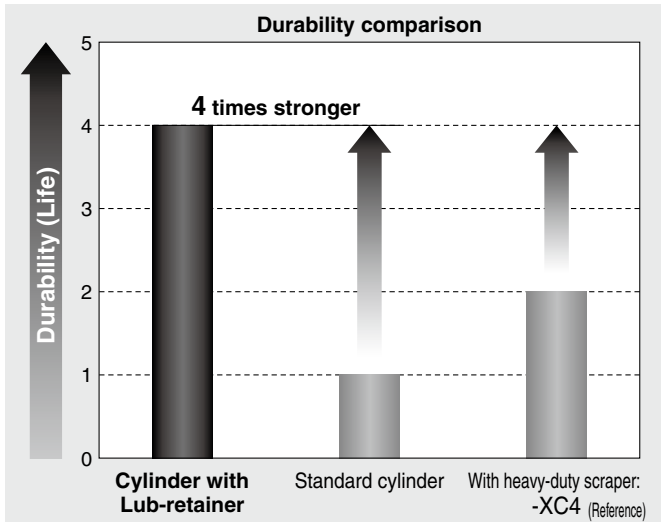


Applicable to operation in micro-powder (20 to 100 μm)/general environments Cylinder with Stable Lubrication Function (Lub-retainer)

Durability is **4 times stronger** than the standard model in micro-powder environments.

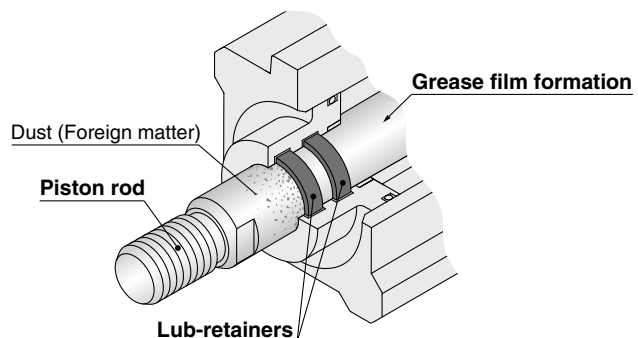


Comparison with the standard model and model with heavy-duty scraper (-XC4) (Relative ratio of B10)

* The durability test is conducted in accordance with SMC test conditions.

As the Lub-retainer is mounted at two locations,

- Grease film is formed on the piston rod surface to improve the durability.
- Entry of dust and foreign matter is prevented.



● The number of operating cycles can be improved even in general environments.

Applicable Cylinders

| | | | |
|-----------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------|
| Air Cylinder Series CM2 ø20 to ø40 RoHS | Air Cylinder Series CG1 ø20 to ø100 RoHS | Air Cylinder Series CA2 ø40 to ø100 RoHS | Compact Cylinder/Compact Type Series CQS ø20 and ø25 RoHS |
| Compact Cylinder Series CQ2 ø32 to ø100 RoHS | Air Slide Table Series MXQ□A ø6 to ø25 RoHS | Compact Guide Cylinder Series MGP ø20 to ø100 RoHS | Dual Rod Cylinder/Compact Type Series CXSJ ø6 to ø32 RoHS |
| | | | Dual Rod Cylinder Series CXS ø6 to ø32 RoHS |

Series **CM2/CG1/CA2/CQS/CQ2/MXQ/MGP/CXSJ/CXS**

Air Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CM2

∅20, ∅25, ∅32, ∅40



How to Order

CM2 C 20 M - 50 [] Z - N V

With auto switch CDM2 C 20 M - 50 [] Z - N V - M9BW []

With auto switch
(Built-in magnet)

Mounting

| | |
|----|----------------------------|
| B | Basic (Double-side bossed) |
| L | Axial foot |
| F | Rod flange |
| G | Head flange |
| C | Single clevis |
| D | Double clevis |
| T | Head trunnion |
| U | Rod trunnion |
| E | Integral clevis |
| V | Integral clevis (90°) |
| BZ | Boss-cut/Basic |
| FZ | Boss-cut/Rod flange |
| UZ | Boss-cut/Rod trunnion |

Bore size

| | |
|----|-------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |

With stable lubrication function (Lub-retainer)

Cylinder stroke

| Bore size (mm) | Standard stroke (mm) | Maximum stroke (mm) |
|----------------|------------------------------------------|---------------------|
| 20 | 25, 50, 75, 100, 125, 150, 200, 250, 300 | 1000 |
| 25 | 25, 50, 75, 100, 125, 150, 200, 250, 300 | |
| 32 | 25, 50, 75, 100, 125, 150, 200, 250, 300 | |
| 40 | 25, 50, 75, 100, 125, 150, 200, 250, 300 | |

* Manufacture of intermediate strokes in 1 mm intervals is possible.

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Applicable auto switch is the same as for the standard model.

Rod end bracket

| | |
|-----|----------------------|
| Nil | None |
| V | Single knuckle joint |
| W | Double knuckle joint |

* No bracket is provided for the female rod end type.
* A knuckle joint pin is not provided with the single knuckle joint.
* Rod end bracket is shipped together with the product, but not assembled.

Pivot bracket

| | |
|-----|------------------------------------------------------------------------|
| Nil | None |
| N | Pivot bracket is shipped together with the product, but not assembled. |

* Only for C, T, U, E, V, UZ mounting types.
* Pivot bracket is shipped together with the product, but not assembled.

Rod end thread

| | |
|-----|----------------|
| Nil | Male rod end |
| F | Female rod end |

Specifications

| Bore size (mm) | 20 | 25 | 32 | 40 |
|----------------------------|----------------------------|----|----|----|
| Minimum operating pressure | 0.1 MPa | | | |
| Other specifications | Same as the standard model | | | |
| Dimensions | Same as the standard model | | | |

Air Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

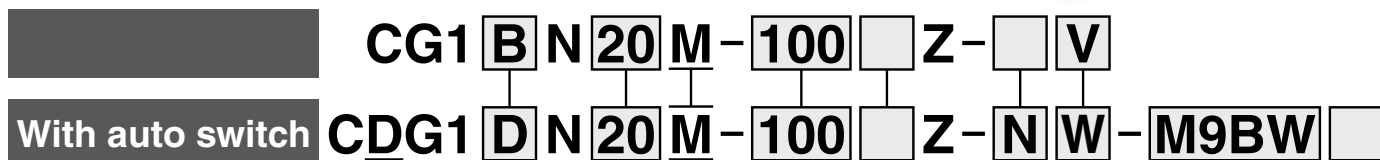
Series CG1

RoHS

∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100



How to Order



With auto switch
(Built-in magnet)

Mounting

| | |
|-----------|-------------------------------------------------|
| B | Basic |
| Z* | Basic (without trunnion mounting female thread) |
| L | Axial foot |
| F | Rod flange |
| G | Head flange |
| T* | Head trunnion |
| D | Clevis |

- * Not available for ∅80 or ∅100.
- * Mounting bracket is shipped together with the product, but not assembled.
- * The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

Bore size

| | |
|------------|--------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |
| 80 | 80 mm |
| 100 | 100 mm |

With stable lubrication function (Lub-retainer)

Specifications

| | | | | | | | | |
|----------------------------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Bore size (mm) | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
| Minimum operating pressure | 0.1 MPa | | | | | | | |
| Other specifications | Same as the standard model | | | | | | | |
| Dimensions | See below | | | | | | | |

Rod end thread

| | |
|------------|----------------|
| Nil | Male rod end |
| F | Female rod end |

Pivot bracket

| | |
|------------|------------------------------------------------------------------------|
| Nil | None |
| N | Pivot bracket is shipped together with the product, but not assembled. |

- * Only for D, T mounting types
- * Pivot bracket is shipped together with the product, but not assembled.

Rod end bracket

| | |
|------------|----------------------|
| Nil | None |
| V | Single knuckle joint |
| W | Double knuckle joint |

- * No bracket is provided for the female rod end type.
- * Rod end bracket is shipped together with the product, but not assembled.
- * A knuckle joint pin is not provided with the single knuckle joint.

Cylinder stroke

| Bore size (mm) | Standard stroke (mm) ^{Note)} |
|----------------|------------------------------------------|
| 20 | 25, 50, 75, 100, 125, 150, 200 |
| 25 | 25, 50, 75, 100, 125, 150, 200, 250, 300 |
| 32 | |
| 40 | |
| 50, 63 | |
| 80 | |
| 100 | |

Note) Manufacture of intermediate strokes in 1 mm intervals is possible. (Spacers are not used.) Produced upon receipt of order.

Number of auto switches

| | |
|------------|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

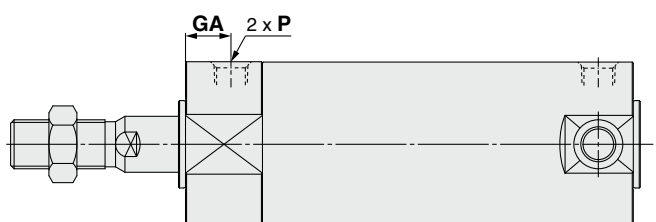
Auto switch

| | |
|------------|---------------------|
| Nil | Without auto switch |
|------------|---------------------|

* Applicable auto switch is the same as for the standard model.

Dimensions (Dimensions other than those shown below are the same as the standard model.)

* No trunnion mounting female thread is provided on the rod side. (For B: Basic)



| Bore size | GA | P |
|------------|------|----------|
| 20 | 14 | M5 x 0.8 |
| 25 | 13 | M5 x 0.8 |
| 32 | (12) | (Rc 1/8) |
| 40 | (13) | (Rc 1/8) |
| 50 | (14) | (Rc 1/4) |
| 63 | (14) | (Rc 1/4) |
| 80 | (20) | (Rc 3/8) |
| 100 | (20) | (Rc 1/2) |

* When female thread is used, use a washer, etc. to prevent the contact part at the rod end from being deformed depending on the material of the workpiece.

(): Same as the standard model.

* The mounting dimensions of the mounting bracket are the same as the standard model.

Air Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CA2

ø40, ø50, ø63, ø80, ø100



How to Order

CA2 L 50 M - 100 Z - [] [] - []

With auto switch CDA2 D 50 M - 100 Z - N W - M9BW [] - []

With auto switch (Built-in magnet)

Mounting

| | |
|---|-----------------|
| B | Basic |
| L | Axial foot |
| F | Rod flange |
| G | Head flange |
| C | Single clevis |
| D | Double clevis |
| T | Center trunnion |

Bore size

| | |
|-----|--------|
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |
| 80 | 80 mm |
| 100 | 100 mm |

With stable lubrication function (Lub-retainer)

Cylinder stroke

| Bore size (mm) | Standard stroke (mm)* | Long stroke (L and F only) (mm) |
|----------------|-----------------------------------------------------------------------------|---------------------------------|
| 40 | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500 | 800 |
| 50, 63 | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600 | 1200 |
| 80, 100 | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700 | ø80 : 1400 ø100: 1500 |

Bracket 1

| | |
|-----|-----------------|
| Nil | Without bracket |
| N | Pivot bracket |

* Only for D, T mounting types
* Pivot bracket is shipped together with the product, but not assembled.

Bracket 2

| | |
|-----|----------------------|
| Nil | Without bracket |
| V | Single knuckle joint |
| W | Double knuckle joint |

* A knuckle joint pin is not provided with the single knuckle joint.
* Rod end bracket is shipped together with the product, but not assembled.

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| 3 | 3 pcs. |
| n | n pcs. |

Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Applicable auto switch is the same as for the standard model.

Made to Order

| Symbol | Specifications |
|--------|-------------------------------------------------------------------|
| -XA□ | Change of rod end shape |
| -XC7 | Tie-rod, cushion valve, tie-rod nut, etc. made of stainless steel |
| -XC14 | Change of trunnion bracket mounting position |
| -XC15 | Change of tie-rod length |

* Intermediate strokes not listed above are produced upon receipt of order.

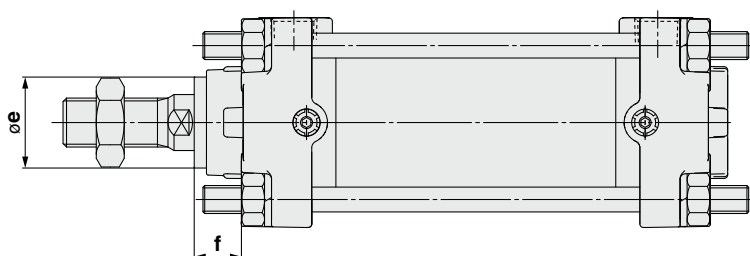
Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) CDA2L40M-100Z

Specifications

| Bore size (mm) | 40 | 50 | 63 | 80 | 100 |
|----------------------------|----------------------------|----|----|----|-----|
| Minimum operating pressure | 0.1 MPa | | | | |
| Other specifications | Same as the standard model | | | | |
| Dimensions | See below | | | | |

Dimensions (Dimensions other than those shown below are the same as the standard model.)



| Bore size | øe | f |
|-----------|----|------|
| 40 | 26 | 13.5 |
| 50 | 30 | 12.5 |
| 63 | 30 | 12.5 |
| 80 | 36 | 16.5 |
| 100 | 42 | 16 |

* The mounting dimensions of the mounting bracket are the same as the standard model.

Compact Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CQS

ø20, ø25



How to Order

With auto switch **CDQS B 20 M - 30 D** - **M9BW**

With auto switch
(Built-in magnet)

Mounting

| | |
|-----------|-------------------------------------------------|
| B | Through-hole/Both ends tapped common (Standard) |
| L | Foot |
| LC | Compact foot |
| F | Rod side flange |
| G | Head side flange |
| D | Double clevis |

* Mounting brackets are shipped together, (but not assembled).

Bore size

| | |
|-----------|-------|
| 20 | 20 mm |
| 25 | 25 mm |

With stable lubrication function (Lub-retainer)

Cylinder stroke

| Bore size (mm) | Standard stroke (mm) |
|----------------|----------------------|
| 20 | 5, 10, 15, 20, 25, |
| 25 | 30, 35, 40, 45, 50 |

Number of auto switches

| | |
|------------|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

Auto switch

| | |
|------------|---------------------|
| Nil | Without auto switch |
|------------|---------------------|

* Applicable auto switch is the same as for the standard model.

Body option

<Standard stroke>

| | |
|------------|---------------------|
| Nil | Standard |
| M | Rod end male thread |
| F | Boss on head end |

* Combination of body options (FM) is available.

Action

| | |
|----------|---------------|
| D | Double acting |
|----------|---------------|

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

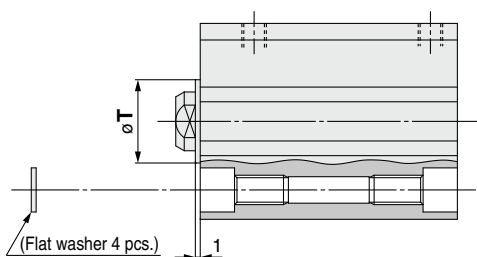
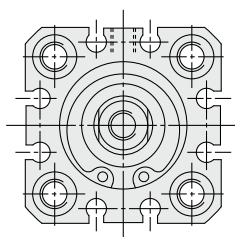
(Example) CDQSL25M-30D

Specifications

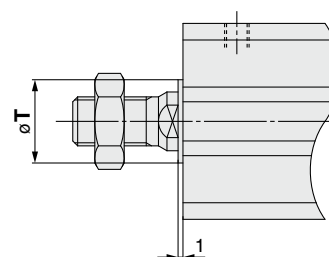
| Bore size (mm) | 20 | 25 |
|----------------------------|----------------------------|----|
| Minimum operating pressure | 0.1 MPa | |
| Other specifications | Same as the standard model | |
| Dimensions | See below | |

Dimensions

(Dimensions other than those shown below are the same as the standard model.)



DM: Rod end male thread



| Bore size | Standard stroke | T (mm) |
|-----------|------------------------|--------|
| 20 | 5, 10, 15, 20, 25, 30, | 15 |
| 25 | 35, 40, 45, 50 | 18 |

* The mounting dimensions of the mounting bracket are the same as the standard model.

Mounting Bracket Part No.

| Bore size (mm) | Foot | Compact foot | Flange |
|----------------|-----------|--------------|-----------|
| 20 | CQS-LM020 | CQS-LCM020 | CQS-FM020 |
| 25 | CQS-LM025 | CQS-LCM025 | CQS-FM025 |

* The double clevis type is the same as the standard model.

* When ordering foot and compact foot brackets, order 2 pieces per cylinder.

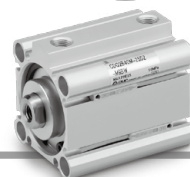
Compact Cylinder with Stable Lubrication Function (Lub-retainer)

Standard: Double Acting, Single Rod

Series CQ2

∅32, ∅40, ∅50, ∅63, ∅80, ∅100

RoHS



How to Order

With auto switch **CDQ2** **B** **32** **M** - **30** **D** **M** **Z** - **L** **W** - **M9BW**

With auto switch
(Built-in magnet)

Mounting

| | |
|-----------|-------------------------|
| B | Through-hole (Standard) |
| A | Both ends tapped |
| L | Foot |
| LC | Compact foot |
| F | Rod flange |
| G | Head flange |
| D | Double clevis |

* Mounting brackets are shipped together, (but not assembled).

Bore size

| | |
|------------|--------|
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |
| 80 | 80 mm |
| 100 | 100 mm |

Number of auto switches

| | |
|------------|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

Auto switch

| | |
|------------|---------------------|
| Nil | Without auto switch |
|------------|---------------------|

* Applicable auto switch is the same as for the standard model.

With stable lubrication function (Lub-retainer)

Cylinder stroke

| Bore size (mm) | Standard stroke (mm) |
|------------------|------------------------------------------------|
| 32, 40 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100 |
| 50 to 100 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100 |

Action

| | |
|----------|---------------|
| D | Double acting |
|----------|---------------|

Body option

| | |
|------------|----------------------------------|
| Nil | Standard (Rod end female thread) |
| F | With boss on head end |
| M | Rod end male thread |

* Combination of body options (FM) is available.

Mounting bolt

| | |
|------------|------------------|
| Nil | None |
| L | Shipped together |

* Mounting bolt is shipped together only when the mounting bracket is "B".

* Mounting bolt size is the same as the standard model.

* Mounting bolt is shipped together.

Rod end bracket

| | |
|------------|-----------------------------|
| Nil | None |
| D | Simple joint A type + Joint |
| E | Simple joint B type + Joint |
| V | Single knuckle joint |
| W | Double knuckle joint |

* The single knuckle joint and double knuckle joint cannot be mounted for the rod end female thread.

* A knuckle joint pin is not provided with the single knuckle joint.

* The simple joint A and B types cannot be mounted for the rod end male thread.

* Rod end bracket is shipped together with the product, but not assembled.

Auto switch mounting groove

| | | |
|----------|-------------|------------|
| Z | ∅32 to ∅100 | 4 surfaces |
|----------|-------------|------------|

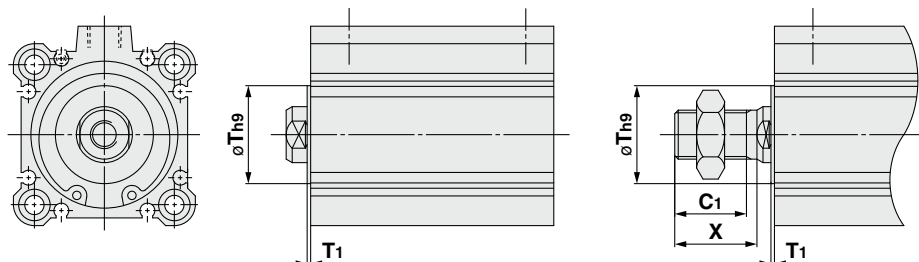
Specifications

| Bore size (mm) | 32 | 40 | 50 | 63 | 80 | 100 |
|----------------------------|----------------------------|----|----|----|----|-----|
| Minimum operating pressure | 0.1 MPa | | | | | |
| Other specifications | Same as the standard model | | | | | |
| Dimensions | See below | | | | | |

Dimensions (Dimensions other than those shown below are the same as the standard model.)

∅32 to ∅100

DMZ: Rod end male thread



| Bore size | T | T1 | C1 | X |
|------------|----|----|------|------|
| 32 | 22 | 1 | 20.5 | 23.5 |
| 40 | 28 | 1 | 20.5 | 23.5 |
| 50 | 35 | 2 | 24 | 26.5 |
| 63 | 35 | 2 | 24 | 26.5 |
| 80 | — | — | 32.5 | 35.5 |
| 100 | — | — | 32.5 | 35.5 |

* The mounting dimensions of the mounting bracket are the same as the standard model.

Air Slide Table with Stable Lubrication Function (Lub-retainer) Double Ported Type

Series **MXQ** □ **A**

∅6, ∅8, ∅12, ∅16, ∅20, ∅25



How to Order

MXQ 12 A M - 30 ZA - M9BW □

With stable lubrication function (Lub-retainer)

● Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

● Auto switch

| | |
|-----|---------------------|
| Nil | Without auto switch |
|-----|---------------------|

* Refer to Best Pneumatics No. 3 for applicable auto switches.

● Adjuster option combinations

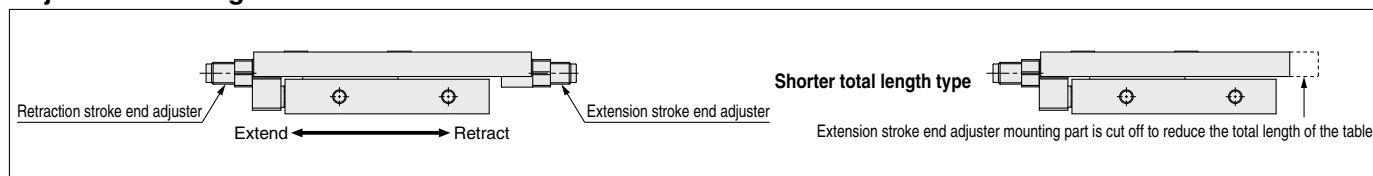
| Bore size | Body option: Double ported type | Standard stroke (mm) |
|-----------|------------------------------------|---------------------------------------|
| | A | |
| 6 | | 10, 20, 30, 40, 50 |
| 8 | | 10, 20, 30, 40, 50, 75 |
| 12 | | 10, 20, 30, 40, 50, 75, 100 |
| 16 | | 10, 20, 30, 40, 50, 75, 100, 125 |
| 20 | | 10, 20, 30, 40, 50, 75, 100, 125, 150 |
| 25 | | 10, 20, 30, 40, 50, 75, 100, 125, 150 |

| Symbol | Adjuster type | Adjuster mounting position ^{Note 1)} | |
|--------|------------------------------------------------------|-----------------------------------------------|-----------------------|
| | | Extension stroke end | Retraction stroke end |
| Z | Without adjuster | | |
| ZA | Metal stopper with bumper (Not available for ∅6) | ● | ● |
| ZB | | ● | |
| ZC | | | ● |
| ZD | | ● | ● |
| ZE | Rubber stopper | ● | |
| ZF | | | ● |
| ZG | Shock absorber (RJ) (Not available for ∅6 and ∅8) | ● | ● |
| ZH | | ● | |
| ZJ | | | ● |
| ZN | Without adjuster | / | |
| ZP | Rubber stopper | | ● |
| ZQ | Shock absorber (RJ) (Not available for ∅6 and ∅8) | | ● |
| ZS | Metal stopper with bumper (Not available for ∅6) | | ● |

Note 1) ● Shipped together with the product, but not assembled. Without any symbols for the adjuster mounting position, the adjuster can be mounted afterward.

Note 2) Extension stroke end adjuster mounting holes are removed to reduce the total length. As the total length is reduced by removing the extension stroke end adjuster mounting holes, an extension stroke end adjuster cannot be mounted afterward. (Retraction stroke end adjuster can be mounted afterward.)

Adjuster Mounting Position



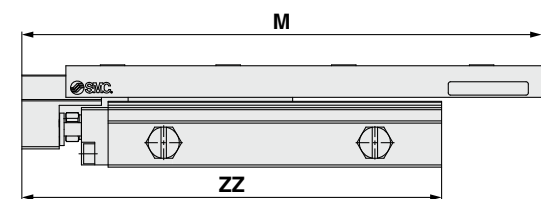
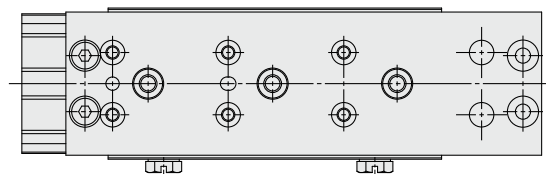
Specifications

| Bore size (mm) | | 6 | 8 | 12 | 16 | 20 | 25 |
|----------------------------|---------------------------|----------------------------|---|----|----|----|----|
| Minimum operating pressure | Without adjuster | 0.15 MPa | | | | | |
| | Rubber stopper | | | | | | |
| | Shock absorber | | | | | | |
| | Metal stopper with bumper | | | | | | |
| Other specifications | | Same as the standard model | | | | | |
| Dimensions | | Refer to next page. | | | | | |

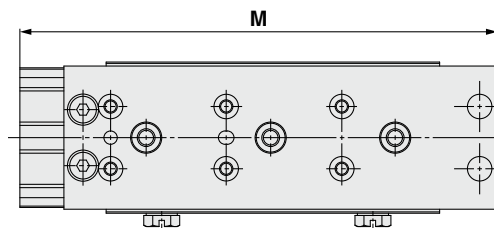
Series MXQ□A

Dimensions (Dimensions other than those shown below are the same as the standard model.)

MXQ6AM

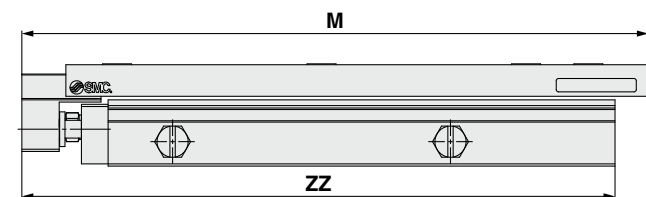
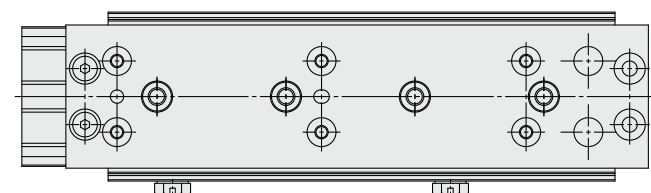


Shorter total length type

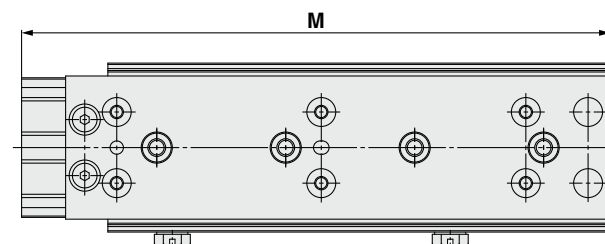


| Model | M | | ZZ |
|-------------------|---------------|---------------------------|-------|
| | Standard type | Shorter total length type | |
| MXQ6AM-10Z | 74 | 64.5 | 69.5 |
| MXQ6AM-20Z | 84 | 74.5 | 69.5 |
| MXQ6AM-30Z | 105 | 95.5 | 82.5 |
| MXQ6AM-40Z | 117 | 107.4 | 94.5 |
| MXQ6AM-50Z | 127 | 117.5 | 104.5 |

MXQ8AM



Shorter total length type



| Model | M | | ZZ |
|-------------------|---------------|---------------------------|-------|
| | Standard type | Shorter total length type | |
| MXQ8AM-10Z | 78 | 69.5 | 70.5 |
| MXQ8AM-20Z | 88 | 79.5 | 80.5 |
| MXQ8AM-30Z | 98 | 89.5 | 90.5 |
| MXQ8AM-40Z | 114 | 105.5 | 106.5 |
| MXQ8AM-50Z | 141 | 132.5 | 133.5 |
| MXQ8AM-75Z | 166 | 157.5 | 135.5 |

The MXQ12AM/MXQ16AM/MXQ20AM/MXQ25AM dimensions are the same as the standard model.

Compact Guide Cylinder with Stable Lubrication Function (Lube-retainer)

Series *MGP*

RoHS

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



How to Order

Compact guide cylinder **MGP M 25** **M** - **30** **Z** - **M9BW**

Compact guide cylinder

Bearing type

| | |
|----------|---------------|
| M | Slide bearing |
| L | Ball bushing |

Bore size

| | |
|------------|--------|
| 20 | 20 mm |
| 25 | 25 mm |
| 32 | 32 mm |
| 40 | 40 mm |
| 50 | 50 mm |
| 63 | 63 mm |
| 80 | 80 mm |
| 100 | 100 mm |

Port thread type

| | |
|------------|-----|
| Nil | Rc |
| TN | NPT |
| TF | G |

With stable lubrication function (Lube-retainer)

Number of auto switches

| | |
|------------|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

Auto switch

| | |
|------------|------------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|------------|------------------------------------------|

* Applicable auto switch is the same as for the standard model.

Cylinder stroke

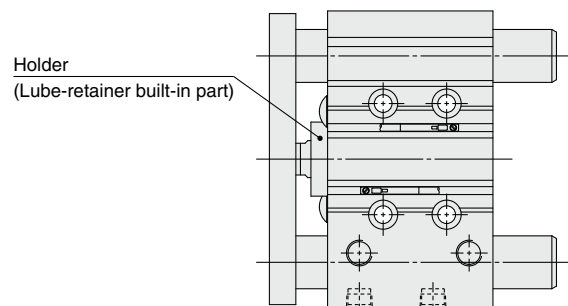
| Bore size (mm) | Standard stroke (mm) |
|------------------|-----------------------------------------------------------------|
| 20, 25 | 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400 |
| 32 to 100 | 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400 |

* Intermediate strokes are the same as standard model.

Specifications

| | | | | | | | | |
|----------------------------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Bore size (mm) | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
| Minimum operating pressure | 0.15 MPa | | | | | | | |
| Other specifications | Same as the standard model | | | | | | | |
| Dimensions | See right side | | | | | | | |

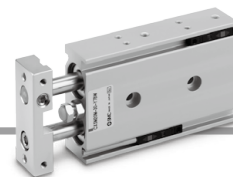
Dimensions (Dimensions are the same as the standard model.)



With Stable Lubrication Function (Lube-retainer) Dual Rod Cylinder/Compact Type

CXSJ Series

∅6, ∅10, ∅15, ∅20, ∅25, ∅32



How to Order

CXSJ **M** **20** **M** - **100** - **M9BW** **□**

Compact type

Bearing type

| | |
|----------|----------------------|
| M | Slide bearing |
| L | Ball bushing bearing |

With stable lubrication function (Lube-retainer)

| Bore size [mm] | Standard stroke [mm] |
|--------------------------------|-----------------------------|
| 6 | 10, 20, 30, 40, 50 |
| 10 | 10, 20, 30, 40, 50, 75 |
| 15, 20 25, 32 | 10, 20, 30, 40, 50, 75, 100 |

Number of auto switches

| | |
|------------|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

Auto switch

| | |
|------------|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

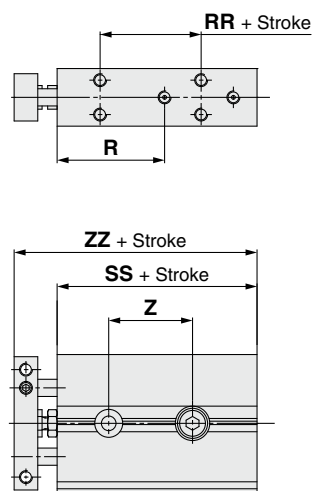
* Applicable auto switch is the same as that of the standard model.

Specifications

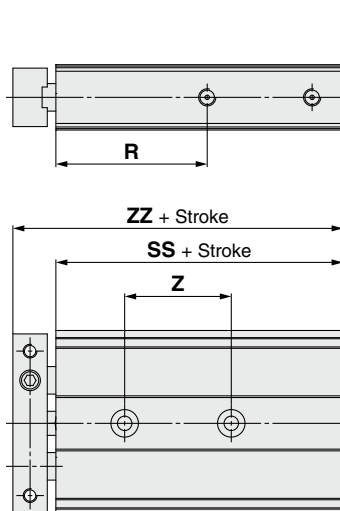
| Bore size [mm] | 6 | 10 | 15 | 20 | 25 | 32 |
|----------------------------|----------------------------|----------|----------------|---------|----------------|----|
| Minimum operating pressure | 0.2 MPa | 0.15 MPa | | 0.1 MPa | | |
| Piston speed | 50 to 800 mm/s | | 50 to 700 mm/s | | 50 to 600 mm/s | |
| Other specifications | Same as the standard model | | | | | |
| Dimensions | See below. | | | | | |

Dimensions (Dimensions other than those shown below are the same as those of the standard model.)

CXSJ□6, 10M



CXSJ□15 to 32M



| Model | R | RR | SS | ZZ |
|-----------------|------|------|------|-------|
| CXSJ□6M | 25 | 13.5 | 36.5 | 46.5 |
| CXSJ□10M | 33.5 | 17 | 49.5 | 61 |
| CXSJ□15M | 44 | — | 63.5 | 76 |
| CXSJ□20M | 51 | — | 73.5 | 90 |
| CXSJ□25M | 52 | — | 76.5 | 93 |
| CXSJ□32M | 66 | — | 90.5 | 110.5 |

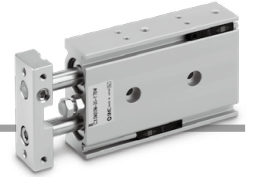
| Symbol | Z | | | | | | |
|-----------------|------|------|------|------|------|----|-----|
| Stroke | 10 | 20 | 30 | 40 | 50 | 75 | 100 |
| CXSJ□6M | 19.5 | 29.5 | 39.5 | 49.5 | 59.5 | — | — |
| CXSJ□10M | 23 | 33 | 43 | 53 | 63 | 88 | — |
| CXSJ□15M | 31 | — | — | 41 | — | 51 | 61 |
| CXSJ□20M | 36 | — | — | 46 | — | — | 66 |
| CXSJ□25M | 37 | — | — | 47 | — | — | 67 |
| CXSJ□32M | 50 | — | — | 60 | — | — | 80 |

Dual Rod Cylinder with Stable Lubrication Function (Lub-retainer)

Series CXS

∅6, ∅10, ∅15, ∅20, ∅25, ∅32

RoHS



How to Order

• With stable lubrication function (Lub-retainer)

CXS **M** **20** **M** - **100** - **Y7BW** **□**

• Bearing type

| | |
|----------|----------------------|
| M | Slide bearing |
| L | Ball bushing bearing |

• Bore size/Standard stroke

| Bore size (mm) | Standard stroke (mm) |
|-----------------------|-------------------------------------------------------------|
| 6 | 10, 20, 30, 40, 50 |
| 10 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75 |
| 15, 20, 25, 32 | 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100 |

• Number of auto switches

| | |
|------------|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

• Auto switch

| | |
|------------|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|------------|---------------------------------------|

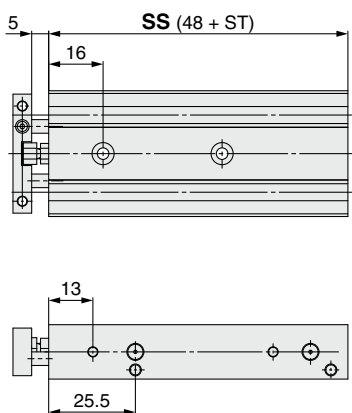
* Applicable auto switch is the same as for the standard model.

Specifications

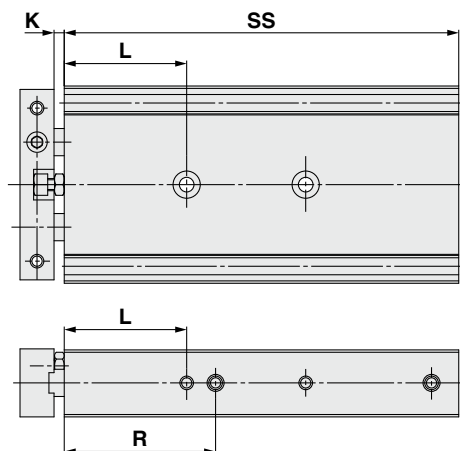
| Bore size (mm) | 6 | 10 | 15 | 20 | 25 | 32 |
|----------------------------|----------------------------|----------------|----------------|----|----------------|----|
| Minimum operating pressure | 0.2 MPa | 0.15 MPa | | | 0.1 MPa | |
| Piston speed | 50 to 300 mm/s | 50 to 800 mm/s | 50 to 700 mm/s | | 50 to 600 mm/s | |
| Other specifications | Same as the standard model | | | | | |
| Dimensions | See below | | | | | |

Dimensions (Dimensions other than those shown below are the same as the standard model.)

CXS□6



CXS□10 to 32



(mm)

| Model | K | L | R |
|---------------|---|----|------|
| CXS□10 | 4 | 25 | 35 |
| CXS□15 | 3 | 36 | 44.5 |
| CXS□20 | 6 | 36 | 50.5 |
| CXS□25 | 6 | 36 | 52 |
| CXS□32 | 4 | 40 | 66 |

(mm)

| Symbol | SS | | | | | | | | | | | | | | | |
|---------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Model | Stroke | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 75 | 80 | 90 | 100 |
| CXS□10 | | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 | 120 | 130 | 135 | — | — | — |
| CXS□15 | | 76 | 81 | 86 | 91 | 96 | 101 | 106 | 111 | 116 | 126 | 136 | 141 | 146 | 156 | 166 |
| CXS□20 | | 86 | 91 | 96 | 101 | 106 | 111 | 116 | 121 | 126 | 136 | 146 | 151 | 156 | 166 | 176 |
| CXS□25 | | 88 | 93 | 98 | 103 | 108 | 113 | 118 | 123 | 128 | 138 | 148 | 153 | 158 | 168 | 178 |
| CXS□32 | | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 152 | 162 | 167 | 172 | 182 | 192 |

With Stable Lubrication Function (Lube-retainer)

Dual Rod Cylinder/ Compact Type

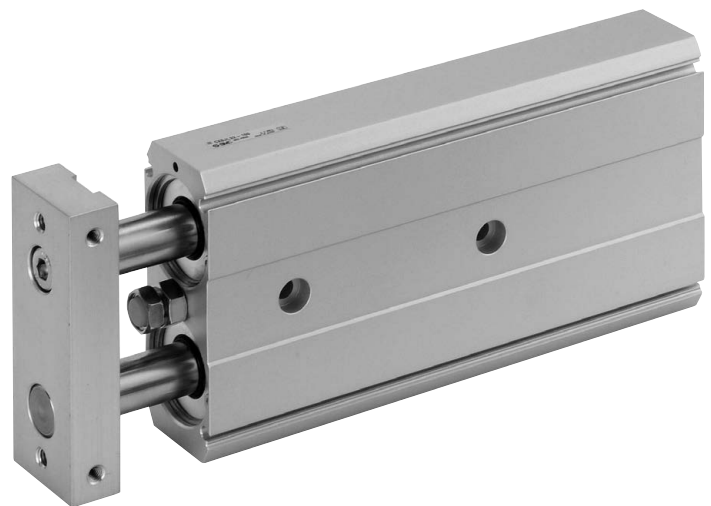
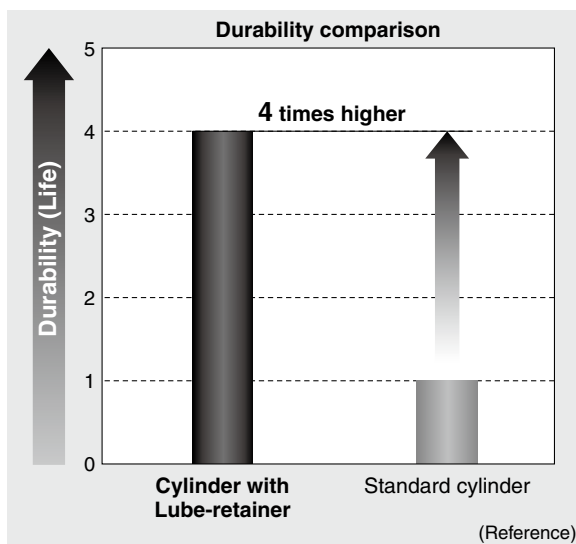
ø6, ø10, ø15, ø20, ø25, ø32

RoHS

4 times the durability of

10 to 100 μm

the standard model in **micro-powder environments**



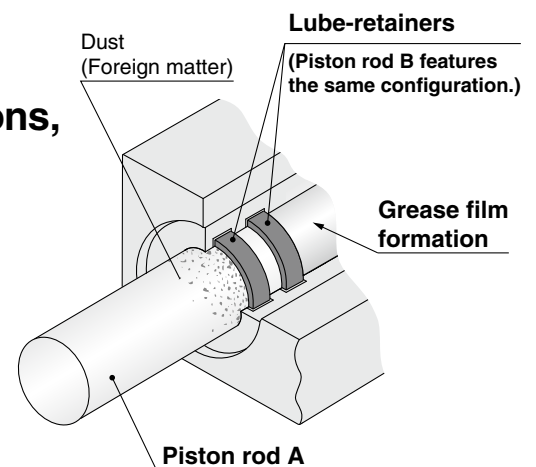
Comparison with the standard model
(Relative ratio of B₁₀)

* This durability test was conducted in accordance with SMC test conditions.

As Lube-retainers are mounted in two locations, grease film is formed on the piston rod surface, improving durability.

This construction allows for the prevention of the entry of dust and foreign matter.

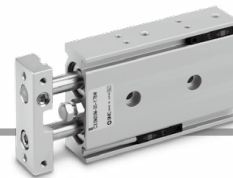
The number of operating cycles can be improved even in general environments.



CXSJ Series

SMC

18-E690



How to Order

CXS J M 20 M - 100 - M9BW

Compact type

Bearing type

| | |
|---|----------------------|
| M | Slide bearing |
| L | Ball bushing bearing |

With stable lubrication function (Lube-retainer)

Number of auto switches

| | |
|-----|--------|
| Nil | 2 pcs. |
| S | 1 pc. |
| n | n pcs. |

Auto switch

| | |
|-----|---------------------------------------|
| Nil | Without auto switch (Built-in magnet) |
|-----|---------------------------------------|

* Applicable auto switch is the same as that of the standard model.

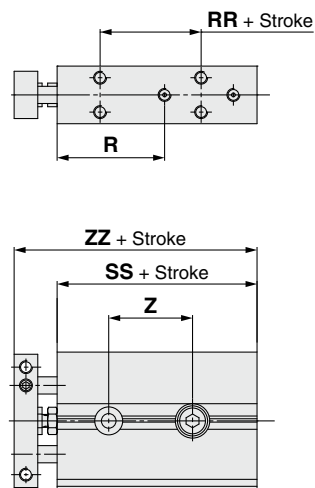
| | |
|------------------|-----------------------------|
| ● Bore size [mm] | ● Standard stroke [mm] |
| 6 | 10, 20, 30, 40, 50 |
| 10 | 10, 20, 30, 40, 50, 75 |
| 15, 20 | 10, 20, 30, 40, 50, 75, 100 |
| 25, 32 | |

Specifications

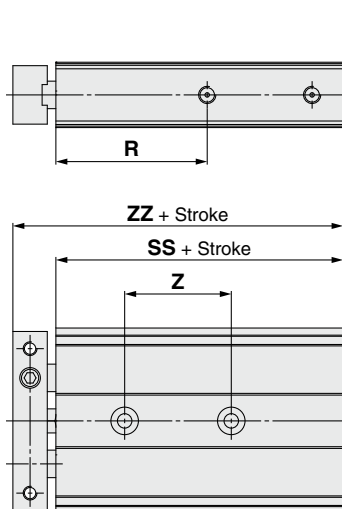
| | | | | | | |
|----------------------------|----------------------------|----------|----------------|---------|----------------|----|
| Bore size [mm] | 6 | 10 | 15 | 20 | 25 | 32 |
| Minimum operating pressure | 0.2 MPa | 0.15 MPa | | 0.1 MPa | | |
| Piston speed | 50 to 800 mm/s | | 50 to 700 mm/s | | 50 to 600 mm/s | |
| Other specifications | Same as the standard model | | | | | |
| Dimensions | See below. | | | | | |

Dimensions (Dimensions other than those shown below are the same as those of the standard model.)

CXSJ□6, 10M



CXSJ□15 to 32M



| Model | R | RR | SS | ZZ |
|----------|------|------|------|-------|
| CXSJ□6M | 25 | 13.5 | 36.5 | 46.5 |
| CXSJ□10M | 33.5 | 17 | 49.5 | 61 |
| CXSJ□15M | 44 | — | 63.5 | 76 |
| CXSJ□20M | 51 | — | 73.5 | 90 |
| CXSJ□25M | 52 | — | 76.5 | 93 |
| CXSJ□32M | 66 | — | 90.5 | 110.5 |

| Model | Symbol Stroke | Z [mm] | | | | | | |
|----------|------------------|--------|------|------|------|------|----|-----|
| | | 10 | 20 | 30 | 40 | 50 | 75 | 100 |
| CXSJ□6M | | 19.5 | 29.5 | 39.5 | 49.5 | 59.5 | — | — |
| CXSJ□10M | | 23 | 33 | 43 | 53 | 63 | 88 | — |
| CXSJ□15M | | 31 | | | 41 | | 51 | 61 |
| CXSJ□20M | | 36 | | | 46 | | 66 | |
| CXSJ□25M | | 37 | | | 47 | | 67 | |
| CXSJ□32M | | 50 | | | 60 | | 80 | |

⚠ Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.

Made to Order Common Specifications: -XC93□: With Greater Water Resistance + Stable Lubrication Function



66 With Greater Water Resistance + Stable Lubrication Function

Symbol
-XC93

- 5 times stronger against water (liquids) than the standard model
- Equipped with the greater water resistant scraper (Fluororubber). The Lube-retainer creates grease coating around the piston rod, which improves lubrication.
- Stainless steel can be selected for the piston rod and rod end nut.

Applicable Series

| Series | Description | Model | Action | Note | Vol. no. (for std model) |
|--------|---------------------|-------|------------------------------|------------------------------------------------|--------------------------|
| RHC | High power cylinder | RHC | Double acting, Single rod | Applicable bore size: ø32, ø40 Rc port only | ②-3 From P. 351 |

How to Order

Standard model no.

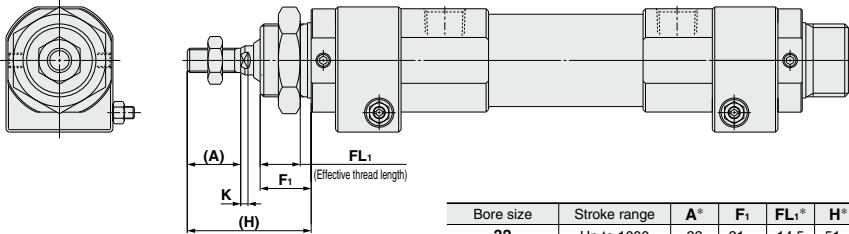
-XC93 □

With greater water resistance + stable lubrication function

● Piston rod,
Rod end nut material

| | |
|-----|-------------------------|
| NII | Standard (Carbon steel) |
| S | Stainless steel |

Dimensions (Dimensions other than below are the same as standard type.)



| Bore size | Stroke range | A* | F ₁ | FL ₁ * | H* | K | (mm) |
|-----------|--------------|----|----------------|-------------------|------|---|------|
| 32 | Up to 1000 | 22 | 21 | 14.5 | 51 | 3 | |
| 40 | Up to 1000 | 24 | 22.5 | 16.5 | 54.5 | 3 | |

*: Same as the standard model.