band mounting.

| 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 | 2-Color for AC Magnetic Field | 2-wire | — | 24 ± 10% | — | 5 to 20 | T2YD□ | — | |
| | With 2-color AC magnetic field proof connector | | — | 24 ± 10% | — | | T2YDT□ | — | |
| Reed | 1-Color For strong magnetic field | 2-wire | 110 | 12/24 | 7 to 20 | 5 to 50 | H0□ | — | |
| | 2-color For strong magnetic field | | — | 24 ± 10% | — | 5 to 20 | H0Y□ | — | |

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

*2: Switches other than the above switch model numbers are also available. (Custom Product) For details, refer to P. 1457.

8 Number of Switches

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

9 Switch Mounting Position and Mounting Method

| Code | Content | Image |
|--|------------------|-------|
| Switch model number selection available | | |
| Blank | Tie rod mounting | |
| B | | |
| C | | |
| Z | Band mounting | |
| No switch model number selection | | |
| Blank | Without tie rod | |
| A | | |
| B | | |
| C | Tie rod mounting | |

*1, *2

*1: Cannot be selected for 7 Switch model No. "H0□" and "H0Y□".

*2: In the case of band mounting, the switch body + mounting bracket set + band are shipped attached to the product.

*3: When setting the switch mounting position to the same side as the port surface, a thick fitting cannot be installed.

Estimated mountable fitting outer diameter
Bore Size ø40 to ø63: ø17.5 or less
Bore Size ø80: ø28 or less

10 Accessories

| Code | Content | Bore Size | | | | Image |
|-------|---|-----------|-----|-----|-----|-------|
| | | ø40 | ø50 | ø63 | ø80 | |
| Blank | Accessories (Knuckle) None | ● | ● | ● | ● | |
| Y | Double yoke knuckle, Cast Iron (Pin, split pin, flat washer included) | ● | ● | ● | | |
| Y1 | Double yoke knuckle, Steel (Pin, split pin, flat washer included) | ● | ● | ● | ● | |
| I | Single yoke knuckle, Steel | ● | ● | ● | | |
| D | With dog | ● | ● | ● | | |
| | Limit Switch Mounting Base | | | | | |
| D1 | Without dog | ● | ● | ● | | |
| Q | Clamp fitting | ● | ● | ● | | |

*1

*2

*1: Q cannot be mounted on the standard type because the Piston Rod projection length is different from the standard type.

*2: When selecting "Q", the 1 clevis width becomes "A".

*3: Refer to the accessory selection table on P. 741 if accessories are available for selection.

Clamping

Clamping

CAC4

CAC4

UCAC2

UCAC2

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

Cylinder Switch

Cylinder Switch

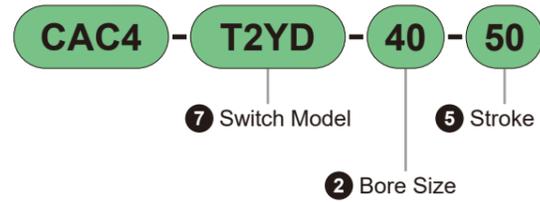
Ending

Ending

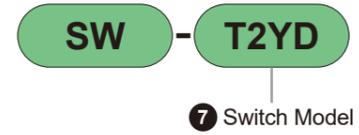
Switch Single Unit Model No. Notation

● T2YD□ switch

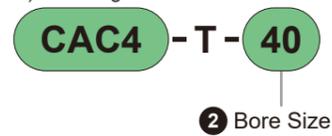
A) Switch body+Mounting bracket set
(=B+C+D)



B) Switch body only



C) Mounting bracket kit

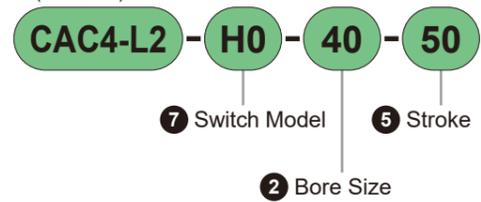


D) Mounting tie rod kit

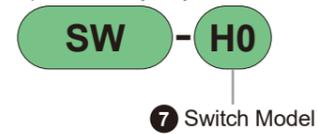


● H-type Switch

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



B) Switch body only



C) Mounting bracket kit

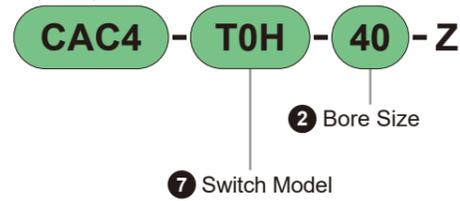


D) Mounting tie rod kit

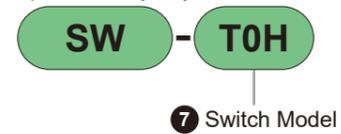


[Switch mounting: Band Type

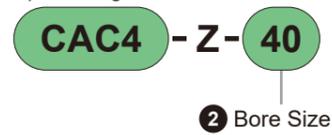
A) Switch body+Mounting bracket set+Band
(=B+C)



B) Switch body only



C) Mounting bracket set+Band



MEMO

Specifications

| Item | CAC4-G4/CAC4-G4L2 | | | | |
|------------------------------|-------------------|---|-----------|-----------|-------|
| | mm | ø40 | ø50 | ø63 | ø80 |
| Bore Size | mm | ø40 | ø50 | ø63 | ø80 |
| Operation type | | Double Acting Type | | | |
| Operating Fluid | | Compressed Air | | | |
| Max Operating Pressure | MPa | 1.0 | | | |
| Min Operating Pressure | MPa | 0.1 | | | |
| Proof Pressure | MPa | 1.6 | | | |
| Ambient Temperature | °C | -10 to 60 (however, no freezing) | | | |
| Port Size | | Rc1/4 | | | Rc3/8 |
| Standard Stroke | mm | 50, 75, 100, 125, 150 | | | |
| Operating Piston Speed | mm/s | 50 to 500 | 50 to 400 | 50 to 300 | |
| Cushion | | With Air Cushion on Head Side | | | |
| Effective Air Cushion Length | mm | 13.5 | | | 15.4 |
| Lubrication | | Not Required (When lubricating, use Turbine Oil ISO VG32) | | | |
| Mounting Style | | Double Clevis | | | |

Note: Please use within the allowable absorbed energy. Please refer to the table below (Cushion Characteristic Table).

Stroke

| Bore Size (mm) | Standard Stroke (mm) | Maximum Stroke (mm) | Min Stroke (mm) | Minimum stroke with switch (mm) |
|----------------|-----------------------|---------------------|-----------------|---------------------------------|
| ø40 | 50, 75, 100, 125, 150 | 150 | 50 | 50 |
| ø50 | | | | |
| ø63 | | | | |
| ø80 | | | | |

Note: Strokes other than Standard Strokes are custom products.

Cushion Characteristic Table

| Bore Size (mm) | Effective Cushion Length (mm) | Allowable Absorption Energy (J) | |
|----------------|-------------------------------|---------------------------------|-----------------|
| | | With cushion | Without cushion |
| ø40 | 13.5 | 5.14 | 0.137 |
| ø50 | 13.5 | 6.41 | 0.137 |
| ø63 | 13.5 | 11.37 | 0.205 |
| ø80 | 15.4 | 25.4 | 0.360 |

●Air Cushion

The purpose of the air cushion is to absorb the kinetic energy held by the piston by utilizing the compressibility of air, and to prevent the piston and cover from forcefully striking at the stroke end. Therefore, the air cushion is not for operating the piston speed at low speed near the stroke end. Note that the table on the left shows the kinetic energy that can be absorbed by the air cushion. If the kinetic energy exceeds this value or if you want to avoid bouncing due to air compressibility, please consider a separate shock absorber.

$$\text{Kinetic Energy (J)} = \frac{1}{2} \times \text{Weight (kg)} \times \{\text{Speed (m/s)}\}^2$$

Cylinder Weight

(Unit: kg)

| Bore Size (mm) | Product weight per stroke = 0 mm | Added weight per stroke = 100 mm | Accessory Weight | | | | | Switch Weight | Switch Mounting Bracket Weight | | Mounting tie rod weight at stroke = 0 mm | Added weight per S = 10 mm of mounting tie rod | |
|----------------|----------------------------------|----------------------------------|------------------|----------------|----------------|----------------------------|-------------|---|--------------------------------|---------------|--|--|--------|
| | | | Axial foot | Double Knuckle | Single knuckle | Limit switch mounting base | Dog fitting | | T Type | | | | H type |
| | | | | | | | | | Tie rod mounting | Band mounting | | | |
| ø40 | 0.75 | 0.34 | 0.21 | 0.37 | 0.27 | 0.18 | 0.08 | Refer to the Weight listed in the Switch Specifications on P. 1457. | 0.021 | 0.007 | 0.024 | 0.019 | 0.003 |
| ø50 | 0.82 | 0.36 | | | | | | | | 0.008 | | | |
| ø63 | 1.03 | 0.39 | | | | | | | | 0.009 | | | |
| ø80 | 2.80 | 0.60 | - | 0.95 | - | - | 0.010 | | 0.030 | | | | |

(Example) Product weight of CAC4-G4-A-40-150-Y

- Stroke for 0 mm 0.75 kg
- Additional weight for 150 mm stroke..... $0.34 \times \frac{150}{100} = 0.51$ kg
- Accessory weight (rod clevis) 0.37 kg
- Product weight $0.75+0.51+0.37=1.63$ kg

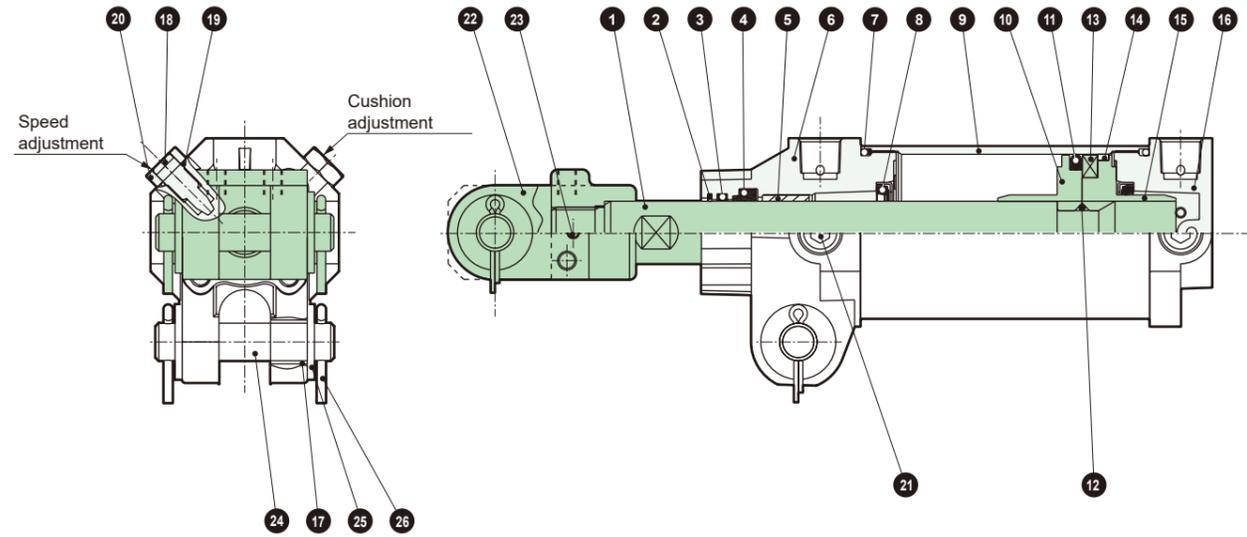
Theoretical Thrust Table

(Unit: N)

| Bore Size (mm) | Operating Direction | Operating Pressure MPa | | | | | | | | | | | |
|----------------|---------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|
| | | 0.1 | 0.15 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | |
| ø40 | Push | 1.26×10 ² | 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 | 1.01×10 ³ | 1.13×10 ³ | 1.26×10 ³ | |
| | Pull | 94.2 | 1.41×10 ² | 1.88×10 ² | 2.83×10 ² | 3.77×10 ² | 4.71×10 ² | 5.65×10 ² | 6.60×10 ² | 7.54×10 ² | 8.48×10 ² | 9.42×10 ² | |
| ø50 | Push | 1.96×10 ² | 2.95×10 ² | 3.93×10 ² | 5.89×10 ² | 7.85×10 ² | 9.82×10 ² | 1.18×10 ³ | 1.37×10 ³ | 1.57×10 ³ | 1.77×10 ³ | 1.96×10 ³ | |
| | Pull | 1.65×10 ² | 2.47×10 ² | 3.30×10 ² | 4.95×10 ² | 6.60×10 ² | 8.25×10 ² | 9.90×10 ² | 1.15×10 ³ | 1.32×10 ³ | 1.48×10 ³ | 1.65×10 ³ | |
| ø63 | Push | 3.12×10 ² | 4.68×10 ² | 6.23×10 ² | 9.35×10 ² | 1.25×10 ³ | 1.56×10 ³ | 1.87×10 ³ | 2.18×10 ³ | 2.49×10 ³ | 2.81×10 ³ | 3.12×10 ³ | |
| | Pull | 2.80×10 ² | 4.20×10 ² | 5.61×10 ² | 8.41×10 ² | 1.12×10 ³ | 1.40×10 ³ | 1.68×10 ³ | 1.96×10 ³ | 2.24×10 ³ | 2.52×10 ³ | 2.80×10 ³ | |
| ø80 | Push | 5.03×10 ² | 7.54×10 ² | 1.01×10 ³ | 1.51×10 ³ | 2.01×10 ³ | 2.51×10 ³ | 3.02×10 ³ | 3.52×10 ³ | 4.02×10 ³ | 4.52×10 ³ | 5.03×10 ³ | |
| | Pull | 4.54×10 ² | 6.80×10 ² | 9.07×10 ² | 1.36×10 ³ | 1.81×10 ³ | 2.27×10 ³ | 2.72×10 ³ | 3.17×10 ³ | 3.63×10 ³ | 4.08×10 ³ | 4.54×10 ³ | |

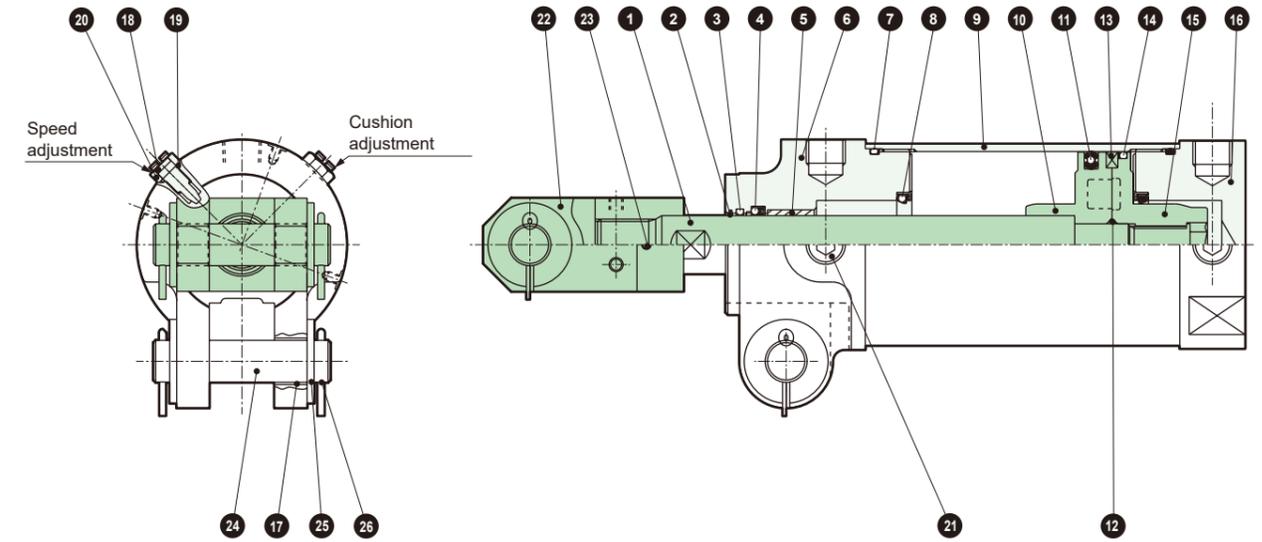
Dimensional Drawings

Same as Double Acting/single rod type. Please refer to P. 748 to 751. Also, for accessories, please refer to P. 752, P. 753.



| Part No. | Part Name | Material | Remarks | Part No. | Part Name | Material | Remarks |
|----------|-----------------|-----------------------|--------------------------------|----------|--------------------------------------|---------------------------|--|
| 1 | Piston Rod | Steel | Industrial Hard Chrome Plating | 15 | Piston (H) | Aluminum Alloy | |
| 2 | Metal Scraper | Copper Alloy | | 16 | Head Cover | Aluminum Alloy | Chromate |
| 3 | Lube keeper | Special rubber | | 17 | Bushing for clevis | Steel, Copper | |
| 4 | Rod Packing | Nitrile Rubber | | 18 | Needle | Copper Alloy | |
| 5 | Bushing | Copper Alloy | | 19 | Needle Gasket | Nitrile Rubber | |
| 6 | Rod Cover | Aluminum Alloy | Chromate | 20 | Hexagon Nut | Steel | Chromate |
| 7 | Cylinder Gasket | Nitrile Rubber | | 21 | Hexagon Socket head countersunk plug | Steel | Black Oxide |
| 8 | Cushion Packing | Nitrile Rubber, Steel | Chromate | 22 | Double Knuckle | Y: Cast Iron Y1: Steel | Y: Manganese Phosphate Y1: Black Oxide finish |
| 9 | Cylinder Tube | Aluminum Alloy | Hard Anodized | 23 | Spring pin | Steel | Black Oxide |
| 10 | Piston (R) | Aluminum Alloy | | 24 | Clevis pin | Steel | Black Oxide |
| 11 | Piston Packing | Nitrile Rubber | | 25 | Plain Washer | Steel | Chromate |
| 12 | Piston Gasket | Nitrile Rubber | | 26 | Split pin | Steel | Chromate |
| 13 | Magnet | Plastic | | | | | |
| 14 | Wear Ring | Polyacetal | | | | | |

Note: 8 cushion packing is attached to the rod side only when both sides are cushioned.



| Part No. | Part Name | Material | Remarks | Part No. | Part Name | Material | Remarks |
|----------|-----------------|-----------------------|--------------------------------|----------|--------------------------------------|----------------|-------------|
| 1 | Piston Rod | Steel | Industrial Hard Chrome Plating | 14 | Wear Ring | Polyacetal | |
| 2 | Metal Scraper | Copper Alloy | | 15 | Piston (H) | Aluminum Alloy | |
| 3 | Lube keeper | Special rubber | | 16 | Head Cover | Aluminum Alloy | Chromate |
| 4 | Rod Packing | Nitrile Rubber | | 17 | Bushing for clevis | Steel, Copper | |
| 5 | Bushing | Copper Alloy | | 18 | Needle | Steel | Chromate |
| 6 | Rod Cover | Aluminum Alloy | Chromate | 19 | Needle Gasket | Nitrile Rubber | |
| 7 | Cylinder Gasket | Nitrile Rubber | | 20 | Hexagon Nut | Steel | Chromate |
| 8 | Cushion Packing | Nitrile Rubber, Steel | Chromate | 21 | Hexagon Socket head countersunk plug | Steel | Black Oxide |
| 9 | Cylinder Tube | Aluminum Alloy | Hard Anodized | 22 | Double Knuckle | Steel | Black Oxide |
| 10 | Piston (R) | Aluminum Alloy | | 23 | Spring pin | Steel | Black Oxide |
| 11 | Piston Packing | Nitrile Rubber | | 24 | Clevis pin | Steel | Black Oxide |
| 12 | Piston Gasket | Nitrile Rubber | | 25 | Plain Washer | Steel | Chromate |
| 13 | Magnet | Plastic | | 26 | Split pin | Steel | Chromate |

Note: 8 cushion packing is attached to the rod side only when both sides are cushioned.

Clamping

CAC4

UCAC2

CAC-N

UCAC-N

RCS2

RCC2

PCC

Cylinder Switch

Ending

Clamping

CAC4

UCAC2

CAC-N

UCAC-N

RCS2

RCC2

PCC

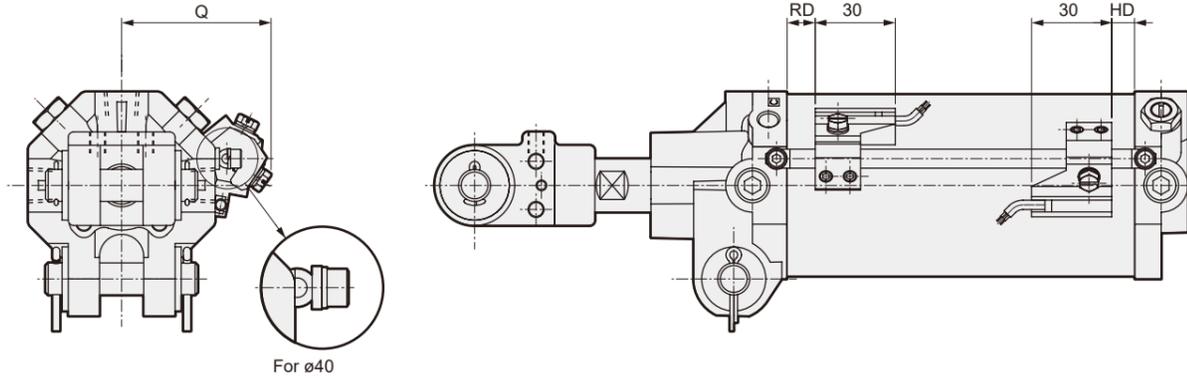
Cylinder Switch

Ending

CAC4 Series External Dimensions Diagram with Switch

- T0H/V, T5H/V, T2H/V, T3H/V, T3PH/V, T2H/VR3, T2WH/V, T3WH/V, T2WLH/V

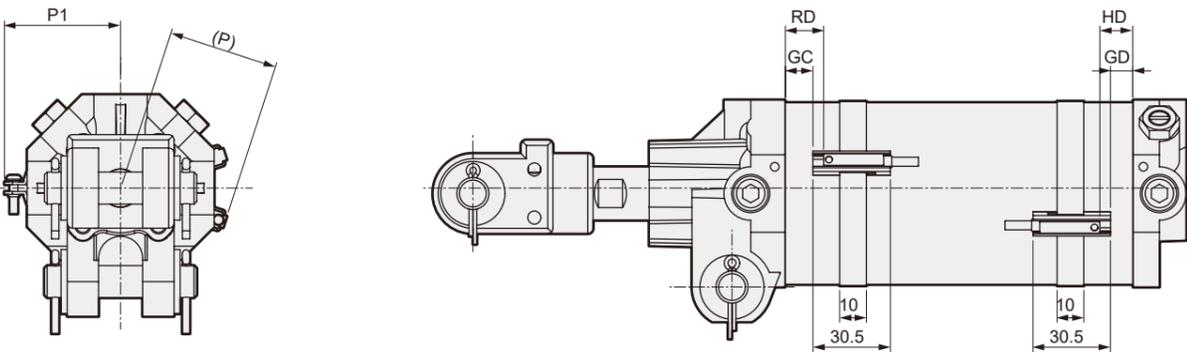
Tie rod mounting
 • CAC4, CAC4-G4



| Code | Q | T0, T5, T2, T3, T3P, T2□R3 | | T2W, T3W, T2WL | |
|----------------|------|----------------------------|-----|----------------|------|
| Bore Size (mm) | | RD | HD | RD | HD |
| ø40 | 46 | 10.5 | 8.5 | 13.5 | 11.5 |
| ø50 | 50.5 | 10.5 | 8.5 | 13.5 | 11.5 |
| ø63 | 56 | 10.5 | 8.5 | 13.5 | 11.5 |
| ø80 | 65 | 26 | 19 | 28.5 | 21.5 |

Note: For switch mountability, refer to the model number display method for each variation.

Band mounting
 • CAC4, CAC4-G4



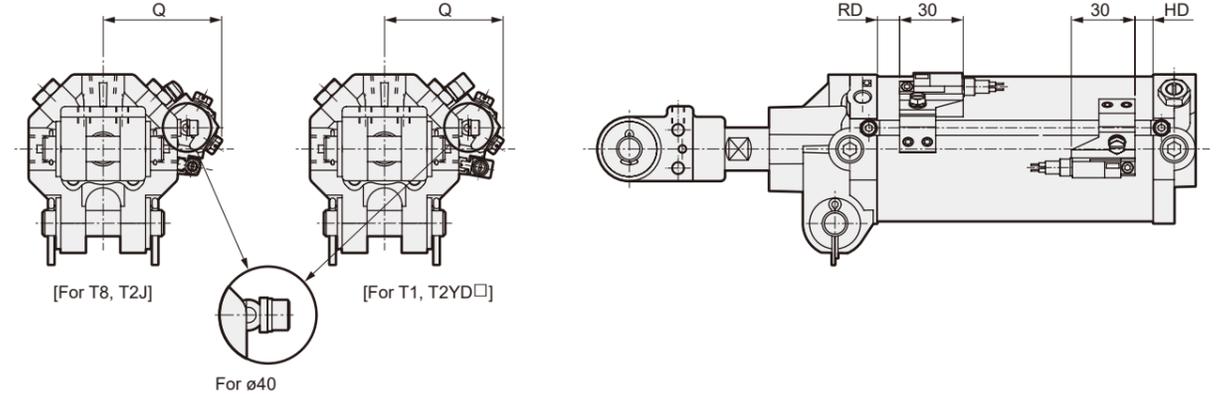
| Code | P | P1 | T0, T5, T2, T3, T3P, T2□R3 | | | | T2W, T3W, T2WL | | | |
|----------------|------|------|----------------------------|-----|------|-----|----------------|-----|------|------|
| Bore Size (mm) | | | GC | GD | RD | HD | GC | GD | RD | HD |
| ø40 | 30 | 31 | 6.5 | 4.5 | 10.5 | 8.5 | 9.5 | 7.5 | 13.5 | 11.5 |
| ø50 | 34.5 | 36 | 6.5 | 4.5 | 10.5 | 8.5 | 9.5 | 7.5 | 13.5 | 11.5 |
| ø63 | 41 | 42.5 | 6.5 | 4.5 | 10.5 | 8.5 | 9.5 | 7.5 | 13.5 | 11.5 |
| ø80 | 50 | 52 | 19 | 12 | 26 | 19 | 22 | 15 | 28.5 | 21.5 |

Note: For switch mountability, refer to the model number display method for each variation.

CAC4 Series External Dimensions Diagram with Switch

- T8H/V, T2JH/V, T1H/V, T2YD, T2YDT, T2YDU

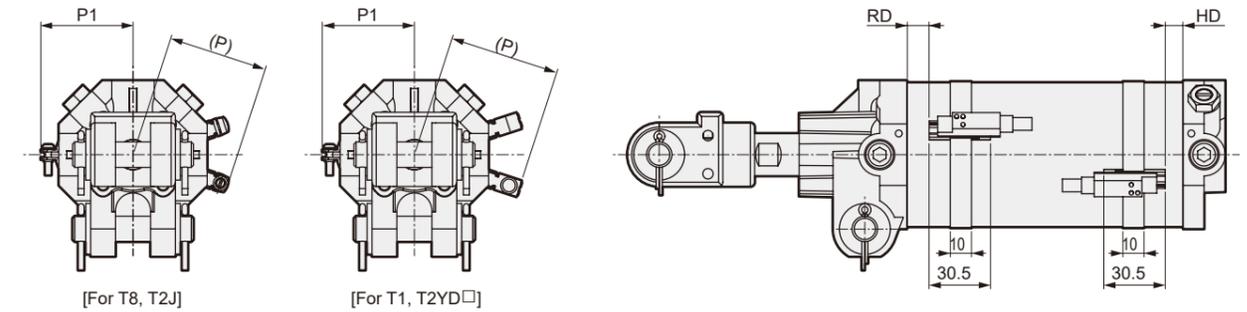
Tie rod mounting
 • CAC4, CAC4-G4



| Code | Q | T8 | | T2J | | T1, T2YD, T2YDT, T2YDU | |
|----------------|------|------|------|------|-----|------------------------|-----|
| Bore Size (mm) | | RD | HD | RD | HD | RD | HD |
| ø40 | 46 | 5.5 | 3.5 | 10.5 | 8.5 | 10.5 | 8.5 |
| ø50 | 50.5 | 5.5 | 3.5 | 10.5 | 8.5 | 10.5 | 8.5 |
| ø63 | 56 | 5.5 | 3.5 | 10.5 | 8.5 | 10.5 | 8.5 |
| ø80 | 65 | 20.5 | 13.5 | 26 | 19 | 26 | 19 |

Note: For switch mountability, refer to the model number display method for each variation.

Band mounting
 • CAC4, CAC4-G4



| Code | T8 | | | | T2J | | | | T1, T2YD, T2YDT, T2YDU | | | |
|----------------|------|------|------|------|------|------|------|-----|------------------------|------|------|-----|
| Bore Size (mm) | P | P1 | RD | HD | P | P1 | RD | HD | P | P1 | RD | HD |
| ø40 | 36 | 31 | 5.5 | 3.5 | 36 | 31 | 10.5 | 8.5 | 41 | 31 | 10.5 | 8.5 |
| ø50 | 40 | 36 | 5.5 | 3.5 | 40 | 36 | 10.5 | 8.5 | 45.5 | 36 | 10.5 | 8.5 |
| ø63 | 46.5 | 42.5 | 5.5 | 3.5 | 46.5 | 42.5 | 10.5 | 8.5 | 52 | 42.5 | 10.5 | 8.5 |
| ø80 | 56 | 52 | 20.5 | 13.5 | 56 | 52 | 26 | 19 | 61 | 52 | 26 | 19 |

Note: For switch mountability, refer to the model number display method for each variation.

Clamping

Clamping

CAC4

CAC4

UCAC2

UCAC2

CAC-N

CAC-N

UCAC-N

UCAC-N

RCS2

RCS2

RCC2

RCC2

PCC

PCC

Cylinder Switch

Cylinder Switch

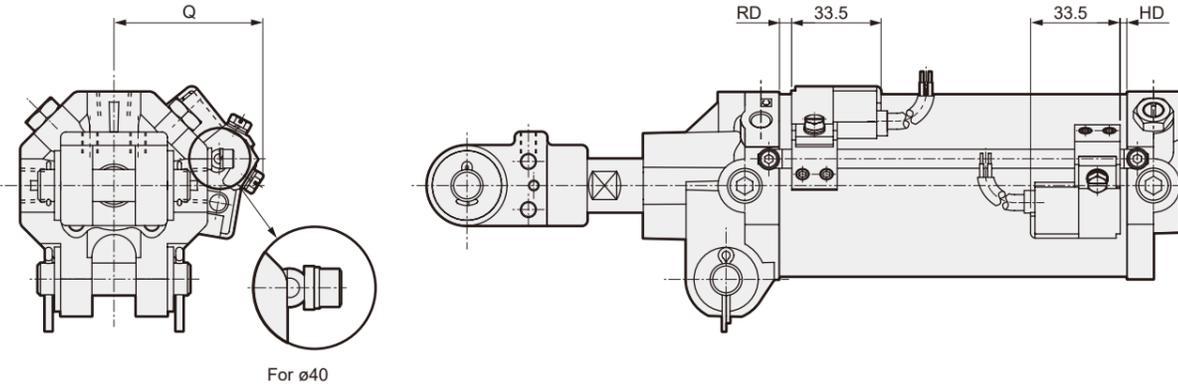
Ending

Ending

CAC4 Series External Dimensions Diagram with Switch

●H0, H0Y

Tie rod mounting
• CAC4-L2, CAC4-G4L2



| Code | Q | H0, H0Y | | |
|--------|-----|---------|------|------|
| | | RD | HD | |
| UCAC2 | ø40 | 46 | 4.5 | 2.5 |
| CAC-N | ø50 | 50.5 | 4.5 | 2.5 |
| | ø63 | 56 | 4.5 | 2.5 |
| UCAC-N | ø80 | 65 | 19.5 | 12.5 |

Note: For switch mountability, refer to the model number display method for each variation.

RCS2
RCC2
PCC



Pneumatic Components

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: Clamp cylinder CAC4 Series

Design / Selection

1. Weld spatter resistant type CAC4-G4

Warning

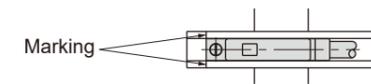
■ This cylinder series has improved durability in a spatter scattering atmosphere compared to general-purpose cylinders. However, please note that durability may be inferior to general type cylinders when used in other atmospheres.

During Use

1. Common (T type switch: Band mounting method)

Warning

- 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 T□C, T2J, T2Y, T3Y, tighten with a 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. Note that the marking on the switch rail is set to the switch maximum sensitivity position, which is the switch mounting position of the external dimensions. If the switch type changes or the band is moved, the maximum sensitivity position changes, so adjust the position each time.

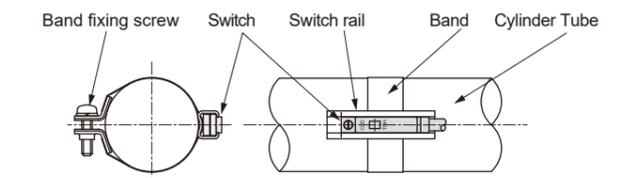


■ When Moving the Switch Position in the Circumferential Direction

- Loosen the band fixing screw, move the switch rail circumferentially, and tighten it at the specified position. The tightening torque for the band fixing screw 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 for the band fixing screw is 0.6 to 0.8 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](#).

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