



Features



Video



Special spec



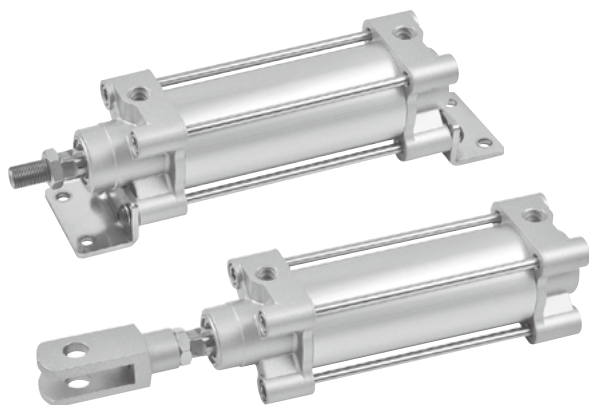
Rod end shape



Technical data



Caution for safety  
(Read before installing)



### Features

#### ■ Non lubrication

Special housing and bushing enable self lubrication of piston rod.

#### ■ High quality long service life

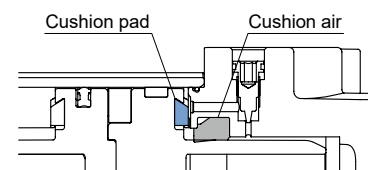
Hard anodised aluminium cylinder tubes offer high resistance to corrosion and low internal friction.

#### ■ Automatic air cushioning

Pneumatic cushioning at both ends without adjusting.

#### ■ Low noise level

Add cushion pad to reduce impact sound and vibration.



#### ■ ISO 15552 standard specification

Conforms to ISO 15552 specification enabling worldwide interchangeability.

#### ■ Cylinder mountings

Available with comprehensive internationally recognised range of fixed and flexible mountings.

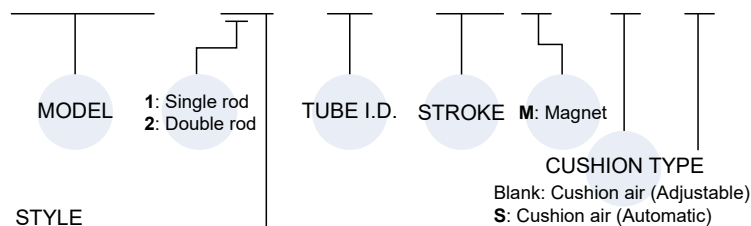
### Table for standard stroke

| Tube I.D. | Stroke (mm)                                                                        | Max. stroke(mm) |             |
|-----------|------------------------------------------------------------------------------------|-----------------|-------------|
|           |                                                                                    | Style 11        | Style 21/27 |
| ø32,40    | 50, 75, 100, 125, 150, 175,<br>200, 250, 300, 350, 400, 450,<br>500, 600, 700, 800 | 1800            | 850         |
| ø50,63    |                                                                                    | 2000            | 950         |
| ø80,100   |                                                                                    | 2500            | 1200        |

\* Please contact us if the stroke is out of specification.

### Order example

MCQV3 — 11 — 63 — 100 M — S — T



#### STYLE

| Code | Symbol                                                                              | Description                                                                          |
|------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1 1  |  | Double acting / Male thread                                                          |
| 2 1  |  | Double rod / Male thread                                                             |
| 2 7  |  | Double rod / Adjustable male thread<br>Please mark "adjustable stroke" at order list |

\* Rc or NPT thread are also available, please contact us.

### Specification

| Model                    | MCQV3                                                                                                                                                                                                                                                                                             |       |        |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|
| Tube I.D. (mm)           | 32,40                                                                                                                                                                                                                                                                                             | 50,63 | 80,100 |
| Medium                   | Air                                                                                                                                                                                                                                                                                               |       |        |
| Operating pressure range | 0.05~1 MPa                                                                                                                                                                                                                                                                                        |       |        |
| Proof pressure           | 1.5 MPa                                                                                                                                                                                                                                                                                           |       |        |
| Ambient temperature      | -5~+60°C (No freezing)                                                                                                                                                                                                                                                                            |       |        |
| Available speed range    | 50~500 mm/sec                                                                                                                                                                                                                                                                                     |       |        |
| Sensor switch            | RDC(V), RQC(V)  , RDT, RQT  , RCA  |       |        |
| Sensor switch holder     | R*C(V)                                                                                                                                                                                                                                                                                            | DT7-1 | DT7-2  |
|                          | R*T                                                                                                                                                                                                                                                                                               | DT-1  | DT-2   |
|                          | RCA                                                                                                                                                                                                                                                                                               | HV1   | HV2    |
|                          |                                                                                                                                                                                                                                                                                                   | HV3   |        |

T: With magnet, TA/TB is assembled

\* Tube, piston rod and tie rod are extended, and an extra piston is added.

## ■ Accessories & Connector

|                       | Accessories                                                                       |                                                                                   |            |                                                                                   |            |                                                                                     |                           |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|---------------------------|
| Code                  | LB<br>(Purchase 2 pcs)                                                            | CA                                                                                | CA2        | CB                                                                                | CB2        | CDB<br>(Purchase CB+PIN)                                                            | CDB2<br>(Purchase CB+PIN) |
| Mounting<br>Tube I.D. |  |  |            |  |            |  |                           |
| ø32                   | LB-Q2-32                                                                          | CA-Q2-32                                                                          | CA2-Q2-32  | CB-Q2-32                                                                          | CB2-Q2-32  | CDB-Q2-32                                                                           | CDB2-Q2-32                |
| ø40                   | LB-Q2-40                                                                          | CA-Q2-40                                                                          | CA2-Q2-40  | CB-Q2-40                                                                          | CB2-Q2-40  | CDB-Q2-40                                                                           | CDB2-Q2-40                |
| ø50                   | LB-Q2-50                                                                          | CA-Q2-50                                                                          | CA2-Q2-50  | CB-Q2-50                                                                          | CB2-Q2-50  | CDB-Q2-50                                                                           | CDB2-Q2-50                |
| ø63                   | LB-Q2-63                                                                          | CA-Q2-63                                                                          | CA2-Q2-63  | CB-Q2-63                                                                          | CB2-Q2-63  | CDB-Q2-63                                                                           | CDB2-Q2-63                |
| ø80                   | LB-Q2-80                                                                          | CA-Q2-80                                                                          | CA2-Q2-80  | CB-Q2-80                                                                          | CB2-Q2-80  | CDB-Q2-80                                                                           | CDB2-Q2-80                |
| ø100                  | LB-Q2-100                                                                         | CA-Q2-100                                                                         | CA2-Q2-100 | CB-Q2-100                                                                         | CB2-Q2-100 | CDB-Q2-100                                                                          | CDB2-Q2-100               |

| Accessories           |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Rod nut                                                                             |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Code                  | FAC                                                                               | FBC                                                                               | FAC2                                                                              | FBC2                                                                              | NUT                                                                                 |
| Mounting<br>Tube I.D. |  |  |  |  |  |
| ø32                   | FAC-Q2-32                                                                         |                                                                                   | FAC2-Q2-32                                                                        |                                                                                   | NUT-M10x1.25x5Hx17B                                                                 |
| ø40                   | FAC-Q2-40                                                                         |                                                                                   | FAC2-Q2-40                                                                        |                                                                                   | NUT-M12x1.25x6Hx19B                                                                 |
| ø50                   | FAC-Q2-50                                                                         |                                                                                   | FAC2-Q2-50                                                                        |                                                                                   | NUT-M16x1.5x8Hx24B                                                                  |
| ø63                   | FAC-Q2-63                                                                         |                                                                                   | FAC2-Q2-63                                                                        |                                                                                   |                                                                                     |
| ø80                   | FAC-Q2-80                                                                         |                                                                                   | FAC2-Q2-80                                                                        |                                                                                   |                                                                                     |
| ø100                  | FAC-Q2-100                                                                        |                                                                                   | FAC2-Q2-100                                                                       |                                                                                   | NUT-M20x1.5x10Hx30B                                                                 |

| Accessories  Factory assembled and shipped (self-assembled is not recommended) |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Connector                                                                            |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Code                                                                                                                                                              | TA                                                                                  | TB                                                                                  | TC                                                                                  | SDS<br>Mid section support<br>(Stroke over 1000mm)                                  | Y                                                                                    | I                                                                                     | YS<br>(Y+Floating pin)                                                                |
| Mounting<br>Tube I.D.                                                                                                                                             |  |  |  |  |  |  |  |
| ø32                                                                                                                                                               | TC-Q2-32                                                                            |                                                                                     |                                                                                     | SDS-Q2-32                                                                           | Y-Q2-32                                                                              | I-Q2-32                                                                               | YS-Q2-32                                                                              |
| ø40                                                                                                                                                               | TC-Q2-40                                                                            |                                                                                     |                                                                                     | SDS-Q2-40                                                                           | Y-Q2-40                                                                              | I-Q2-40                                                                               | YS-Q2-40                                                                              |
| ø50                                                                                                                                                               | TC-Q2-50                                                                            |                                                                                     |                                                                                     | SDS-Q2-50                                                                           | Y-Q2-50                                                                              | I-Q2-50                                                                               | YS-Q2-50                                                                              |
| ø63                                                                                                                                                               | TC-Q2-63                                                                            |                                                                                     |                                                                                     | SDS-Q2-63                                                                           |                                                                                      |                                                                                       |                                                                                       |
| ø80                                                                                                                                                               | TC-Q2-80                                                                            |                                                                                     |                                                                                     | SDS-Q2-80                                                                           | Y-Q2-80                                                                              | I-Q2-80                                                                               | YS-Q2-80                                                                              |
| ø100                                                                                                                                                              | TC-Q2-100                                                                           |                                                                                     |                                                                                     | SDS-Q2-100                                                                          |                                                                                      |                                                                                       |                                                                                       |

**Pin**

| Applicable       | YS connector                                                                        | Y&I connector                                                                       | CA&CB accessories                                                                   |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Code             | PIN-S                                                                               | PIN-Y-P<br>(with split pin)                                                         | PIN-CB-P<br>(with split pin)                                                        |
| Fig<br>Tube I.D. |  |  |  |
| ø32              | PIN-Q2-32-S                                                                         | PIN-Q2-32-2-P                                                                       | PIN-Q2-32-1-P                                                                       |
| ø40              | PIN-Q2-40-S                                                                         | PIN-Q2-40-2-P                                                                       | PIN-Q2-40-1-P                                                                       |
| ø50              | PIN-Q2-50-S                                                                         | PIN-Q2-50-2-P                                                                       | PIN-Q2-50-1-P                                                                       |
| ø63              |                                                                                     |                                                                                     | PIN-Q2-63-1-P                                                                       |
| ø80              | PIN-Q2-80-S                                                                         | PIN-Q2-80-2-P                                                                       | PIN-Q2-80-1-P                                                                       |
| ø100             |                                                                                     |                                                                                     | PIN-Q2-100-1-P                                                                      |

## ■ Order example of self-assembled

The tube I.D.  $\varnothing 40$  of LB accessories, Y connector and pin.

| No. | Order number         | Qty |
|-----|----------------------|-----|
| 1   | <b>LB-Q2-40</b>      | 2   |
| 2   | <b>Y-Q2-40</b>       | 1   |
| 3   | <b>PIN-Q2-40-2-P</b> | 1   |

\* To order accessories/  
connectors/ pin separately,  
please place orders separately  
according to the order codes  
in the above table.

### ■ Order example of factory assembled

⚠ Cylinders and accessories are distinguished by the symbol " + ".

MCQV3 – Standard model no.

+ TA

CYLINDER

## ACCESSORIES

# MCQV3-11 Inside structure & Parts list

ISO 15552 **STANDARD CYLINDER**

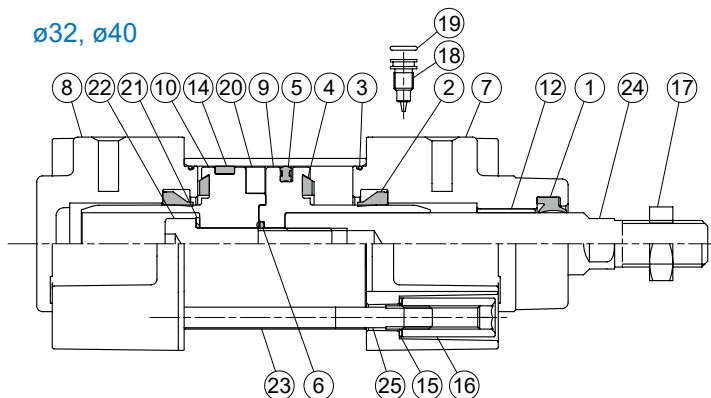


Mindman

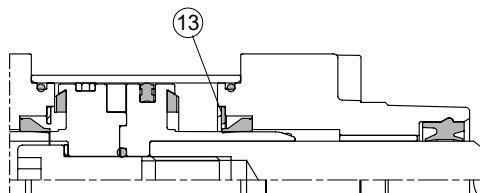
## Single rod 11 type

Cushion air (Adjustable)

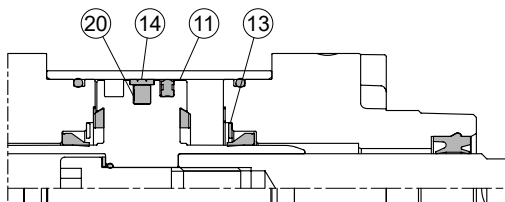
ø32, ø40



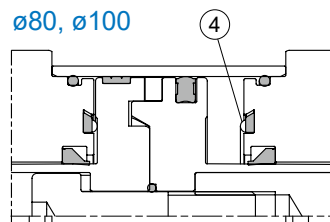
ø50



ø63



ø80, ø100



| No. | Part name       | Material        | Q'ty | Component parts (inclusion) | Repair kits (inclusion) | Note              |
|-----|-----------------|-----------------|------|-----------------------------|-------------------------|-------------------|
| 1   | Rod packing     | NBR / TPU       | 1    | ●                           | ●                       | ø50, 63: TPU      |
| 2   | Cushion packing | NBR             | 2    | ●                           | ●                       |                   |
| 3   | O-ring          | NBR             | 2    | ●                           | ●                       |                   |
| 4   | Cushion pad     | NBR             | 2    | ●                           | ●                       |                   |
| 5   | Piston packing  | NBR             | 1    | ●                           | ●                       |                   |
| 6   | O-ring          | NBR             | 1    | ●                           | ●                       |                   |
| 7   | Rod cover       | Aluminum alloy  | 1    | ●                           |                         |                   |
| 8   | Head cover      | Aluminum alloy  | 1    | ●                           |                         |                   |
| 9   | Piston #1       | Aluminum alloy  | 1    | ●                           |                         |                   |
| 10  | Piston #2       | Aluminum alloy  | 1    | ●                           |                         |                   |
| 11  | Piston          | Aluminum alloy  | 1    | ●                           |                         | Only for ø63      |
| 12  | Bush            | Bearing alloy   | 1    | ●                           |                         |                   |
| 13  | Washer          | Carbon steel    | 2    | ●                           |                         | Only for ø50, ø63 |
| 14  | Wear ring       | Resin           | 1    | ●                           |                         |                   |
| 15  | Washer          | Aluminum alloy  | 8    | ●                           |                         |                   |
| 16  | Tie rod nut     | Carbon steel    | 8    | ●                           |                         |                   |
| 17  | Piston rod nut  | Carbon steel    | 1    | ●                           |                         |                   |
| 18  | Needle valve    | Copper alloy    | 2    | ●                           |                         |                   |
| 19  | O-ring          | NBR             | 2    | ●                           |                         |                   |
| 20  | Magnet ring     | Magnet material | 1    | ◎                           |                         | ◎ Option          |
| 21  | Washer          | Aluminum alloy  | 1    | ●                           |                         |                   |
| 22  | Hex bolt        | Carbon steel    | 1    | ●                           |                         |                   |
| 23  | Cylinder tube   | Aluminum alloy  | 1    |                             |                         |                   |
| 24  | Piston rod *1   | Carbon steel    | 1    |                             |                         |                   |
| 25  | Tie rod         | Carbon steel    | 4    |                             |                         |                   |

\*1. When customized material is bearing steel, only two-side across flat (wrench flat) is available.

# MCQV3-11-S Inside structure & Parts list

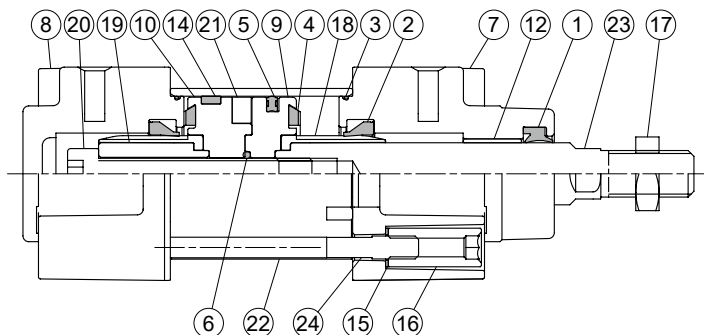
ISO 15552 **STANDARD CYLINDER**



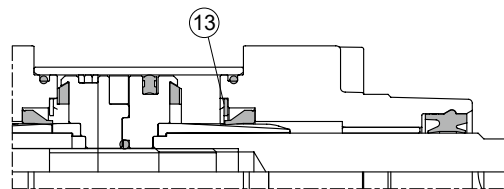
## Single rod 11 type

Cushion air (Automatic)

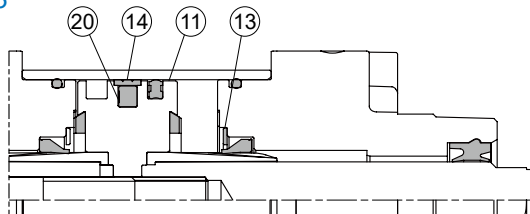
ø32, ø40



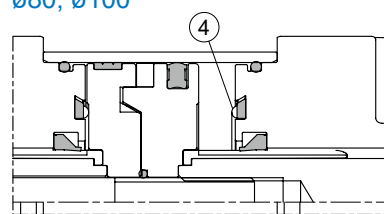
ø50



ø63



ø80, ø100



| No. | Part name           | Material        | Q'ty | Component parts (inclusion) | Repair kits (inclusion) | Note              |
|-----|---------------------|-----------------|------|-----------------------------|-------------------------|-------------------|
| 1   | Rod packing         | NBR / TPU       | 1    | ●                           | ●                       | ø50, 63: TPU      |
| 2   | Cushion packing     | NBR             | 2    | ●                           | ●                       |                   |
| 3   | O-ring              | NBR             | 2    | ●                           | ●                       |                   |
| 4   | Cushion pad         | NBR             | 2    | ●                           | ●                       |                   |
| 5   | Piston packing      | NBR             | 1    | ●                           | ●                       |                   |
| 6   | O-ring              | NBR             | 1    | ●                           | ●                       |                   |
| 7   | Rod cover           | Aluminum alloy  | 1    | ●                           |                         |                   |
| 8   | Head cover          | Aluminum alloy  | 1    | ●                           |                         |                   |
| 9   | Piston #1           | Aluminum alloy  | 1    | ●                           |                         |                   |
| 10  | Piston #2           | Aluminum alloy  | 1    | ●                           |                         |                   |
| 11  | Piston              | Aluminum alloy  | 1    | ●                           |                         | Only for ø63      |
| 12  | Bush                | Bearing alloy   | 1    | ●                           |                         |                   |
| 13  | Washer              | Carbon steel    | 2    | ●                           |                         | Only for ø50, ø63 |
| 14  | Wear ring           | Resin           | 1    | ●                           |                         |                   |
| 15  | Washer              | Aluminum alloy  | 8    | ●                           |                         |                   |
| 16  | Tie rod nut         | Carbon steel    | 8    | ●                           |                         |                   |
| 17  | Piston rod nut      | Carbon steel    | 1    | ●                           |                         |                   |
| 18  | Shock absorber axis | Resin           | 2    | ●                           |                         |                   |
| 19  | Piston nut          | Aluminum alloy  | 1    | ●                           |                         |                   |
| 20  | Hex bolt            | Carbon steel    | 1    | ●                           |                         |                   |
| 21  | Magnet ring         | Magnet material | 1    | ◎                           |                         | ◎ Option          |
| 22  | Cylinder tube       | Aluminum alloy  | 1    |                             |                         |                   |
| 23  | Piston rod *1       | Carbon steel    | 1    |                             |                         |                   |
| 24  | Tie rod             | Carbon steel    | 4    |                             |                         |                   |

\*1. When customized material is bearing steel, only two-side across flat (wrench flat) is available.

# MCQV3-21/27 Inside structure & Parts list

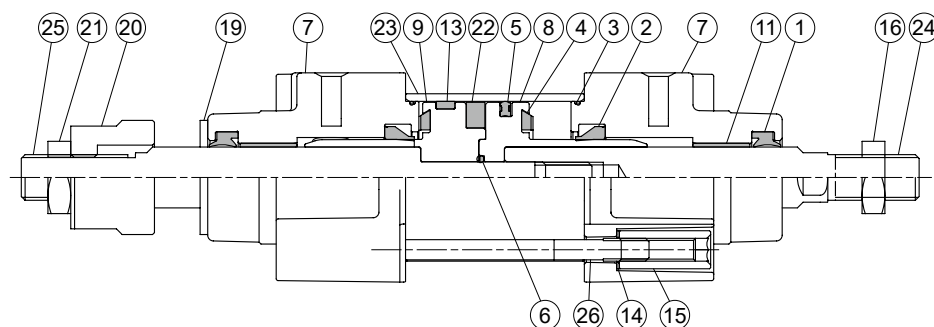
ISO 15552 **STANDARD CYLINDER**



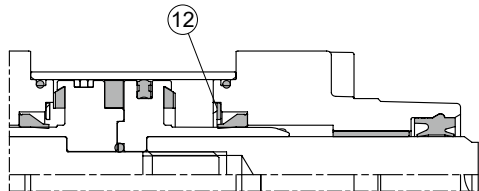
## Double rod 21 / 27 type

Cushion air (Adjustable)

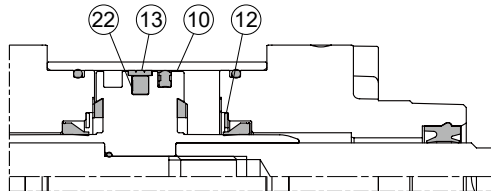
ø32, ø40



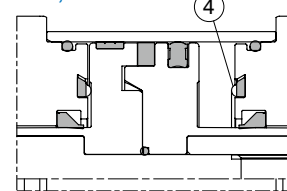
ø50



ø63



ø80, ø100



| No. | Part name        | Material        | Q'y | Component parts (inclusion) |         | Repair kits (inclusion) | Note              |
|-----|------------------|-----------------|-----|-----------------------------|---------|-------------------------|-------------------|
|     |                  |                 |     | 21 type                     | 27 type |                         |                   |
| 1   | Rod packing      | NBR / TPU       | 2   | ●                           | ●       | ●                       | ø50, 63: TPU      |
| 2   | Cushion packing  | NBR             | 2   | ●                           | ●       | ●                       |                   |
| 3   | O-ring           | NBR             | 2   | ●                           | ●       | ●                       |                   |
| 4   | Cushion pad      | NBR             | 2   | ●                           | ●       | ●                       |                   |
| 5   | Piston packing   | NBR             | 1   | ●                           | ●       | ●                       |                   |
| 6   | O-ring           | NBR             | 1   | ●                           | ●       | ●                       |                   |
| 7   | Rod cover        | Aluminum alloy  | 2   | ●                           | ●       |                         |                   |
| 8   | Piston #1        | Aluminum alloy  | 1   | ●                           | ●       |                         |                   |
| 9   | Piston #2        | Aluminum alloy  | 1   | ●                           | ●       |                         |                   |
| 10  | Piston           | Aluminum alloy  | 1   | ●                           | ●       |                         | Only for ø63      |
| 11  | Bush             | Bearing alloy   | 2   | ●                           | ●       |                         |                   |
| 12  | Washer           | Carbon steel    | 2   | ●                           | ●       |                         | Only for ø50, ø63 |
| 13  | Wear ring        | Resin           | 1   | ●                           | ●       |                         |                   |
| 14  | Washer           | Carbon steel    | 8   | ●                           | ●       |                         |                   |
| 15  | Tie rod nut      | Carbon steel    | 8   | ●                           | ●       |                         |                   |
| 16  | Piston rod nut   | Carbon steel    | 1   | ●                           | ●       |                         |                   |
| 17  | Needle valve     | Copper alloy    | 2   | ●                           | ●       |                         |                   |
| 18  | O-ring           | NBR             | 2   | ●                           | ●       |                         |                   |
| 19  | Gasket           | PU              | 1   |                             | ●       |                         |                   |
| 20  | Adjustable nut   | Carbon steel    | 1   |                             | ●       |                         |                   |
| 21  | Hex nut          | Carbon steel    | 1   |                             | ●       |                         |                   |
| 22  | Magnet ring      | Magnet material | 1   | ◎                           | ◎       |                         | ◎ Option          |
| 23  | Cylinder tube    | Aluminum alloy  | 1   |                             |         |                         |                   |
| 24  | Piston rod #1 *1 | Carbon steel    | 1   |                             |         |                         |                   |
| 25  | Piston rod #2 *1 | Carbon steel    | 1   |                             |         |                         |                   |
| 26  | Tie rod          | Carbon steel    | 4   |                             |         |                         |                   |

\*1. When customized material is bearing steel, only two-side across flat (wrench flat) is available.

# MCQV3-21/27-S Inside structure & Parts list

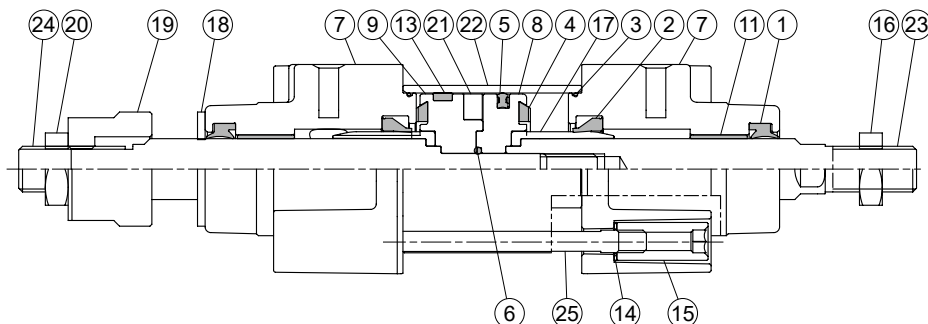
ISO 15552 **STANDARD CYLINDER**



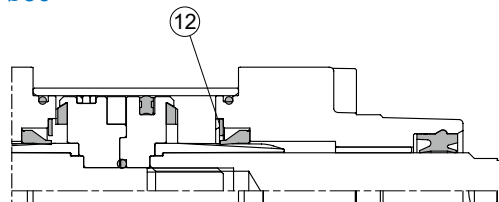
## Double rod 21 / 27 type

Cushion air (Automatic)

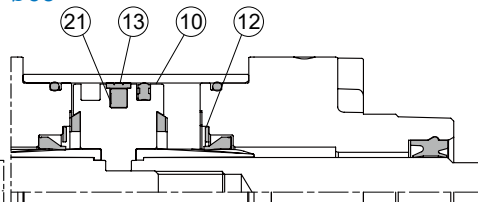
ø32, ø40



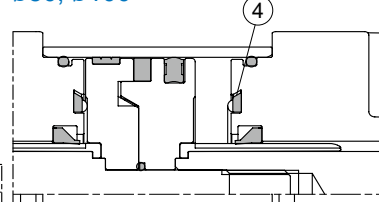
ø50



ø63



ø80, ø100

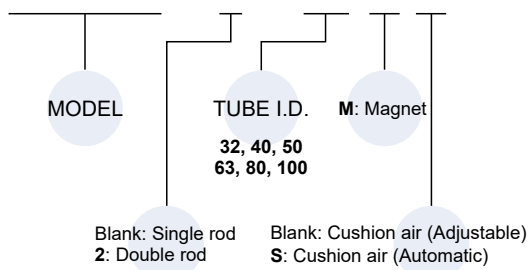


| No. | Part name           | Material        | Q'y | Component parts (inclusion) |         | Repair kits (inclusion) | Note              |
|-----|---------------------|-----------------|-----|-----------------------------|---------|-------------------------|-------------------|
|     |                     |                 |     | 21 type                     | 27 type |                         |                   |
| 1   | Rod packing         | NBR / TPU       | 2   | ●                           | ●       | ●                       | ø50, 63: TPU      |
| 2   | Cushion packing     | NBR             | 2   | ●                           | ●       | ●                       |                   |
| 3   | O-ring              | NBR             | 2   | ●                           | ●       | ●                       |                   |
| 4   | Cushion pad         | NBR             | 2   | ●                           | ●       | ●                       |                   |
| 5   | Piston packing      | NBR             | 1   | ●                           | ●       | ●                       |                   |
| 6   | O-ring              | NBR             | 1   | ●                           | ●       | ●                       |                   |
| 7   | Rod cover           | Aluminum alloy  | 2   | ●                           | ●       |                         |                   |
| 8   | Piston #1           | Aluminum alloy  | 1   | ●                           | ●       |                         |                   |
| 9   | Piston #2           | Aluminum alloy  | 1   | ●                           | ●       |                         |                   |
| 10  | Piston              | Aluminum alloy  | 1   | ●                           | ●       |                         | Only for ø63      |
| 11  | Bush                | Bearing alloy   | 2   | ●                           | ●       |                         |                   |
| 12  | Washer              | Carbon steel    | 2   | ●                           | ●       |                         | Only for ø50, ø63 |
| 13  | Wear ring           | Resin           | 1   | ●                           | ●       |                         |                   |
| 14  | Washer              | Carbon steel    | 8   | ●                           | ●       |                         |                   |
| 15  | Tie rod nut         | Carbon steel    | 8   | ●                           | ●       |                         |                   |
| 16  | Piston rod nut      | Carbon steel    | 1   | ●                           | ●       |                         |                   |
| 17  | Shock absorber axis | Resin           | 2   | ●                           | ●       |                         |                   |
| 18  | Gasket              | PU              | 1   |                             | ●       |                         |                   |
| 19  | Adjustable nut      | Carbon steel    | 1   |                             | ●       |                         |                   |
| 20  | Hex nut             | Carbon steel    | 1   |                             | ●       |                         |                   |
| 21  | Magnet ring         | Magnet material | 1   | ◎                           | ◎       |                         | ◎ Option          |
| 22  | Cylinder tube       | Aluminum alloy  | 1   |                             |         |                         |                   |
| 23  | Piston rod #1 *1    | Carbon steel    | 1   |                             |         |                         |                   |
| 24  | Piston rod #2 *1    | Carbon steel    | 1   |                             |         |                         |                   |
| 25  | Tie rod             | Carbon steel    | 4   |                             |         |                         |                   |

\*1. When customized material is bearing steel, only two-side across flat (wrench flat) is available.

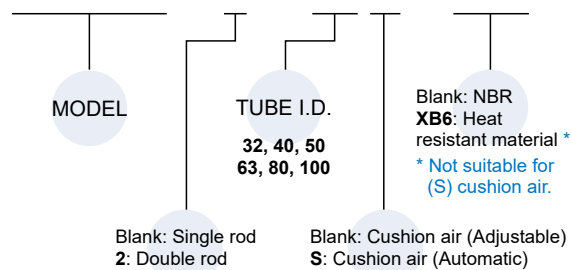
### Order example of component parts

CP — MCQV3 — 2 — 63 M S



### Order example of repair kits

PS — MCQV3 — 2 — 63 S — XB6

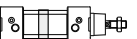


\* Order example for Rc or NPT thread please contact us.

### Cylinder & accessories weight

#### Cylinder weight

Unit: kg

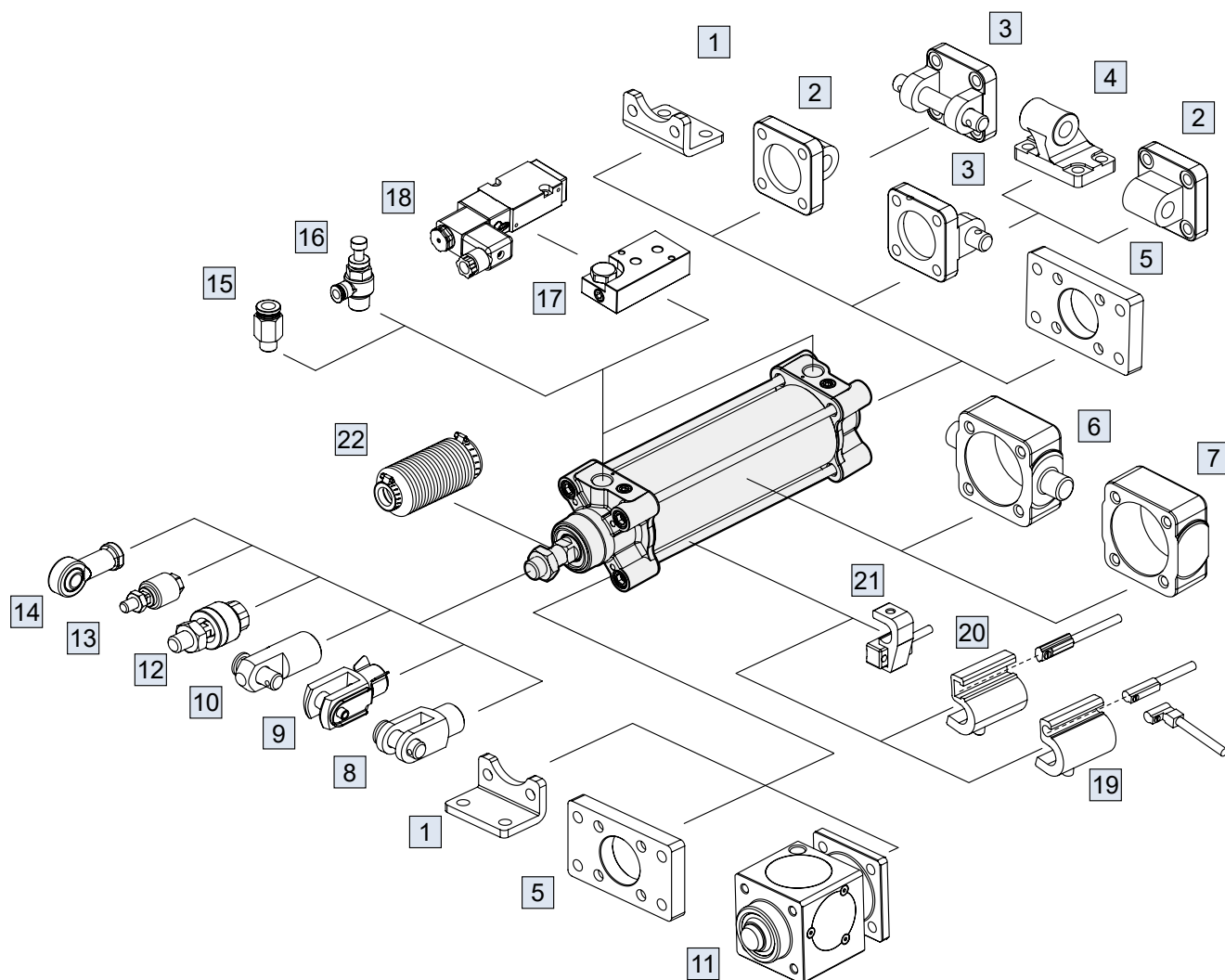
| Model     | Basic weight<br>MCQV3-11                                                            | Basic weight (magnet)<br>MCQV3-11                                                   | Basic weight<br>MCQV3-11-S                                                          | Basic weight (magnet)<br>MCQV3-11-S                                                  | Stroke 25 mm<br>MCQV3-11-(S)                                                          |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Tube I.D. |  |  |  |  |  |
| ø32       | 0.510                                                                               | 0.516                                                                               | 0.45                                                                                | 0.456                                                                                | 0.05                                                                                  |
| ø40       | 0.717                                                                               | 0.729                                                                               | 0.697                                                                               | 0.709                                                                                | 0.068                                                                                 |
| ø50       | 1.114                                                                               | 1.131                                                                               | 1.101                                                                               | 1.118                                                                                | 0.108                                                                                 |
| ø63       | 1.689                                                                               | 1.709                                                                               | 1.673                                                                               | 1.693                                                                                | 0.125                                                                                 |
| ø80       | 2.464                                                                               | 2.491                                                                               | 2.445                                                                               | 2.472                                                                                | 0.187                                                                                 |
| ø100      | 3.682                                                                               | 3.717                                                                               | 3.613                                                                               | 3.648                                                                                | 0.210                                                                                 |

#### Accessories weight

Unit: kg

| Model     | LB                                                                                  | CA                                                                                  | CA2                                                                                 | CB                                                                                  | CB2                                                                                 | CDB                                                                                   | CDB2                                                                                  | FAC/<br>FBC                                                                           | FAC2/<br>FBC2                                                                         | TA/TB/TC                                                                              | SDS                                                                                   |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Tube I.D. |  |  |  |  |  |  |  |  |  |  |  |
| ø32       | 0.163                                                                               | 0.213                                                                               | 0.07                                                                                | 0.185                                                                               | 0.07                                                                                | 0.170                                                                                 | 0.06                                                                                  | 0.235                                                                                 | 0.07                                                                                  | 0.208                                                                                 | 0.157                                                                                 |
| ø40       | 0.211                                                                               | 0.253                                                                               | 0.09                                                                                | 0.211                                                                               | 0.10                                                                                | 0.230                                                                                 | 0.08                                                                                  | 0.265                                                                                 | 0.09                                                                                  | 0.282                                                                                 | 0.179                                                                                 |
| ø50       | 0.315                                                                               | 0.390                                                                               | 0.16                                                                                | 0.352                                                                               | 0.15                                                                                | 0.410                                                                                 | 0.12                                                                                  | 0.460                                                                                 | 0.17                                                                                  | 0.377                                                                                 | 0.289                                                                                 |
| ø63       | 0.395                                                                               | 0.670                                                                               | 0.23                                                                                | 0.544                                                                               | 0.23                                                                                | 0.550                                                                                 | 0.18                                                                                  | 0.684                                                                                 | 0.20                                                                                  | 0.675                                                                                 | 0.474                                                                                 |
| ø80       | 0.816                                                                               | 1.076                                                                               | 0.40                                                                                | 0.982                                                                               | 0.45                                                                                | 0.870                                                                                 | 0.28                                                                                  | 1.508                                                                                 | 0.40                                                                                  | 1.025                                                                                 | 0.846                                                                                 |
| ø100      | 1.014                                                                               | 1.587                                                                               | 0.50                                                                                | 1.493                                                                               | 0.60                                                                                | 1.400                                                                                 | 0.45                                                                                  | 1.975                                                                                 | 0.56                                                                                  | 1.680                                                                                 | 1.373                                                                                 |

| Model     | Y                                                                                   | I                                                                                   | Pin                                                                                 |                                                                                     | YS                                                                                  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           |                                                                                     |                                                                                     | Y / I                                                                               | CA / CB                                                                             |                                                                                     |
| Tube I.D. |  |  |  |  |  |
| ø32       | 0.067                                                                               | 0.082                                                                               | 0.016                                                                               | 0.036                                                                               | 0.018                                                                               |
| ø40       | 0.115                                                                               | 0.141                                                                               | 0.029                                                                               | 0.057                                                                               | 0.031                                                                               |
| ø50       | 0.272                                                                               | 0.334                                                                               | 0.067                                                                               | 0.063                                                                               | 0.070                                                                               |
| ø63       | 0.272                                                                               | 0.334                                                                               | 0.067                                                                               | 0.128                                                                               | 0.070                                                                               |
| ø80       | 0.551                                                                               | 0.553                                                                               | 0.142                                                                               | 0.158                                                                               | 0.150                                                                               |
| ø100      | 0.551                                                                               | 0.553                                                                               | 0.142                                                                               | 0.292                                                                               | 0.150                                                                               |



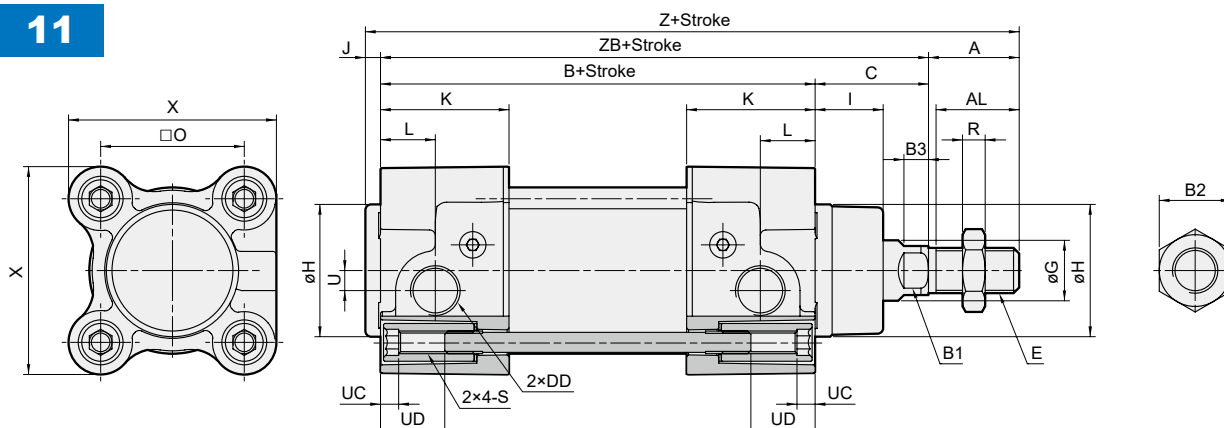
| No. | Accessories                     | Material       | Page link                             |
|-----|---------------------------------|----------------|---------------------------------------|
| 1   | Mounting accessories LB         | Carbon steel   | <a href="#">↗</a>                     |
| 2   | Mounting accessories CA         | Cast iron      | <a href="#">↗</a>                     |
|     | Mounting accessories CA2        | Aluminum alloy | <a href="#">↗</a>                     |
| 3   | Mounting accessories CB+PIN     | Cast iron / *1 | <a href="#">↗</a> , <a href="#">↗</a> |
|     | Mounting accessories CB2+PIN    | Aluminum alloy | <a href="#">↗</a> , <a href="#">↗</a> |
| 4   | Mounting accessories CDB        | Cast iron      | <a href="#">↗</a>                     |
|     | Mounting accessories CDB2       | Aluminum alloy | <a href="#">↗</a>                     |
| 5   | Mounting accessories FAC/FBC    | Carbon steel   | <a href="#">↗</a>                     |
|     | Mounting accessories FAC2/FBC2  | Aluminum alloy | <a href="#">↗</a>                     |
| 6   | Mounting accessories TA/TB/TC   | Cast iron      | <a href="#">↗</a>                     |
| 7   | Mounting accessories SDS        | Cast iron      | <a href="#">↗</a>                     |
| 8   | Accessories Y+PIN               | Cast iron / *1 | <a href="#">↗</a>                     |
| 9   | Accessories YS (Y+Floating pin) | Carbon steel   | <a href="#">↗</a>                     |
| 10  | Accessories I+PIN               | Carbon steel   | <a href="#">↗</a>                     |

| No. | Accessories                      | Material          | Page link                             |
|-----|----------------------------------|-------------------|---------------------------------------|
| 11  | Locking unit MCBQV3              | Aluminum alloy+*2 | <a href="#">↗</a>                     |
| 12  | Floating joint MFC               | Carbon steel      | <a href="#">↗</a>                     |
| 13  | Floating joint MFCS              | Carbon steel      | <a href="#">↗</a>                     |
| 14  | Female rod ends PHS              | Carbon steel      | <a href="#">↗</a>                     |
| 15  | Fitting PC (PISCO)               | —                 | <a href="#">↗</a>                     |
| 16  | Speed controller JSC (PISCO)     | —                 | <a href="#">↗</a>                     |
| 17  | Cylinder link seats MVSN-300-C*3 | Aluminum alloy    | <a href="#">↗</a>                     |
| 18  | Solenoid valve MVSN-220 / 300*3  | —                 | <a href="#">↗</a> , <a href="#">↗</a> |
| 19  | Sensor switch R*C(V)+DT7-*       | —                 | <a href="#">↗</a>                     |
| 20  | Sensor switch R*T+DT-*           | —                 | <a href="#">↗</a>                     |
| 21  | Sensor switch RCA+HV*            | —                 | <a href="#">↗</a>                     |
| 22  | Protective bellows kit           | NBR               | —                                     |

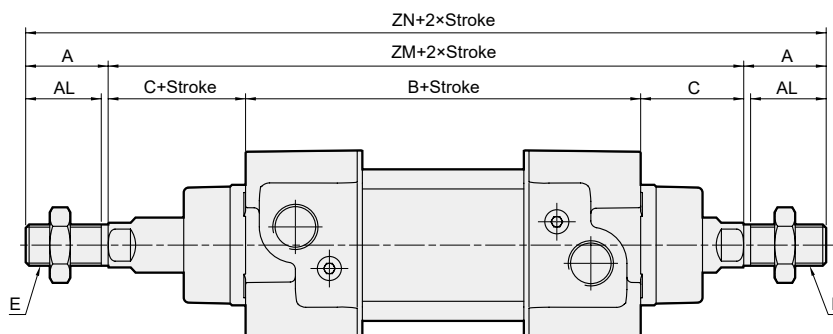
\*1. PIN material is carbon steel. \*2. Bronze alloy.  
\*3. Only for tube I.D.  $\varnothing 40$ ,  $\varnothing 50$ .



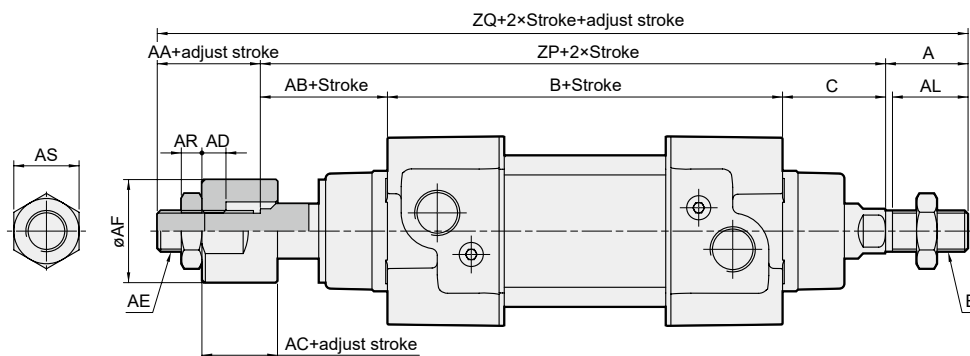
11



21



27

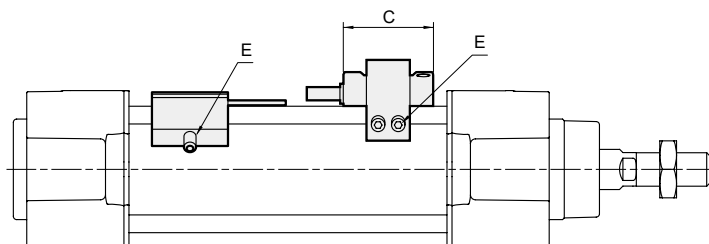
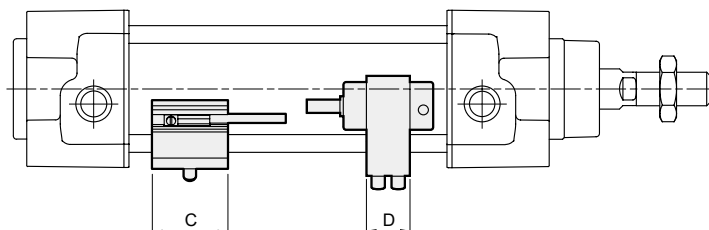
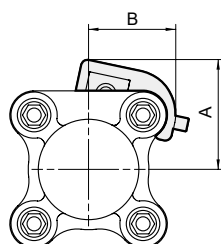
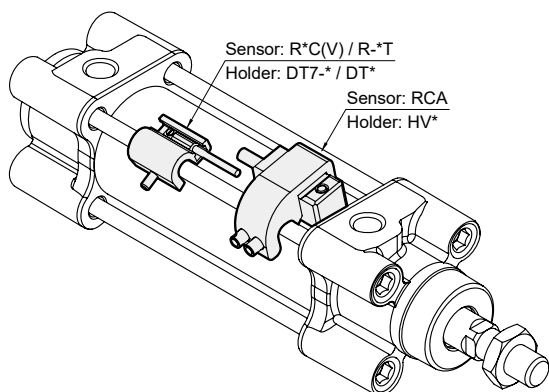


| Code<br>Tube I.D. | A  | AA | AB | AC | AD | AE       | AF | AL | AR | AS | B   | B1 | B2 | B3  | C  | DD   | E        | G  | H  | I    | J | K    | L    | O    |
|-------------------|----|----|----|----|----|----------|----|----|----|----|-----|----|----|-----|----|------|----------|----|----|------|---|------|------|------|
| 32                | 22 | 16 | 26 | 12 | 7  | M10×1.25 | 20 | 20 | 5  | 17 | 94  | 10 | 17 | 4   | 26 | G1/8 | M10×1.25 | 12 | 30 | 15   | 4 | 30.5 | 20   | 32.5 |
| 40                | 24 | 20 | 27 | 12 | 7  | M12×1.25 | 30 | 22 | 6  | 19 | 105 | 13 | 19 | 6.5 | 30 | G1/4 | M12×1.25 | 16 | 35 | 18   | 4 | 34   | 14.5 | 38   |
| 50                | 32 | 18 | 34 | 15 | 10 | M16×1.5  | 40 | 30 | 8  | 24 | 106 | 17 | 24 | 6   | 37 | G1/4 | M16×1.5  | 20 | 40 | 28   | 4 | 31   | 16   | 46.5 |
| 63                | 32 | 20 | 32 | 15 | 10 | M16×1.5  | 40 | 30 | 8  | 24 | 121 | 17 | 24 | 8   | 37 | G3/8 | M16×1.5  | 20 | 45 | 26   | 4 | 33   | 17   | 56.5 |
| 80                | 40 | 32 | 41 | 20 | 14 | M22×1.5  | 50 | 38 | 13 | 32 | 128 | 22 | 30 | 10  | 46 | G3/8 | M20×1.5  | 25 | 45 | 32.5 | 4 | 35.5 | 20.5 | 72   |
| 100               | 40 | 30 | 46 | 20 | 14 | M22×1.5  | 50 | 38 | 13 | 32 | 138 | 22 | 30 | 10  | 51 | G1/2 | M20×1.5  | 25 | 55 | 37.5 | 4 | 37   | 19   | 89   |

| Code<br>Tube I.D. | R  | S       | U   | UC  | UD | X   | Z   | ZB  | ZM  | ZN  | ZP  | ZQ  |
|-------------------|----|---------|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| 32                | 5  | M6×1.0  | 4.5 | 4.5 | 16 | 47  | 146 | 120 | 146 | 190 | 146 | 184 |
| 40                | 6  | M6×1.0  | 5.3 | 4.5 | 16 | 55  | 163 | 135 | 165 | 213 | 162 | 206 |
| 50                | 8  | M8×1.25 | 8.5 | 4.5 | 16 | 65  | 179 | 143 | 180 | 244 | 177 | 227 |
| 63                | 8  | M8×1.25 | 8   | 4.5 | 16 | 78  | 194 | 158 | 195 | 259 | 190 | 242 |
| 80                | 10 | M10×1.5 | 9   | 4.5 | 18 | 95  | 218 | 174 | 220 | 300 | 215 | 287 |
| 100               | 10 | M10×1.5 | 13  | 4.5 | 18 | 115 | 233 | 189 | 240 | 320 | 235 | 305 |

# MCQV3 Installation of sensor switch ø32~ø100

ISO 15552 **STANDARD CYLINDER**

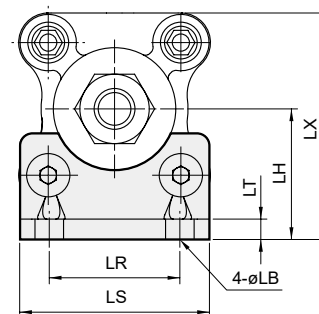
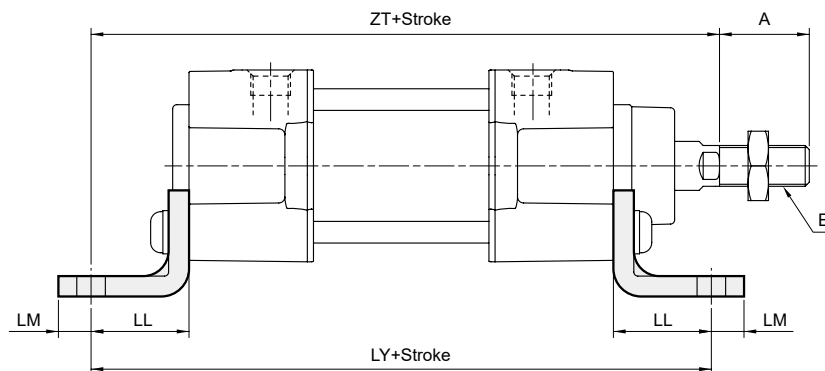


| Code<br>Tube I.D. | Sensor switch | Holder       | A    | B    | C  | E      |
|-------------------|---------------|--------------|------|------|----|--------|
| 32                | R*C(V) / R*T  | DT7-1 / DT-1 | 24   | 26   | 25 | M4×12L |
| 40                | R*C(V) / R*T  | DT7-1 / DT-1 | 28   | 29.5 | 25 | M4×12L |
| 50                | R*C(V) / R*T  | DT7-1 / DT-1 | 31.5 | 32   | 25 | M4×12L |
| 63                | R*C(V) / R*T  | DT7-1 / DT-1 | 36   | 37   | 25 | M4×12L |
| 80                | R*C(V) / R*T  | DT7-2 / DT-2 | 45   | 46   | 25 | M4×12L |
| 100               | R*C(V) / R*T  | DT7-2 / DT-2 | 53.5 | 55   | 25 | M4×12L |

| Code<br>Tube I.D. | Sensor switch | Hold | A  | B  | C  | D  | E      |
|-------------------|---------------|------|----|----|----|----|--------|
| 32                | RCA           | HV1  | 34 | 25 | 26 | 13 | M4×10L |
| 40                | RCA           | HV1  | 34 | 26 | 26 | 13 | M4×10L |
| 50                | RCA           | HV2  | 43 | 38 | 26 | 13 | M4×10L |
| 63                | RCA           | HV2  | 48 | 43 | 26 | 13 | M4×10L |
| 80                | RCA           | HV3  | 55 | 48 | 26 | 13 | M5×16L |
| 100               | RCA           | HV3  | 62 | 58 | 26 | 13 | M5×16L |

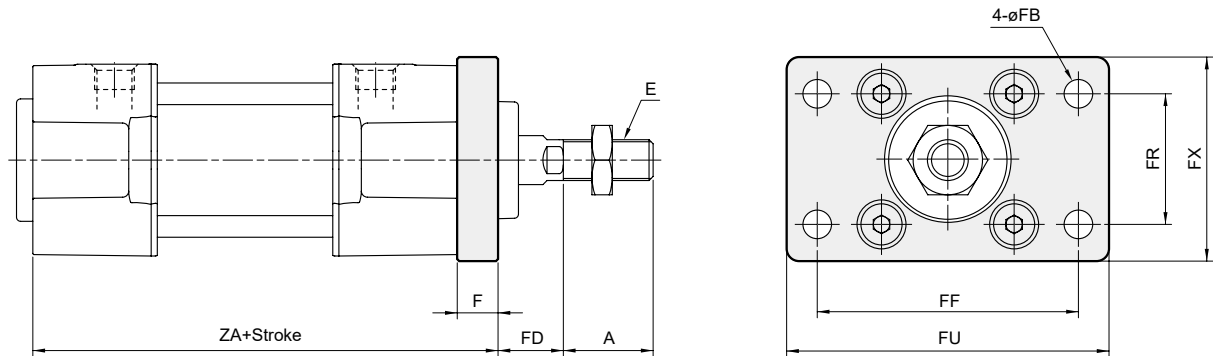
## ■ Mounting accessories

### LB

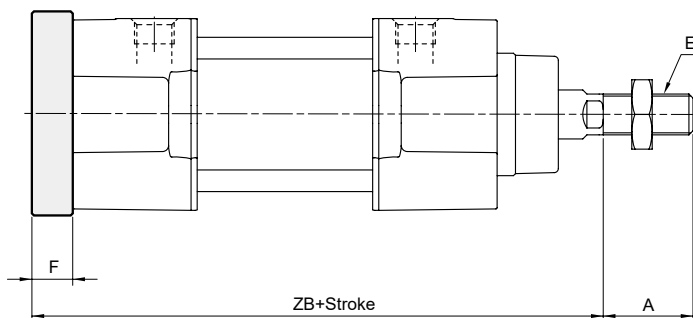


| Code<br>Tube I.D. | A  | E        | LB | LH | LL | LM | LR | LS  | LT | LX    | LY  | ZT  |
|-------------------|----|----------|----|----|----|----|----|-----|----|-------|-----|-----|
| 32                | 22 | M10×1.25 | 7  | 32 | 24 | 8  | 32 | 47  | 5  | 55.5  | 142 | 144 |
| 40                | 24 | M12×1.25 | 9  | 36 | 28 | 10 | 36 | 53  | 5  | 63.2  | 161 | 163 |
| 50                | 32 | M16×1.5  | 9  | 45 | 32 | 10 | 45 | 65  | 5  | 77.5  | 170 | 175 |
| 63                | 32 | M16×1.5  | 9  | 50 | 32 | 10 | 50 | 75  | 5  | 89.0  | 185 | 190 |
| 80                | 40 | M20×1.5  | 12 | 63 | 41 | 13 | 63 | 95  | 6  | 110.5 | 210 | 215 |
| 100               | 40 | M20×1.5  | 14 | 71 | 41 | 13 | 75 | 115 | 6  | 128.5 | 220 | 230 |

### FAC

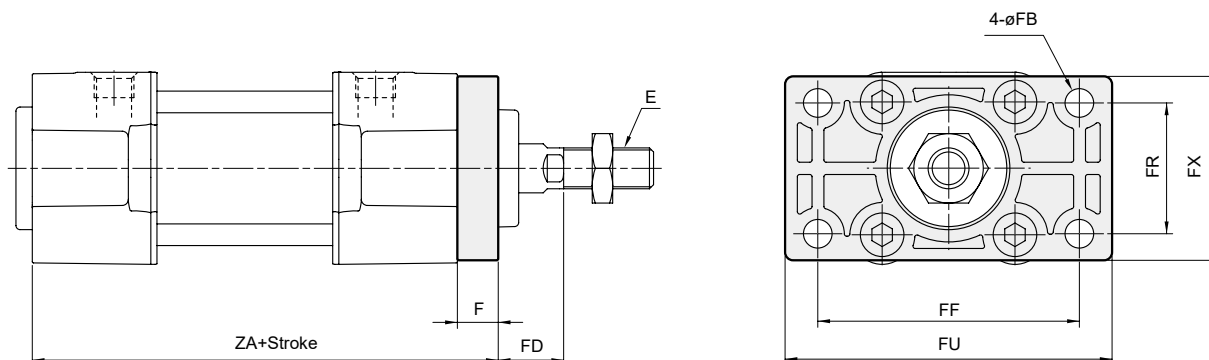


### FBC

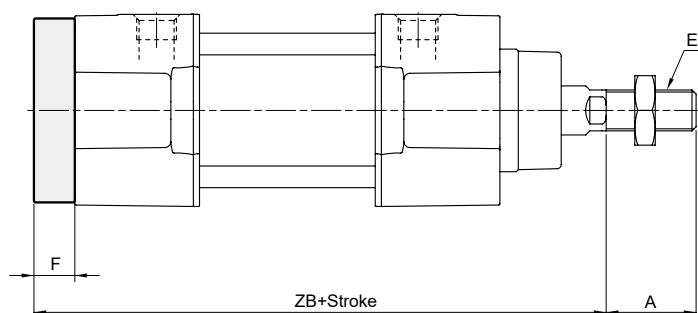


| Code<br>Tube I.D. | A  | E        | F  | FB | FD | FF  | FR | FU  | FX  | ZA  | ZB  |
|-------------------|----|----------|----|----|----|-----|----|-----|-----|-----|-----|
| 32                | 22 | M10×1.25 | 10 | 7  | 16 | 64  | 32 | 79  | 50  | 104 | 130 |
| 40                | 24 | M12×1.25 | 10 | 9  | 20 | 72  | 36 | 90  | 52  | 115 | 145 |
| 50                | 32 | M16×1.5  | 12 | 9  | 25 | 90  | 45 | 110 | 65  | 118 | 155 |
| 63                | 32 | M16×1.5  | 12 | 9  | 25 | 100 | 50 | 125 | 76  | 133 | 170 |
| 80                | 40 | M20×1.5  | 16 | 12 | 30 | 126 | 63 | 154 | 94  | 144 | 190 |
| 100               | 40 | M20×1.5  | 16 | 14 | 35 | 150 | 75 | 180 | 112 | 154 | 205 |

### FAC2



### FBC2



| Code<br>Tube I.D. | A  | E        | F  | FB | FD | FF  | FR | FU  | FX  | ZA  | ZB  |
|-------------------|----|----------|----|----|----|-----|----|-----|-----|-----|-----|
| 32                | 22 | M10×1.25 | 10 | 7  | 16 | 64  | 32 | 80  | 45  | 104 | 130 |
| 40                | 24 | M12×1.25 | 10 | 9  | 20 | 72  | 36 | 90  | 52  | 115 | 145 |
| 50                | 32 | M16×1.5  | 12 | 9  | 25 | 90  | 45 | 110 | 65  | 118 | 155 |
| 63                | 32 | M16×1.5  | 12 | 9  | 25 | 100 | 50 | 120 | 75  | 133 | 170 |
| 80                | 40 | M20×1.5  | 16 | 12 | 30 | 126 | 63 | 150 | 95  | 144 | 190 |
| 100               | 40 | M20×1.5  | 16 | 14 | 35 | 150 | 75 | 175 | 115 | 154 | 205 |

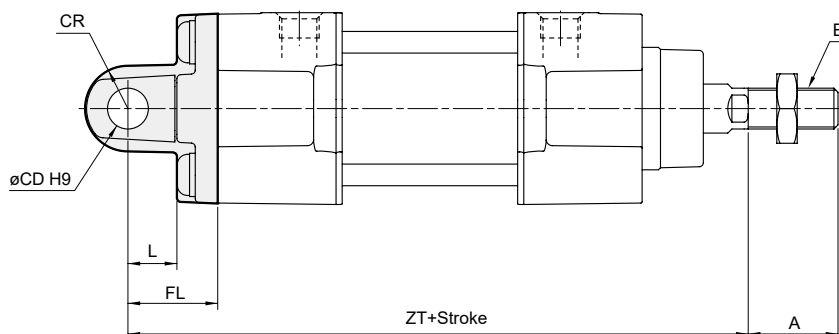
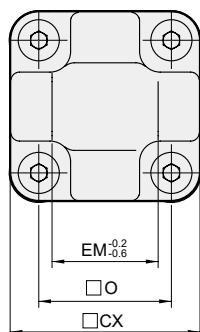
# MCQV3 Mounting accessories $\varnothing 32 \sim \varnothing 100$

ISO 15552 **STANDARD CYLINDER**

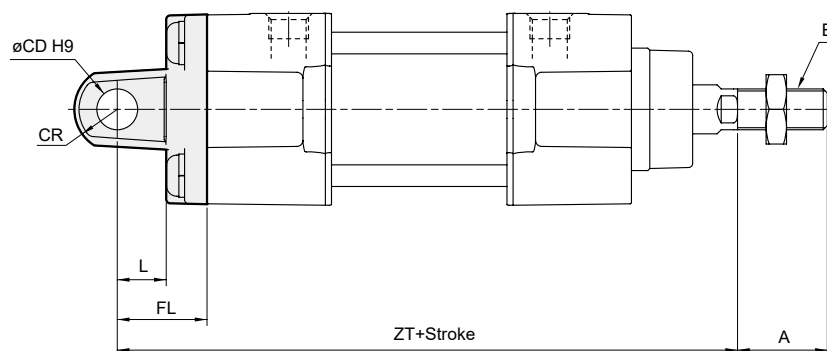
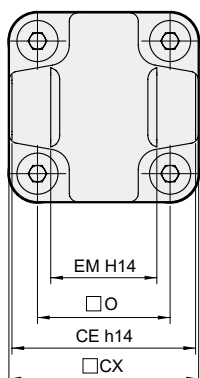


Mindman

## CA

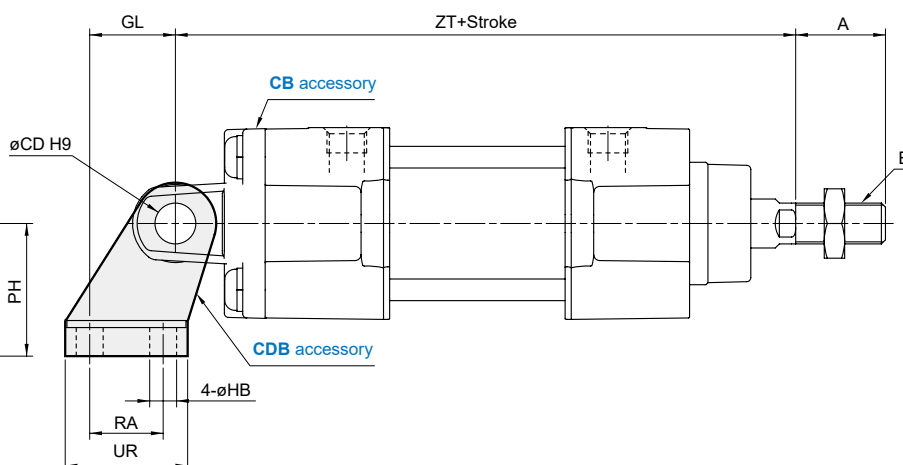
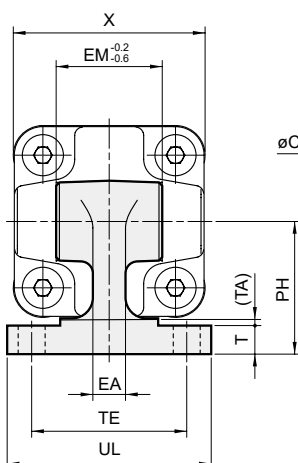


## CB



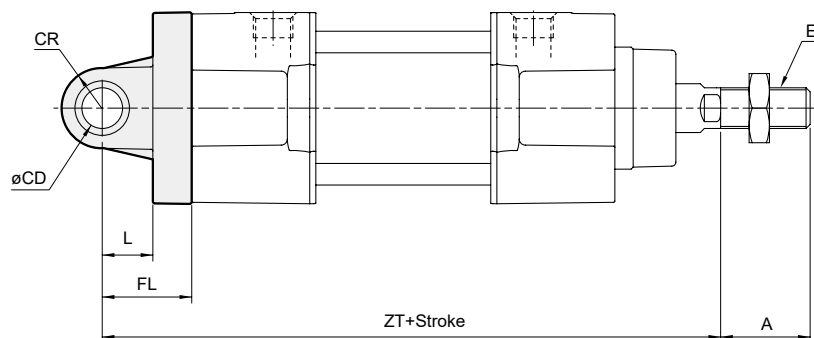
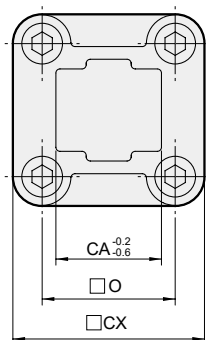
## CDB

CB+Pin (Extra purchase)

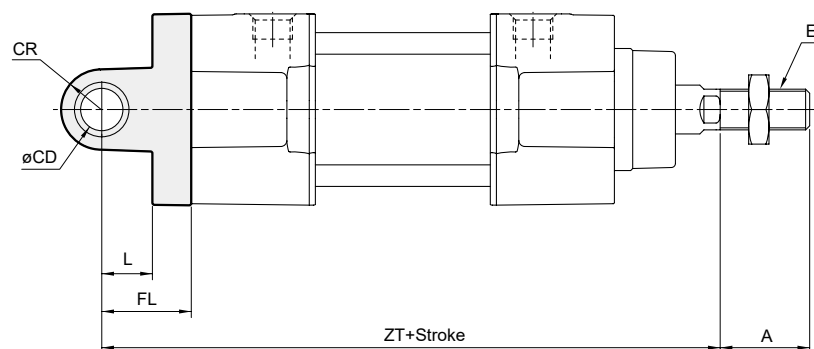
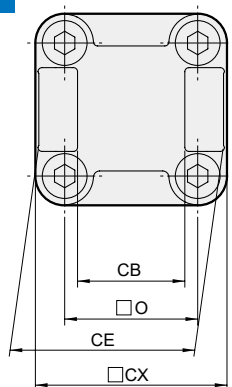


| Code<br>Tube I.D. | A  | CD | CE  | CR    | CX   | E        | EA | EM | FL | GL | HB  | L  | O    | PH | RA | T    | TA  | TE | UL | UR | X   | ZT  |
|-------------------|----|----|-----|-------|------|----------|----|----|----|----|-----|----|------|----|----|------|-----|----|----|----|-----|-----|
| 32                | 22 | 10 | 45  | R10.5 | 46.5 | M10×1.25 | 8  | 26 | 22 | 21 | 6.6 | 12 | 32.5 | 32 | 18 | 6.5  | 1.5 | 38 | 50 | 30 | 47  | 142 |
| 40                | 24 | 12 | 52  | R12   | 54   | M12×1.25 | 10 | 28 | 25 | 24 | 6.6 | 15 | 38   | 36 | 22 | 8.5  | 1.5 | 41 | 53 | 34 | 55  | 160 |
| 50                | 32 | 12 | 60  | R13   | 64   | M16×1.5  | 10 | 32 | 27 | 33 | 9   | 15 | 46.5 | 45 | 30 | 10.5 | 1.5 | 50 | 65 | 45 | 65  | 170 |
| 63                | 32 | 16 | 70  | R17   | 75   | M16×1.5  | 12 | 40 | 32 | 37 | 9   | 20 | 56.5 | 50 | 35 | 10.5 | 1.5 | 52 | 67 | 50 | 78  | 190 |
| 80                | 40 | 16 | 90  | R17   | 93   | M20×1.5  | 12 | 50 | 36 | 47 | 11  | 20 | 72   | 63 | 40 | 11.5 | 2.5 | 66 | 86 | 60 | 95  | 210 |
| 100               | 40 | 20 | 110 | R21   | 114  | M20×1.5  | 16 | 60 | 41 | 55 | 11  | 25 | 89   | 71 | 50 | 12.5 | 2.5 | 76 | 96 | 70 | 115 | 230 |

### CA2

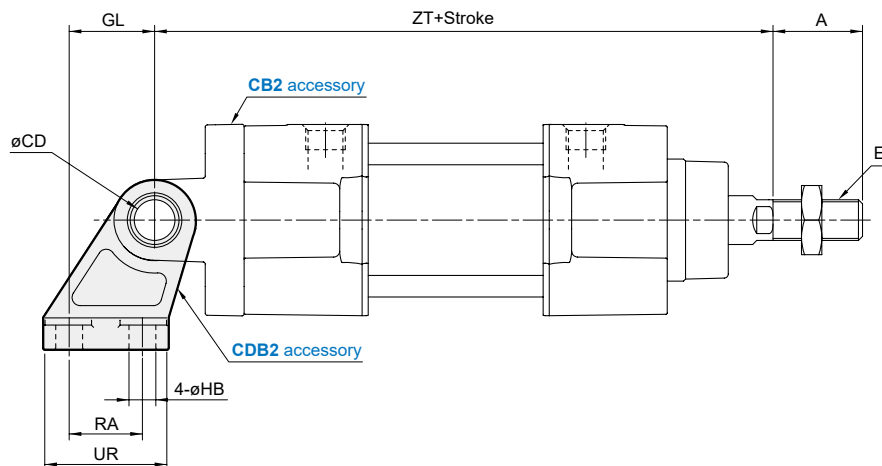
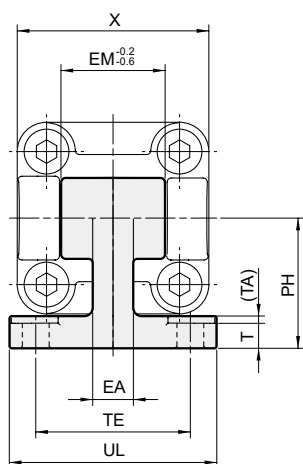


### CB2



### CDB2

CB2+Pin (Extra purchase)



| Code<br>Tube I.D. | A  | CA | CB <sup>H14</sup>          | CD <sup>H9</sup>           | CE <sup>H14</sup>          | CR  | CX  | E        | EA | EM | FL | GL | HB  | L    | O    | PH | RA | T  | TA  | TE | UL | UR | X   | ZT  |
|-------------------|----|----|----------------------------|----------------------------|----------------------------|-----|-----|----------|----|----|----|----|-----|------|------|----|----|----|-----|----|----|----|-----|-----|
| 32                | 22 | 26 | 26 <sup>+0.052<br/>0</sup> | 10 <sup>+0.036<br/>0</sup> | 45 <sup>0<br/>-0.62</sup>  | R10 | 47  | M10×1.25 | 10 | 26 | 22 | 21 | 6.6 | 12.5 | 32.5 | 32 | 18 | 8  | 1.6 | 38 | 51 | 31 | 47  | 142 |
| 40                | 24 | 28 | 28 <sup>+0.052<br/>0</sup> | 12 <sup>+0.043<br/>0</sup> | 52 <sup>0<br/>-0.74</sup>  | R12 | 53  | M12×1.25 | 15 | 28 | 25 | 24 | 6.6 | 16   | 38   | 36 | 22 | 10 | 1.6 | 41 | 54 | 35 | 55  | 160 |
| 50                | 32 | 32 | 32 <sup>+0.062<br/>0</sup> | 12 <sup>+0.043<br/>0</sup> | 60 <sup>0<br/>-0.74</sup>  | R12 | 65  | M16×1.5  | 16 | 32 | 27 | 33 | 9   | 16   | 46.5 | 45 | 30 | 12 | 1.6 | 50 | 65 | 45 | 65  | 170 |
| 63                | 32 | 40 | 40 <sup>+0.062<br/>0</sup> | 16 <sup>+0.043<br/>0</sup> | 70 <sup>0<br/>-0.74</sup>  | R16 | 75  | M16×1.5  | 16 | 40 | 32 | 37 | 9   | 21   | 56.5 | 50 | 35 | 14 | 1.6 | 52 | 67 | 50 | 78  | 190 |
| 80                | 40 | 50 | 50 <sup>+0.062<br/>0</sup> | 16 <sup>+0.043<br/>0</sup> | 90 <sup>0<br/>-0.87</sup>  | R16 | 95  | M20×1.5  | 20 | 50 | 36 | 47 | 11  | 22   | 72   | 63 | 40 | 14 | 2.5 | 66 | 86 | 60 | 95  | 210 |
| 100               | 40 | 60 | 60 <sup>+0.074<br/>0</sup> | 20 <sup>+0.052<br/>0</sup> | 110 <sup>0<br/>-0.87</sup> | R20 | 115 | M20×1.5  | 20 | 60 | 41 | 55 | 11  | 27   | 89   | 71 | 50 | 17 | 2.5 | 76 | 96 | 70 | 115 | 230 |

# MCQV3 Mounting accessories ø32~ø100

ISO 15552 **STANDARD CYLINDER**

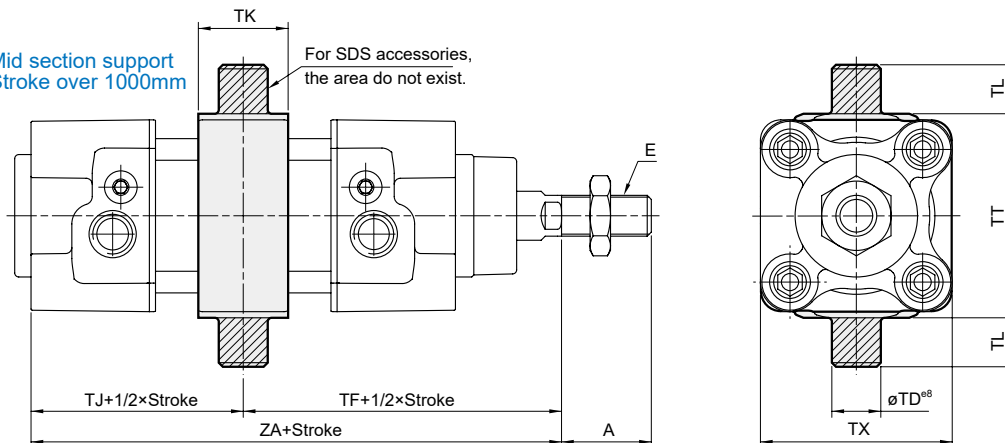


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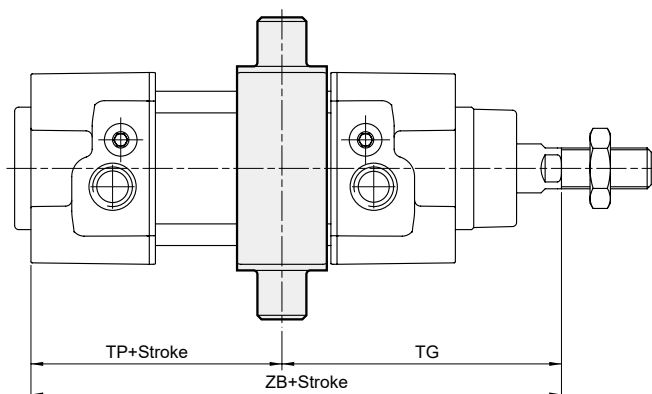
**TC**

**SDS**

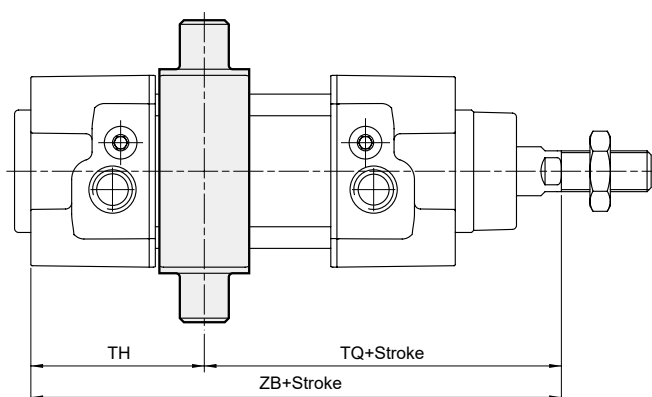
Mid section support  
Stroke over 1000mm



**TA**



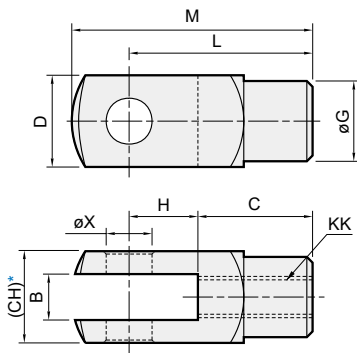
**TB**



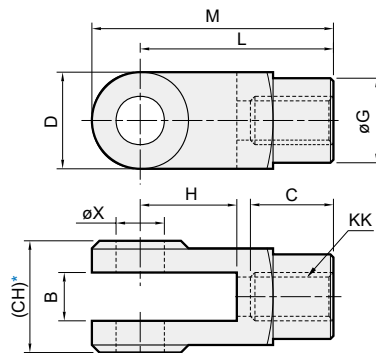
| Code<br>Tube I.D. | A  | E        | TD | TF   | TG   | TH   | TJ   | TK | TL | Without magnet |       |     | Magnet |       |     | TC  | SDS | TX  | ZA  |
|-------------------|----|----------|----|------|------|------|------|----|----|----------------|-------|-----|--------|-------|-----|-----|-----|-----|-----|
|                   |    |          |    |      |      |      |      |    |    | TP             | TQ    | ZB  | TP     | TQ    | ZB  |     |     |     |     |
| 32                | 22 | M10×1.25 | 12 | 73   | 68.5 | 42.5 | 47   | 22 | 12 | 51.5           | 77.5  | 120 | 81.5   | 107.5 | 150 | 50  | 49  | 47  | 120 |
| 40                | 24 | M12×1.25 | 16 | 82.5 | 76   | 46   | 52.5 | 22 | 16 | 59             | 89    | 135 | 89     | 119   | 165 | 63  | 55  | 53  | 135 |
| 50                | 32 | M16×1.5  | 16 | 90   | 80   | 43   | 53   | 22 | 16 | 63             | 100   | 143 | 93     | 130   | 173 | 75  | 68  | 66  | 143 |
| 63                | 32 | M16×1.5  | 20 | 97.5 | 85   | 48   | 60.5 | 28 | 20 | 73             | 110   | 158 | 103    | 140   | 188 | 90  | 82  | 80  | 158 |
| 80                | 40 | M20×1.5  | 20 | 110  | 99.5 | 53.5 | 64   | 34 | 20 | 74.5           | 120.5 | 174 | 114.5  | 160.5 | 214 | 110 | 108 | 106 | 174 |
| 100               | 40 | M20×1.5  | 25 | 120  | 109  | 58   | 69   | 40 | 25 | 80             | 131   | 189 | 120    | 171   | 229 | 132 | 130 | 126 | 189 |

### Y connector

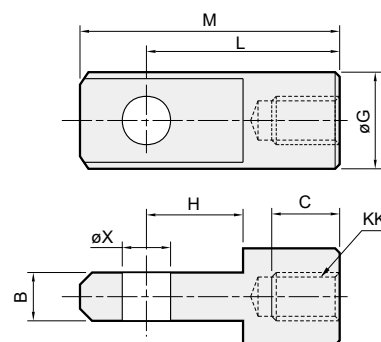
$\phi 32 \sim \phi 40$



$\phi 50 \sim \phi 100$



### I connector

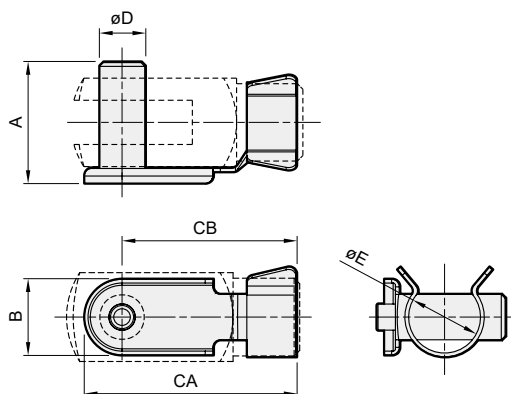


\* Please do not take the sand casting plate as the mounting plate, because we do not machine it.  
If you have this special demand, please contact our sales representative.

| Code      | B                                   |                                    | C  |    | CH |   | D  |   | G         |           | H  |    | KK       |    | L  |     | M   |           | X <sup>H9</sup>                         |
|-----------|-------------------------------------|------------------------------------|----|----|----|---|----|---|-----------|-----------|----|----|----------|----|----|-----|-----|-----------|-----------------------------------------|
| Tube I.D. | Y                                   | I                                  | Y  | I  | Y  | I | Y  | I | Y         | I         | Y  | I  | Y        | I  | Y  | I   | Y   | I         |                                         |
| 32        | 10 <sup>+0.5</sup> <sub>+0.15</sub> | 10 <sup>-0.1</sup> <sub>-0.2</sub> | 20 | 17 | 19 | — | 19 | — | $\phi 18$ | $\phi 20$ | 20 | 15 | M10×1.25 | 40 | 40 | 52  | 52  | $\phi 10$ | $\phi 10$ <sup>+0.04</sup> <sub>0</sub> |
| 40        | 12 <sup>+0.5</sup> <sub>+0.15</sub> | 12 <sup>-0.1</sup> <sub>-0.2</sub> | 24 | 21 | 22 | — | 22 | — | $\phi 20$ | $\phi 24$ | 24 | 18 | M12×1.25 | 48 | 48 | 62  | 62  | $\phi 12$ | $\phi 12$ <sup>+0.04</sup> <sub>0</sub> |
| 50        | 16 <sup>+0.3</sup> <sub>+0.1</sub>  | 16 <sup>-0.1</sup> <sub>-0.3</sub> | 28 | 23 | 32 | — | 32 | — | $\phi 28$ | $\phi 32$ | 32 | 32 | M16×1.5  | 64 | 64 | 89  | 86  | $\phi 16$ | $\phi 16$ <sup>+0.04</sup> <sub>0</sub> |
| 63        | 16 <sup>+0.3</sup> <sub>+0.1</sub>  | 16 <sup>-0.1</sup> <sub>-0.3</sub> | 28 | 23 | 32 | — | 32 | — | $\phi 28$ | $\phi 32$ | 32 | 32 | M16×1.5  | 64 | 64 | 89  | 86  | $\phi 16$ | $\phi 16$ <sup>+0.04</sup> <sub>0</sub> |
| 80        | 20 <sup>+0.3</sup> <sub>+0.1</sub>  | 20 <sup>-0.1</sup> <sub>-0.3</sub> | 33 | 30 | 45 | — | 40 | — | $\phi 36$ | $\phi 36$ | 40 | 40 | M20×1.5  | 80 | 80 | 100 | 108 | $\phi 20$ | $\phi 20$ <sup>+0.05</sup> <sub>0</sub> |
| 100       | 20 <sup>+0.3</sup> <sub>+0.1</sub>  | 20 <sup>-0.1</sup> <sub>-0.3</sub> | 33 | 30 | 45 | — | 40 | — | $\phi 36$ | $\phi 36$ | 40 | 40 | M20×1.5  | 80 | 80 | 100 | 108 | $\phi 20$ | $\phi 20$ <sup>+0.05</sup> <sub>0</sub> |

### PIN

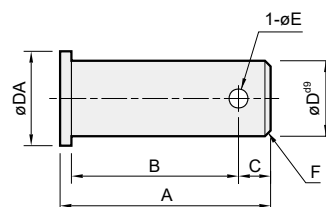
#### S



for floating pin

| Code      | A  | B  | CA | CB | D <sup>d9</sup>                             | E  |
|-----------|----|----|----|----|---------------------------------------------|----|
| Tube I.D. |    |    |    |    |                                             |    |
| 32        | 26 | 14 | 45 | 38 | $\phi 10$ <sup>-0.04</sup> <sub>-0.07</sub> | 17 |
| 40        | 31 | 16 | 54 | 46 | $\phi 12$ <sup>-0.05</sup> <sub>-0.09</sub> | 19 |
| 50,63     | 42 | 20 | 70 | 60 | $\phi 16$ <sup>-0.05</sup> <sub>-0.09</sub> | 27 |
| 80,100    | 56 | 30 | 91 | 76 | $\phi 20$ <sup>-0.06</sup> <sub>-0.11</sub> | 35 |

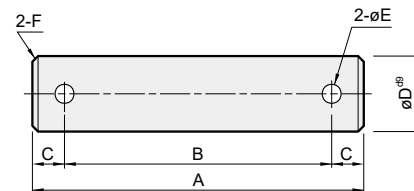
#### P



for Y & I connector

| Code      | A  | B  | C   | D <sup>d9</sup>                             | DA | E   | F   | Split pin |
|-----------|----|----|-----|---------------------------------------------|----|-----|-----|-----------|
| Tube I.D. |    |    |     |                                             |    |     |     |           |
| 32        | 30 | 25 | 3.5 | $\phi 10$ <sup>-0.06</sup> <sub>-0.09</sub> | 14 | 3.2 | 1   | 3.2×20L   |
| 40        | 37 | 30 | 5   | $\phi 12$ <sup>-0.06</sup> <sub>-0.09</sub> | 16 | 3.2 | 1   | 3.2×20L   |
| 50,63     | 47 | 37 | 7   | $\phi 16$ <sup>-0.05</sup> <sub>-0.09</sub> | 22 | 4   | 1   | 4×25L     |
| 80,100    | 62 | 50 | 8   | $\phi 20$ <sup>-0.06</sup> <sub>-0.11</sub> | 30 | 5   | 1.5 | 5×35L     |

#### P



for CA & CB

| Code      | A   | B   | C   | D <sup>d9</sup>                             | E | F   | Split pin |
|-----------|-----|-----|-----|---------------------------------------------|---|-----|-----------|
| Tube I.D. |     |     |     |                                             |   |     |           |
| 32        | 69  | 55  | 7   | $\phi 10$ <sup>-0.05</sup> <sub>-0.09</sub> | 4 | 1.0 | 4×20L     |
| 40        | 76  | 62  | 7   | $\phi 12$ <sup>-0.05</sup> <sub>-0.09</sub> | 4 | 1.0 | 4×20L     |
| 50        | 84  | 70  | 7   | $\phi 12$ <sup>-0.05</sup> <sub>-0.09</sub> | 4 | 1.0 | 4×20L     |
| 63        | 94  | 80  | 7   | $\phi 16$ <sup>-0.05</sup> <sub>-0.09</sub> | 4 | 1.0 | 4×30L     |
| 80        | 117 | 100 | 8.5 | $\phi 16$ <sup>-0.05</sup> <sub>-0.09</sub> | 5 | 1.5 | 5×30L     |
| 100       | 137 | 120 | 8.5 | $\phi 20$ <sup>-0.05</sup> <sub>-0.09</sub> | 5 | 1.5 | 5×35L     |



# MCQV3 Solenoid valve link seats ø40, ø50

ISO 15552 **STANDARD CYLINDER**



Mindman

## Order example

MCQV3 — As standard order example — VR — 4E2C — 6A — AC110 — L

MODEL

SOLENOID VALVE  
LINK SEATS

VR: Installed on the front cover  
VH: Installed on the back cover

4 way (5 port)

E1: Single solenoid  
E2: Double solenoid

C: Closed center  
P: Pressure center  
R: Exhaust center  
(Only for  
MVSN-300-4E2)

PORT  
SIZE

6A: G1/8  
(Only for  
MVSN-220)  
8A: G1/4

VOLTAGE

AC220V(50/60)Hz  
AC110V(50/60)Hz  
DC24V

ELECTRIC CONNECTION

| Standard                 |                                 |
|--------------------------|---------------------------------|
| Blank                    | DIN terminal                    |
| L                        | DIN terminal with LED indicator |
| E                        | Explosion protection            |
| Power saving (for DC24V) |                                 |
| KL                       | DIN terminal with LED indicator |

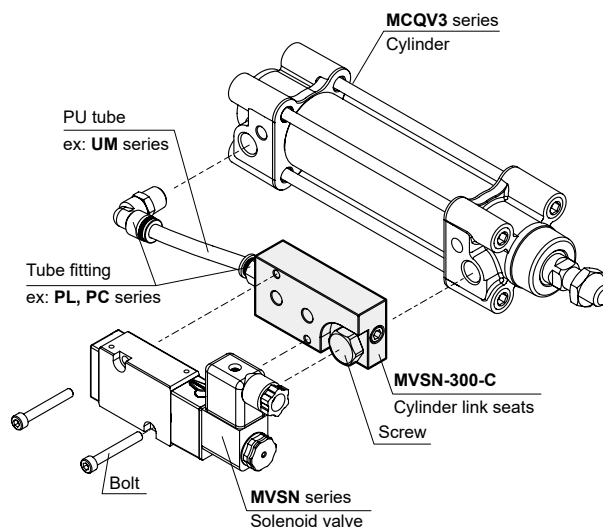
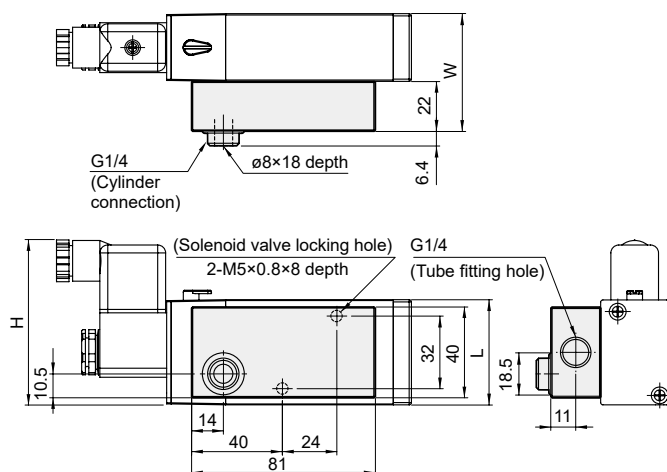
\* MCQV3-ø40 (for MVSN-220 valve)

\* MCQV3-ø50 (for MVSN-300 valve)

## MVSN-300-C

Solenoid valve link seats

## Mounting of solenoid valve link seats



| Code<br>Model | H  | W    | L    | Cylinder type   |
|---------------|----|------|------|-----------------|
| MVSN-220      | 70 | 44.3 | 40   | MCQV3/MCQI3 ø40 |
| MVSN-300      | 73 | 52   | 46.4 | MCQV3/MCQI3 ø50 |