

Metal Seal

Compact Low Friction Cylinder

Series *MQQ*

ø10, ø16, ø20, ø25, ø30, ø40

How to Order

MQQ T B 10 10 D

Compact low friction specification

| | |
|----------|---|
| T | Standard type |
| L | Lateral load resisting type (Built-in ball bushing) |

Type

Mounting

| | |
|-------------------------------|---|
| B | Through hole & Double end tapped (Standard) |
| L | Foot type |
| F | Front flange type |
| G | Rear flange type |
| D <small>Note)</small> | Double clevis type |

Note) Available with the MQQL□ only.
* Mounting brackets are included when shipped, but unassembled.

Bore size

| | |
|-----------|-------|
| 10 | 10 mm |
| 16 | 16 mm |
| 20 | 20 mm |
| 25 | 25 mm |
| 30 | 30 mm |
| 40 | 40 mm |

Body option

| | |
|-------------------------------|----------------------------------|
| Nil | Standard (Rod end female thread) |
| M <small>Note)</small> | Rod end male thread |

Note) A rod end thread adapter is attached.
*A rod end thread adapter is shipped being assembled.

Action

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

Cylinder stroke

| Bore size (mm) | Standard stroke (mm) |
|----------------|-----------------------------|
| 10 | 10, 20, 30, 40 |
| 16 | 10, 20, 30, 40, 50, 60 |
| 20 | 10, 20, 30, 40, 50, 60 |
| 25 | 10, 20, 30, 40, 50, 75, 100 |
| 30 | 10, 20, 30, 40, 50, 75, 100 |
| 40 | 10, 20, 30, 40, 50, 75, 100 |

* Strokes are available in 1 mm increments by installing a spacer in standard stroke cylinders.

Port thread type

| | | |
|------------|----------|------------|
| Nil | M thread | ø10 to ø20 |
| | Rc | |
| TN | NPT | ø25 to ø40 |
| TF | G | |

* The MQQ series is not auto switch capable.

Mounting Bracket Part No.

| Bore size (mm) | Foot <small>Note 1)</small> | Flange | Double clevis | Rod end thread adapter (with nut) |
|----------------|-----------------------------|----------|---------------|-----------------------------------|
| 10 | CQS-L016 | CQS-F016 | CQS-D016 | MQ10-M |
| 16 | CQS-L020 | CQS-F020 | CQS-D020 | MQ16-M |
| 20 | CQS-L025 | CQS-F025 | CQS-D025 | MQ20-M |
| 25 | MQ-L032 | MQ-F032 | MQ-D032 | MQ25-M |
| 30 | MQ-L040 | MQ-F040 | MQ-D040 | MQ28-M |
| 40 | CQ-L050 | CQ-F050 | MQ-D050 | |

Note 1) When ordering a foot bracket, order 2 pcs. for each cylinder.

Note 2) The following parts are included with a bracket respectively.

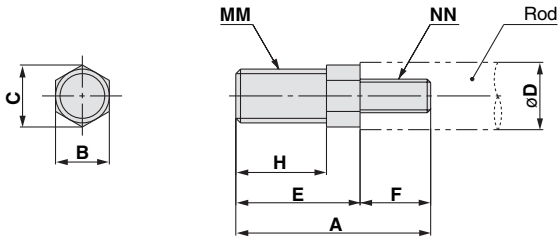
Foot, Flange Body mounting bolts

Double clevis Clevis pin, C type snap ring for shaft, Body mounting bolts

Series MQQ

Accessory Dimensions

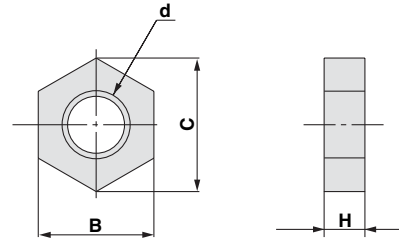
Rod end thread adapter



| Part no. | Applicable bore size (mm) | A | B | C | D | E | F |
|---------------|---------------------------|------|----|------|----|------|----|
| MQ10-M | 10 | 20.5 | 8 | 9.2 | 6 | 15.5 | 5 |
| MQ16-M | 16 | 22.5 | 8 | 9.2 | 8 | 16.5 | 6 |
| MQ20-M | 20 | 24.5 | 8 | 9.2 | 10 | 18.5 | 6 |
| MQ25-M | 25 | 33.5 | 10 | 11.5 | 12 | 22.5 | 11 |
| MQ28-M | 30, 40 | 40.5 | 14 | 16 | 16 | 28.5 | 12 |

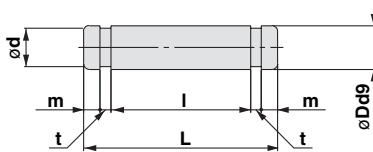
| Part no. | Applicable bore size (mm) | H | MM | NN |
|---------------|---------------------------|------|------------|-----------|
| MQ10-M | 10 | 10.5 | M5 x 0.8 | M3 x 0.5 |
| MQ16-M | 16 | 11.5 | M6 x 1.0 | M4 x 0.7 |
| MQ20-M | 20 | 13.5 | M8 x 1.25 | M5 x 0.8 |
| MQ25-M | 25 | 16.5 | M10 x 1.25 | M6 x 1.0 |
| MQ28-M | 30, 40 | 22.5 | M14 x 1.5 | M8 x 1.25 |

Rod end nut



| Part no. | Applicable bore size (mm) | B | C | d | H |
|-----------------|---------------------------|----|------|------------|---|
| NTJ-015A | 10 | 8 | 9.2 | M5 x 0.8 | 4 |
| NT-015A | 16 | 10 | 11.5 | M6 x 1.0 | 5 |
| NT-02 | 20 | 13 | 15 | M8 x 1.25 | 5 |
| NT-03 | 25 | 17 | 19.6 | M10 x 1.25 | 6 |
| NT-04 | 30, 40 | 22 | 25.4 | M14 x 1.5 | 8 |

Clevis pin



| Part no. | Applicable bore size (mm) | Dd9 | L | d | l | m | t | Applicable snap ring |
|----------------|---------------------------|------------------------|------|------|------|------|------|----------------------|
| IY-J015 | 10 | $5_{-0.030}^{-0.040}$ | 16.6 | 4.8 | 12.2 | 1.5 | 0.7 | C type 5 for shaft |
| IY-G02 | 16 | $8_{-0.040}^{-0.076}$ | 21 | 7.6 | 16.2 | 1.5 | 0.9 | C type 8 for shaft |
| IY-G03 | 20 | $10_{-0.040}^{-0.076}$ | 25.6 | 9.6 | 20.2 | 1.55 | 1.15 | C type 10 for shaft |
| IY-G04 | 25, 30 | $10_{-0.040}^{-0.076}$ | 41.6 | 9.6 | 36.2 | 1.55 | 1.15 | C type 10 for shaft |
| IY-G05 | 40 | $14_{-0.050}^{-0.093}$ | 50.6 | 13.4 | 44.2 | 2.05 | 1.15 | C type 14 for shaft |