



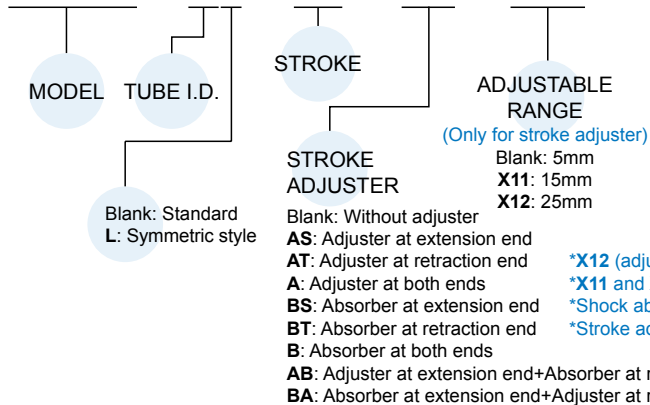
### Table for standard stroke

| Tube I.D. | Stroke (mm)            |
|-----------|------------------------|
| ø6        | 10, 20, 30, 40, 50     |
| ø8        | 10, 20, 30, 40, 50, 75 |

\* Produce after received your orders.

### Order example

**MCSQ – 8L – 50 – AS – X12**



### Features

- High precision combination of cylinder and linear rail.
- Flush fitting sensor groove.
- Magnetic as standard.

### Specification

| Model                    | MCSQ   |        |
|--------------------------|--|--------|
| Acting type              | Double acting                                    |        |
| Tube I.D. (mm)           | 6  | 8      |
| Port size                | M3×0.5   | M5×0.8 |
| Medium                   | Air  |        |
| Operating pressure range | 0.15~0.7 MPa                                     |        |
| Proof pressure           | 1 MPa  |        |
| Ambient temperature      | -5~+60°C (No freezing)                           |        |
| Lubricator               | Not required                                     |        |
| Available speed range    | 50~500 mm/sec                                    |        |
| Cushion                  | Rubber bumper (Standard) Shock absorber (Option) |        |
| Sensor switch (*)        | RCE, RCE1, RDEP                                  |        |

\* RCE, RCE1, RDEP specification, please refer to page 8-10, 15.

### Theoretical force

Unit: N

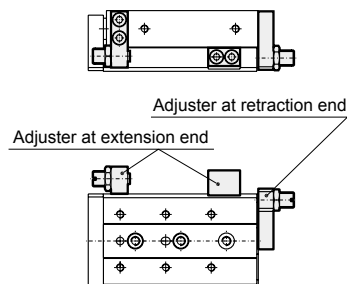
| Tube I.D. (mm) | Piston rod (mm) | Operating direction | Piston area (mm <sup>2</sup> ) | Operating pressure (MPa) |     |     |     |     |     |  |
|----------------|-----------------|---------------------|--------------------------------|--------------------------|-----|-----|-----|-----|-----|--|
|                |                 |                     |                                | 0.2                      | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 |  |
| 6              | 3               | OUT                 | 57                             | 11                       | 17  | 23  | 29  | 34  | 40  |  |
|                |                 | IN                  | 42                             | 8                        | 13  | 17  | 21  | 25  | 29  |  |
| 8              | 4               | OUT                 | 101                            | 20                       | 30  | 40  | 51  | 61  | 71  |  |
|                |                 | IN                  | 75                             | 15                       | 23  | 30  | 38  | 45  | 53  |  |

### Stroke adjuster option

#### Stroke adjuster

- Adjustable stroke range: 0~5mm (Standard)

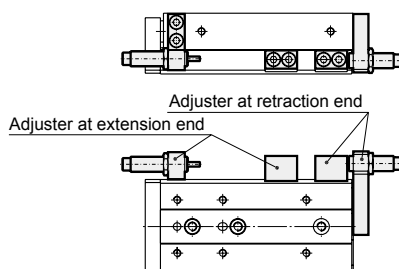
AS: Adjuster at extension end  
AT: Adjuster at retraction end  
A: Adjuster at both ends



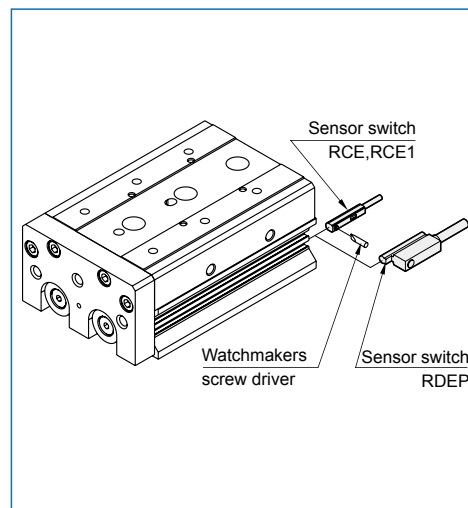
#### With shock absorber

- Enables adjustment of stroke.
- Absorbs the collision at stroke end and stops smoothly.

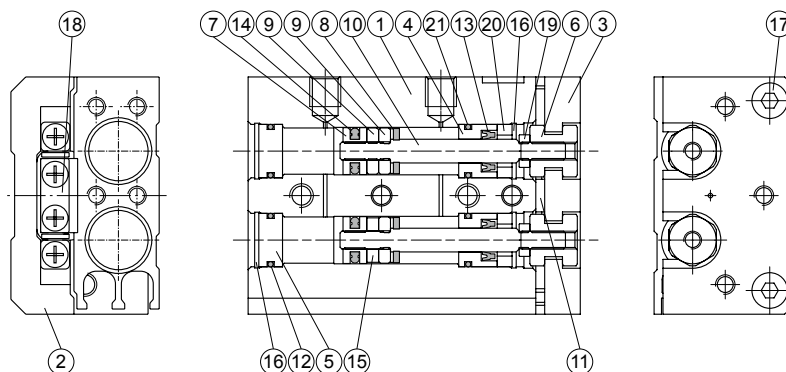
BS: Absorber at extension end  
BT: Absorber at retraction end  
B: Absorber at both ends



### Installation of sensor switch



ø6, ø8



### Material

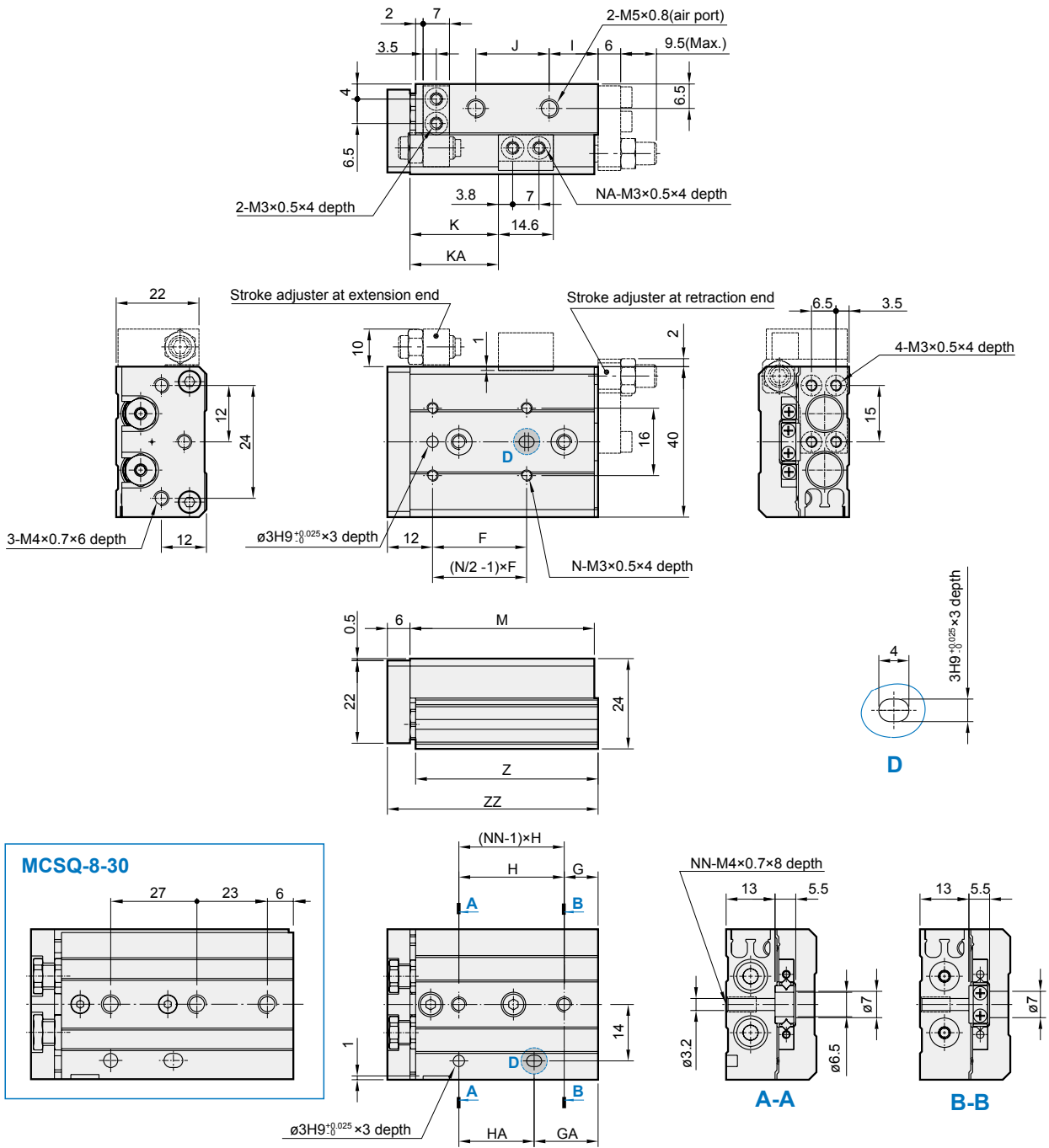
| No. | Tube I.D.<br>Part name | 6               | 8               | Q'y | Repair kits<br>(inclusion) |
|-----|------------------------|-----------------|-----------------|-----|----------------------------|
| 1   | Body                   | Aluminum alloy  |                 | 1   |                            |
| 2   | Table                  | Aluminum alloy  |                 | 1   |                            |
| 3   | Plate                  | Aluminum alloy  |                 | 1   |                            |
| 4   | Rod cover              | Aluminum alloy  |                 | 2   |                            |
| 5   | Head cover             | Aluminum alloy  |                 | 2   |                            |
| 6   | Floating connector     | Stainless steel |                 | 2   |                            |
| 7   | Piston                 | Stainless steel |                 | 2   |                            |
| 8   | Cushion pad            | NBR             |                 | 2   | ●                          |
| 9   | Spacer ring            | Stainless steel | Aluminum alloy  | 3   |                            |
| 10  | Piston rod             | Stainless steel |                 | 2   |                            |
| 11  | End cushion            | PU              |                 | 1   | ●                          |
| 12  | Cover ring             | NBR             |                 | 2   | ●                          |
| 13  | Rod packing            | NBR             |                 | 2   | ●                          |
| 14  | Piston packing         | NBR             |                 | *   | ●                          |
| 15  | Magnet ring            | Magnet material |                 | 1   |                            |
| 16  | Snap ring              | Spring steel    | Stainless steel | 4   |                            |
| 17  | Bolt                   | Stainless steel |                 | 2   |                            |
| 18  | Slide way              | Bearing steel   |                 | 1   |                            |
| 19  | Nut                    | Copper          |                 | 2   |                            |
| 20  | Rod cover washer       | Stainless steel |                 | 2   |                            |
| 21  | Cover ring             | NBR             |                 | 2   |                            |

\* Q'y: ø6=2, ø8=4

### Order example of repair kits

| Tube I.D. | Repair kits      |
|-----------|------------------|
| ø6        | <b>PS-MCSQ-6</b> |
| ø8        | <b>PS-MCSQ-8</b> |





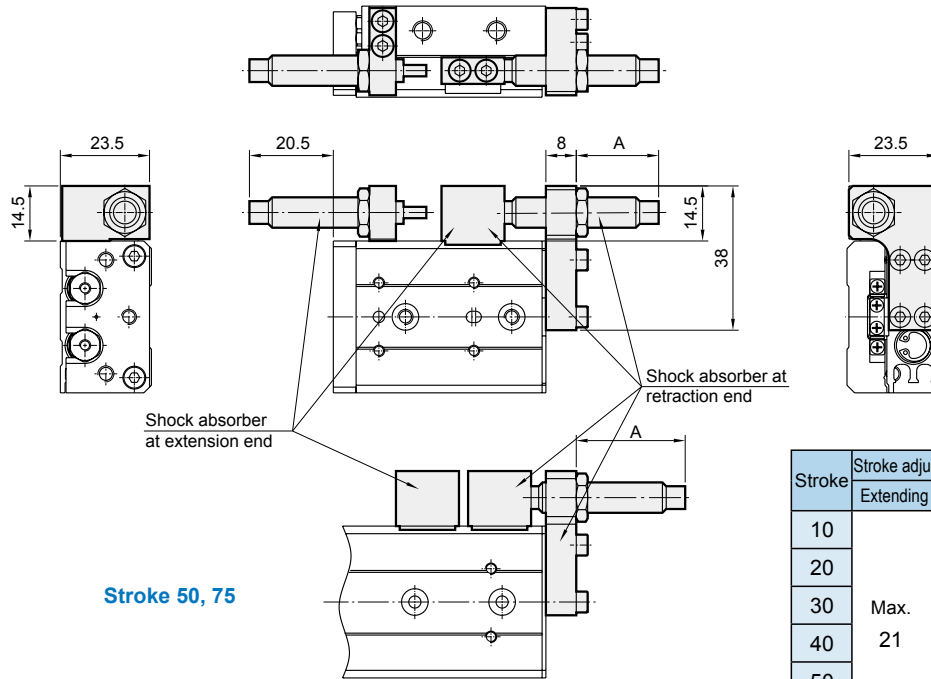
| Code Stroke | F  | G  | GA | H  | HA | I  | J   | K    | KA    | M   | N | NA | NN | Z     | ZZ  |
|-------------|----|----|----|----|----|----|-----|------|-------|-----|---|----|----|-------|-----|
| 10          | 25 | 7  | 13 | 25 | 19 | 11 | 17  | 23.5 | —     | 46  | 4 | 2  | 2  | 45.5  | 53  |
| 20          | 25 | 14 | 14 | 28 | 28 | 10 | 28  | 33.5 | —     | 56  | 4 | 2  | 2  | 55.5  | 63  |
| 30          | 26 | —  | 29 | —  | 27 | 12 | 40  | 43.5 | —     | 70  | 6 | 2  | 3  | 69.5  | 77  |
| 40          | 32 | 8  | 39 | 31 | 31 | 14 | 52  | 53.5 | —     | 84  | 6 | 2  | 3  | 83.5  | 91  |
| 50          | 46 | 8  | 37 | 29 | 58 | 13 | 78  | 63.5 | 82.5  | 109 | 6 | 4  | 4  | 108.5 | 116 |
| 75          | 50 | 31 | 61 | 30 | 60 | 12 | 105 | 88.5 | 112.5 | 135 | 6 | 4  | 4  | 134.5 | 142 |

# MCSQ With shock absorber $\varnothing 8$

## SLIDE CYLINDER



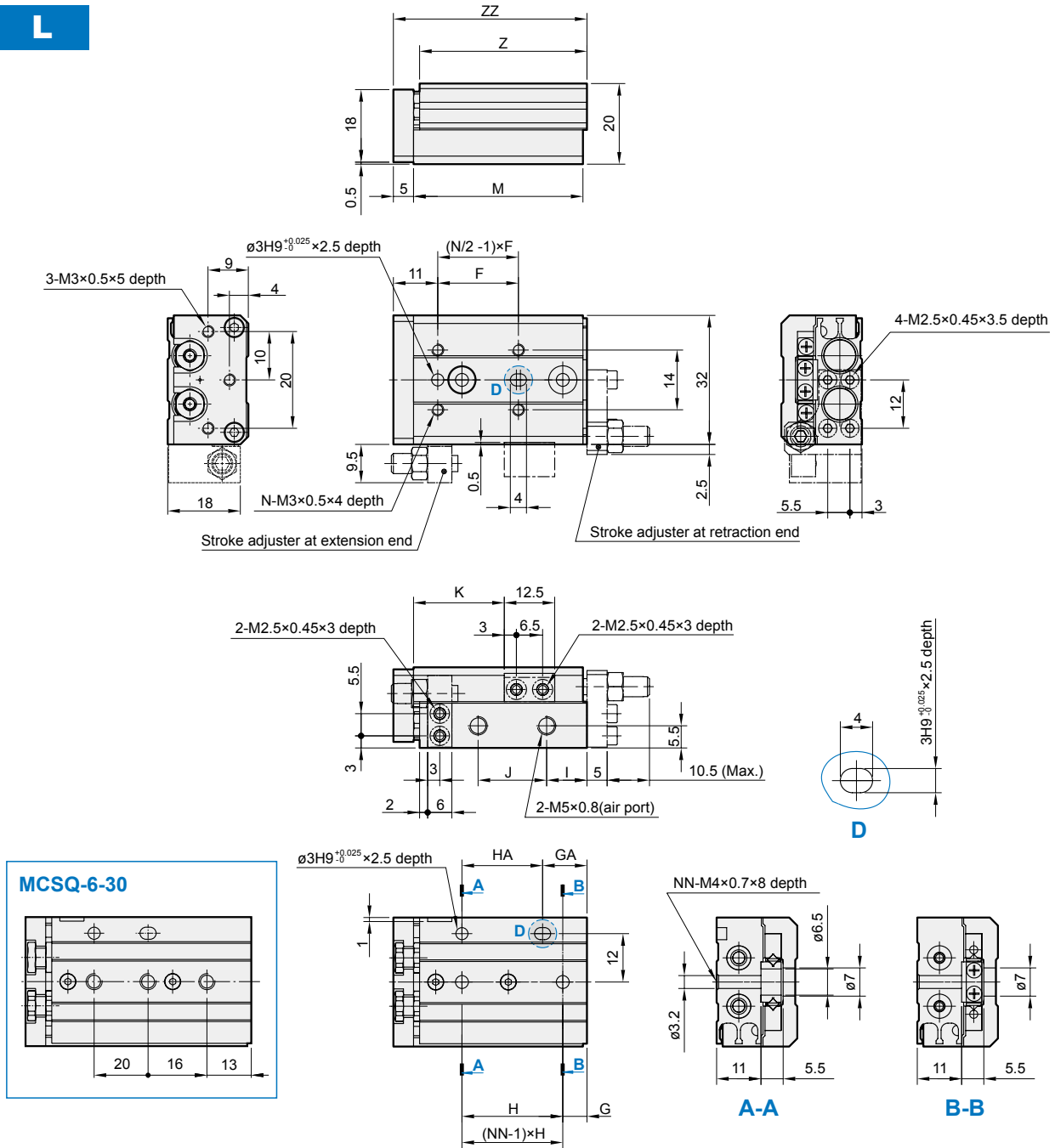
$\varnothing 8$



| Stroke | Stroke adjustment range |            | A dimension<br>(Retracted side mounting) |
|--------|-------------------------|------------|--|
|        | Extending               | Retracting |  |
| 10     | Max.<br>21              | 13.9       | 22.9                                     |
| 20     |                         | 13.9       | 22.9                                     |
| 30     |                         | 9.9        | 18.9                                     |
| 40     |                         | 5.9        | 14.9                                     |
| 50     |                         | 9.9        | 18.9                                     |
| 75     |                         | 13.9       | 22.9                                     |

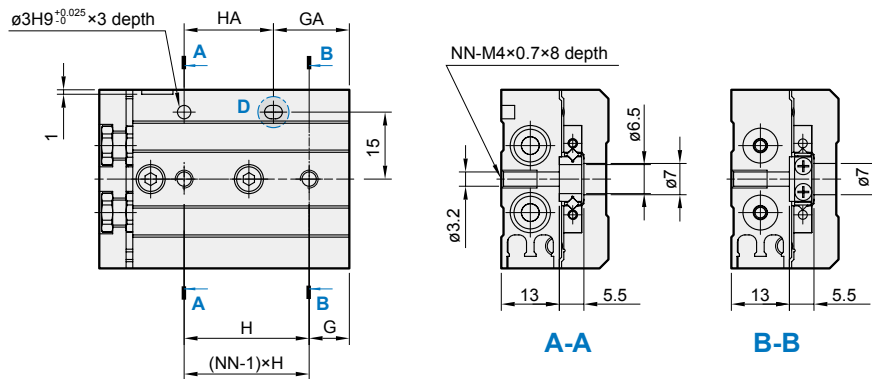
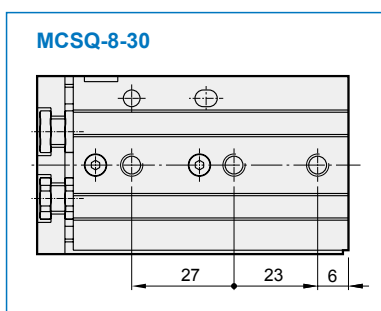
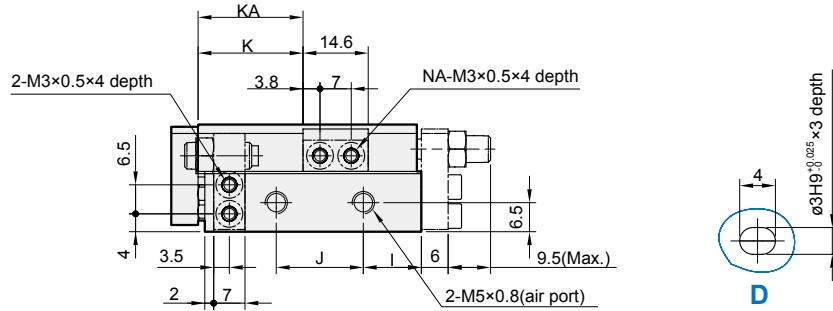
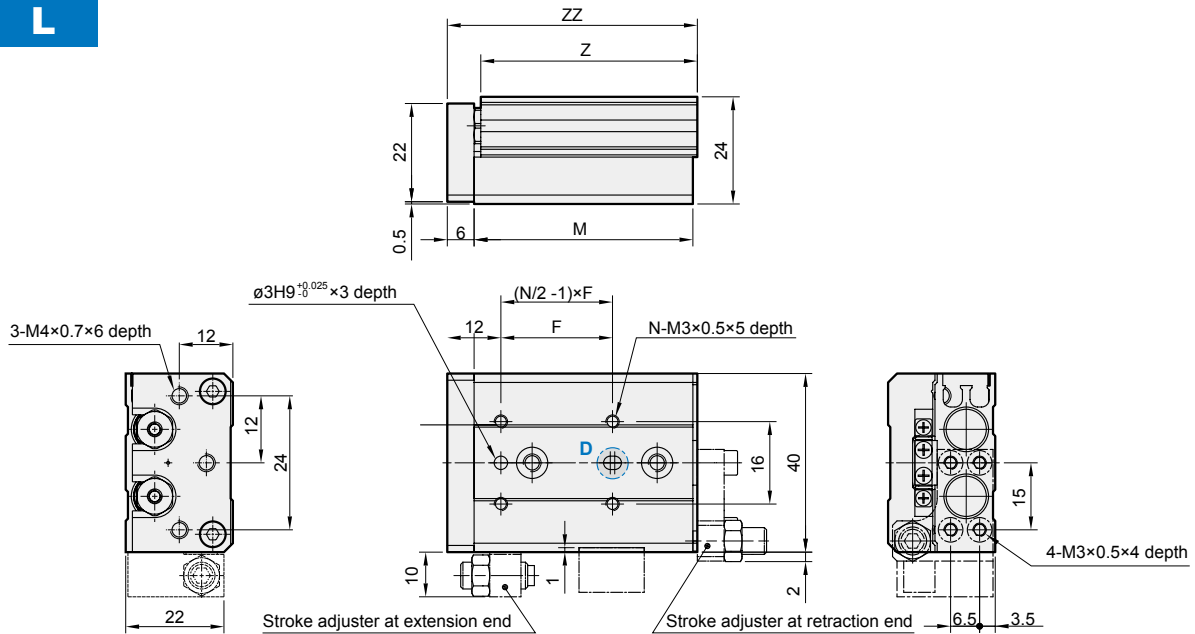
\* Other dimensions not indicated are the same as the basic style.

L



| Code<br>Stroke | F  | G  | GA | H  | HA | I  | J  | K    | M  | N | NN | Z    | ZZ |
|----------------|----|----|----|----|----|----|----|------|----|---|----|------|----|
| 10             | 22 | 6  | 13 | 23 | 16 | 9  | 17 | 21.5 | 42 | 4 | 2  | 41.5 | 48 |
| 20             | 25 | 13 | 13 | 26 | 26 | 9  | 27 | 31.5 | 52 | 4 | 2  | 51.5 | 58 |
| 30             | 21 | —  | 29 | —  | 20 | 9  | 37 | 41.5 | 62 | 6 | 3  | 61.5 | 68 |
| 40             | 26 | 11 | 39 | 28 | 28 | 16 | 48 | 51.5 | 80 | 6 | 3  | 79.5 | 86 |
| 50             | 27 | 21 | 49 | 28 | 28 | 9  | 65 | 61.5 | 90 | 6 | 4  | 89.5 | 96 |

**L**



| Code<br>Stroke | F  | G  | GA | H  | HA | I  | J   | K    | KA    | M   | N | NA | NN | Z     | ZZ  |
|----------------|----|----|----|----|----|----|-----|------|-------|-----|---|----|----|-------|-----|
| 10             | 25 | 7  | 13 | 25 | 19 | 11 | 17  | 23.5 | —     | 46  | 4 | 2  | 2  | 45.5  | 53  |
| 20             | 25 | 14 | 14 | 28 | 28 | 10 | 28  | 33.5 | —     | 56  | 4 | 2  | 2  | 55.5  | 63  |
| 30             | 26 | —  | 29 | —  | 27 | 12 | 40  | 43.5 | —     | 70  | 6 | 2  | 3  | 69.5  | 77  |
| 40             | 32 | 8  | 39 | 31 | 31 | 14 | 52  | 53.5 | —     | 84  | 6 | 2  | 3  | 83.5  | 91  |
| 50             | 46 | 8  | 37 | 29 | 58 | 13 | 78  | 63.5 | 82.5  | 109 | 6 | 4  | 4  | 108.5 | 116 |
| 75             | 50 | 31 | 61 | 30 | 60 | 12 | 105 | 88.5 | 112.5 | 135 | 6 | 4  | 4  | 134.5 | 142 |