

## C(D)85, ISO Standard Cylinder, Double Acting, Single Rod CD85N12-160C-B

### Datasheet

### General series information

- Double acting, single rod, crimped cylinder
- Conforms to ISO 6432 and CETOP RP52P
- Bore sizes (mm): 8, 10, 12, 16, 20, 25
- Standard strokes up to 300mm
- Auto switch capable



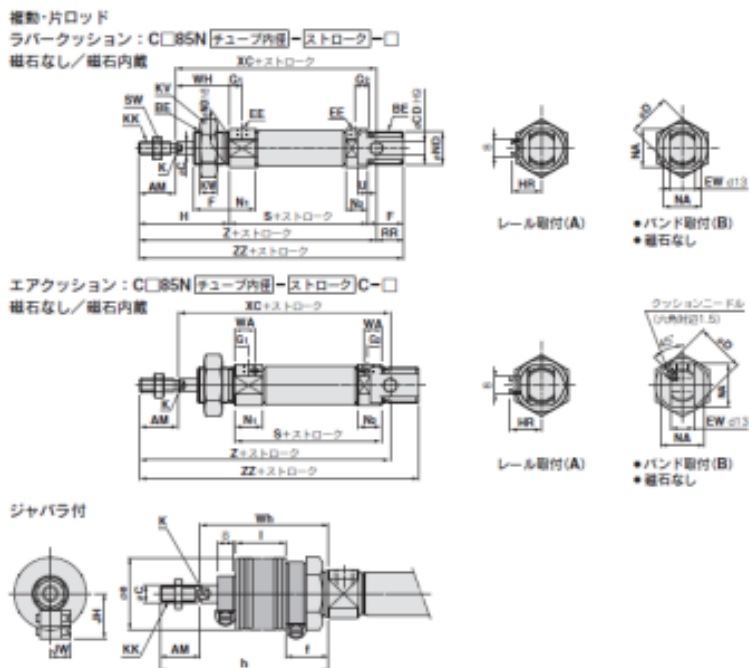
*Double-acting cylinder with cushioning  
adjustable at both ends, single piston rod*

### Standard specifications

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| Magnet                                             | D (Built-in)                              |
| Mounting                                           | N (Basic Integrated Clevis)               |
| Bore Size                                          | Ø12 mm                                    |
| Stroke                                             | 160                                       |
| Cushion                                            | C (Air Cushion)                           |
| Rod Boot                                           | None                                      |
| Auto Switch Mounting Type                          | B (Band)                                  |
| Auto Switch                                        | No Switch                                 |
| Lead Wire or Prewired Connector                    | 0.5m (Or None in the Case of No Switch)   |
| Number                                             | 2 pcs. (Or None in the Case of No Switch) |
| Rod End Options                                    | None                                      |
| Temperature Resistance                             | None                                      |
| Low Speed                                          | None                                      |
| Stainless Steel                                    | None                                      |
| Long Stroke                                        | None                                      |
| Pressure medium                                    | Compressed Air                            |
| Maximum temperature of pressure medium             | 80 °C                                     |
| Maximum temperature of pressure medium with magnet | 60 °C                                     |

|                                                         |                               |
|---------------------------------------------------------|-------------------------------|
| Minimum temperature of pressure medium                  | -20 °C [without condensation] |
| Minimum temperature of pressure medium with magnet      | -10 °C [without condensation] |
| Maximum operating pressure                              | 1 MPa                         |
| Minimum operating pressure                              | 0.08 MPa                      |
| Proof pressure                                          | 1.5 MPa                       |
| Maximum ambient temperature                             | 80 °C                         |
| Maximum ambient temperature with magnet                 | 60 °C                         |
| Minimum ambient temperature                             | -20 °C                        |
| Minimum ambient temperature with magnet                 | -10 °C                        |
| Number of pneumatic connections                         | 2 pcs.                        |
| Pneumatic input connection                              | M5                            |
| Pneumatic output connection                             | M5                            |
| Mode of operation of drive                              | Double acting                 |
| Theoretical cylinder force, advance stroke (at 0.5 MPa) | 56.6 N                        |
| Theoretical cylinder force, return stroke (at 0.5 MPa)  | 42.4 N                        |
| Maximum piston speed                                    | 1,500 mm/s                    |
| Type of cushioning                                      | Air cushion                   |
| Piston rod end                                          | External thread               |
| Geometric form of the piston rod                        | Single rod                    |
| Male thread of rod end                                  | M6                            |
| Usable tubing material                                  | Soft nylon;Nylon;Polyurethane |
| Minimum piston speed                                    | 50 mm/s                       |
| Weight                                                  | 0.195 Kg                      |

# Dimensions



| 寸法表 | AM | BE      | C   | CO   | D      | EE    | EF | F | G <sub>1</sub> | G <sub>2</sub> | H | HR  | K       | KA | KK | KV   | KN   | N <sub>1</sub> | N <sub>2</sub> | NA | NC | PR | S  | SW | U  | WA | WH  | XC  | Z | ZZ |
|-----|----|---------|-----|------|--------|-------|----|---|----------------|----------------|---|-----|---------|----|----|------|------|----------------|----------------|----|----|----|----|----|----|----|-----|-----|---|----|
| 8   | 12 | M2×1.25 | 4.4 | 16.1 | M5×0.8 | 8.12  | 7  | 5 | 26             | 10             | — | 4.2 | M4×0.7  | 19 | 6  | 11.5 | 9.5  | 15             | 12             | 10 | 46 | 7  | 6  | —  | 16 | 64 | 76  | 86  | — |    |
| 10  | 12 | M2×1.25 | 4.4 | 16.1 | M5×0.8 | 8.12  | 7  | 5 | 26             | 10.5           | — | 4.2 | M4×0.7  | 19 | 6  | 11.5 | 9.5  | 15             | 12             | 10 | 46 | 7  | 6  | —  | 16 | 64 | 76  | 86  | — |    |
| 12  | 16 | M16×1.5 | 6.6 | 19.7 | M5×0.8 | 12.17 | 8  | 6 | 36             | 14             | 5 | 6.2 | M5×1    | 24 | 8  | 12.5 | 10.5 | 18             | 12             | 10 | 46 | 7  | 6  | —  | 16 | 64 | 76  | 86  | — |    |
| 16  | 16 | M16×1.5 | 6.6 | 19.7 | M5×0.8 | 12.17 | 8  | 6 | 36             | 14             | 5 | 6.2 | M5×1    | 24 | 8  | 12.5 | 10.5 | 18             | 12             | 10 | 46 | 7  | 6  | —  | 16 | 64 | 76  | 86  | — |    |
| 20  | 20 | M22×1.5 | 8.8 | 28   | G 1/8  | 16.20 | 8  | 8 | 44             | 17             | 6 | 8.2 | M6×1.25 | 32 | 11 | 15   | 17   | 24             | 22             | 11 | 62 | 13 | 12 | 13 | 24 | 95 | 115 | 126 | — |    |
| 25  | 25 | M22×1.5 | 8.8 | 28   | G 1/8  | 16.20 | 8  | 8 | 44             | 17             | 6 | 8.2 | M6×1.25 | 32 | 11 | 15   | 17   | 24             | 22             | 11 | 62 | 13 | 12 | 13 | 24 | 95 | 115 | 126 | — |    |

（ ）内は寸法調整の値。

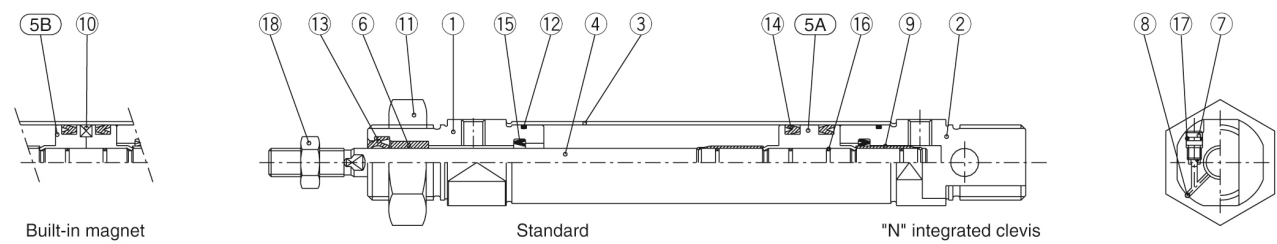
( )内はエアクッションの寸法。

ジャバラ付 (mm)

| シリーズ | AM | C  | e  | f  | K | KK       | h  |
|------|----|----|----|----|---|----------|----|
| 8    | 20 | 8  | 36 | 20 | 6 | M6×1.25  | 71 |
| 10   | 22 | 10 | 36 | 20 | 8 | M10×1.25 | 74 |
| 12   | 20 | 8  | 36 | 20 | 6 | M6×1.25  | 71 |
| 16   | 20 | 8  | 36 | 20 | 6 | M6×1.25  | 71 |
| 20   | 20 | 8  | 36 | 20 | 6 | M6×1.25  | 71 |
| 25   | 20 | 8  | 36 | 20 | 6 | M6×1.25  | 71 |

# Constructions

## Double acting: Single rod C□85□10 to 16 Air cushion (Disassembly is not possible)



### Component Parts

| No. | Description    | Material        | Quantity | Remarks               |
|-----|----------------|-----------------|----------|-----------------------|
| ①   | Rod cover      | Aluminum alloy  | 1        | White anodized        |
| ②   | Head cover N   | Aluminum alloy  | 1        | White anodized        |
| ③   | Cylinder tube  | Stainless steel | 1        |                       |
| ④   | Piston rod     | Stainless steel | 1        |                       |
| ⑤A  | Piston A       | Brass           | 1        |                       |
| ⑤B  | Piston B       | Brass           | 2        | (Switch style piston) |
| ⑥   | Bush           | Sintered bronze | 1        |                       |
| ⑦   | Cushion needle | Stainless steel | 2        |                       |
| ⑧   | Steel ball     | Bearing steel   | 2        |                       |

| No. | Description                         | Material     | Quantity | Remarks       |
|-----|-------------------------------------|--------------|----------|---------------|
| ⑨   | Cushion ring                        | Brass        | 2        |               |
| ⑩   | Magnet                              |              | 1        |               |
| ⑪   | Mounting nut                        | Carbon steel | 1        | Nickel plated |
| ⑫   | Tube gasket                         | NBR          | 2        |               |
| ⑬   | Rod seal                            | NBR          | 1        |               |
| ⑭   | Piston seal                         | NBR          | 2        |               |
| ⑮   | Check seal                          | NBR          | 2        |               |
| ⑯   | Piston gasket & cushion ring gasket | NBR          | 3        |               |
| ⑰   | Needle seal                         | NBR          | 2        |               |
| ⑱   | Rod end nut                         | Carbon steel | 1        | Nickel plated |

## Additional information

Catalogue

[C85\\_C75-A\\_EU.pdf](#)