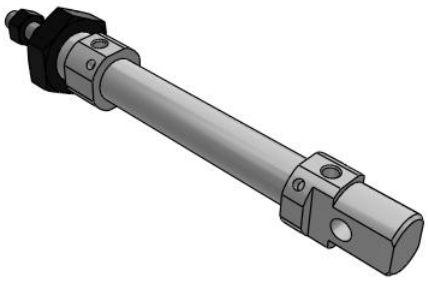


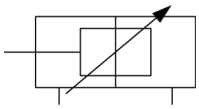
# C(D)85, ISO Standard Cylinder, Double Acting, Single Rod

## C85N12-40C

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

| | |
|---|---|
| Low Speed | None |
| Stroke | 40 |
| Long Stroke | None |
| Magnet | None |
| Rod End Options | None |
| Auto Switch | No Switch |
| Cushion | C (Air Cushion) |
| Mounting | N (Basic Integrated Clevis) |
| Bore Size | Ø12 mm |
| Rod Boot | None |
| 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) |
| Stainless Steel | None |
| Temperature Resistance | None |
| Auto Switch Mounting Type | None |
| Pressure medium | Compressed Air |
| Maximum temperature of pressure medium | 80 °C |
| Maximum temperature of pressure medium with magnet | 60 °C |

*Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.*



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| | |
|---|---|
| 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 | 0.121 Kg |

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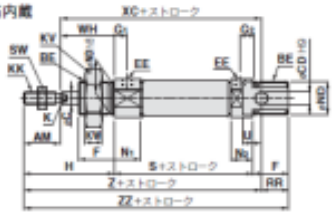
# Dimensions

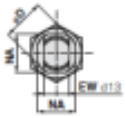
複動・片ロッド

ラバークッション：C□85N チューブ内径－ストローク－□

磁石なし／磁石内蔵



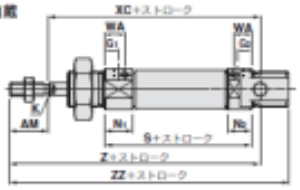
レール取付(A)




●バンド取付(B)
●磁石なし

エアクッション：C□85N チューブ内径－ストローク C－□

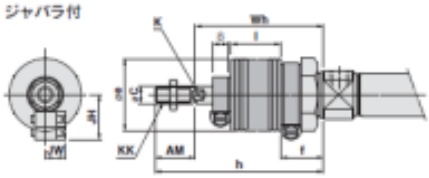
磁石なし／磁石内蔵



レール取付(A)

●バンド取付(B)
●磁石なし

ジャバラ付




寸法表

(mm)

| チューブ内径 | AM | BE | C | CD | D | EE | EW | F | $G_1$ | $G_2$ | H | HR | K | KA | KK | KV | KW | $N_1$ | $N_2$ | NA | ND | RR | S | SW | U | WA | WH | XC | Z | ZZ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 12 | M12×1.25 | 4 | 4 | 16.7 | M5×0.8 | 8 | 12 | 7 | 5 | 28 | 10 | — | 4.2 | M4×0.7 | 19 | 6 | 11.5 | 9.5 | 15 | 12 | 10 | 46 | 7 | 6 | — | 16 | 64 | 76 | 86 |
| 10 | 12 | M12×1.25 | 4 | 4 | 16.7 | M5×0.8 | 8 | 12 | 7 (6.5) | 5 (5.5) | 28 | 10.5 | — | 4.2 | M4×0.7 | 19 | 6 | 11.5 (13.5) | 9.5 (11.5) | 15 | 12 | 10 | 46 (53) | 7 | 6 | 10.5 | 16 | 64 (71) | 76 (83) | 86 (93) |
| 12 | 16 | M16×1.5 | 6 | 6 | 19.7 | M5×0.8 | 12 | 17 | 8 (7.5) | 6 (6.5) | 38 | 14 | 5 | 6.2 | M6×1 | 24 | 8 | 13.5 (12.5) | 10.5 (12.5) | 18.3 | 16 | 14 | 50 (54) | 10 | 9 | 9.5 | 22 | 75 (79) | 91 (95) | 105 (109) |
| 16 | 16 | M16×1.5 | 6 | 6 | 19.7 | M5×0.8 | 12 | 17 | 8 (7.5) | 6 (6.5) | 38 | 14 | 5 | 6.2 | M6×1 | 24 | 8 | 13.5 (12.5) | 10.5 (12.5) | 18.3 | 16 | 14 | 50 (54) | 10 | 9 | 9.5 | 22 | 85 (89) | 98 (102) | 111 (115) |
| 20 | 20 | M22×1.5 | 8 | 8 | 28 | G 1/8 | 16 | 20 | 8 | 8 | 44 | 17 | 6 | 8.2 | M8×1.25 | 32 | 11 | 19 (17) | 15 (17) | 24 | 22 | 11 | 62 | 13 | 12 | 13 | 24 | 95 | 115 | 126 |
| 25 | 20 | M22×1.5 | 8 | 8 | 33.5 | G 1/8 | 16 | 22 | 8 | 8 | 52 | 20 | 8 | 8.2 | M10×1.25 | 32 | 11 | 19 (17) | 15 (17) | 30 | 22 | 11 | 66 | 17 | 12 | 13 | 28 | 104 | 126 | 137 |

（ ）内はエアクッションの場合。

ジャバラ付

(mm)

| チューブ内径 \ ストローク | AM | C | e | f | K | KK | h 1～50 | 51～100 | 101～150 | 151～200 | 201～300 | 301～400 | 401～500 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 20 | 8 | 36 | 20 | 6 | M8×1.25 | 71 | 84 | 96 | 109 | 134 | 159 | — |
| 25 | 22 | 10 | 36 | 20 | 8 | M10×1.25 | 74 | 87 | 99 | 112 | 137 | 162 | 187 |

| チューブ内径 \ ストローク | l 1～50 | 51～100 | 101～150 | 151～200 | 201～300 | 301～400 | 401～500 | JH | JW | Wh 1～50 | 51～100 | 101～150 | 151～200 | 201～300 | 301～400 | 401～500 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 12.5 | 25 | 37.5 | 50 | 75 | 100 | — | 23.5 | 10.5 | 51 | 64 | 76 | 89 | 114 | 139 | — |
| 25 | 12.5 | 25 | 37.5 | 50 | 75 | 100 | 125 | 23.5 | 10.5 | 52 | 65 | 77 | 90 | 115 | 140 | 165 |

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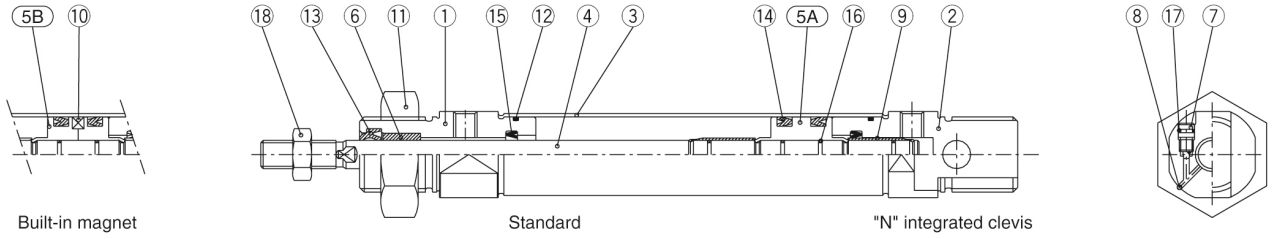
# Constructions

### 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 |

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## Additional information

| | |
|---|---|
| Catalogue | C85_C75-A_EU.pdf |

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