# Mini cylinder, Series ICM

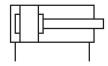
**1321001000** 2024-06-21

- Ø 8 ... 32 mm
- Max. stroke: 400 mm
- · corrosion-resistant
- · Suitable for us in food processing

### **AVENTICS Series ICM Mini cylinders**

The AVENTICS Series ICM is a mini cylinder and costefficient solution for high corrosion resistance and reliability – even in harsh environments. The cylinder tube and piston rod are made of stainless steel, the cylinder covers are fashioned from a high-quality polymer.





#### Technical data

 Industry
 Industrial

 Standards
 ISO 6432

 Piston Ø
 10 mm

 Stroke
 12 mm

 Ports
 M5

Functional principle Double-acting
Cushioning Elastic cushioning
Magnetic piston Piston without magnet
Environmental requirements Industry standard

suitable for use in food processing

Piston rod thread - type External thread

Piston rod thread M4
Piston rod single

Scraper Standard Industry Scraper

Pressure for determining piston forces 6,3 bar
Retracting piston force 42 N
Extracting piston force 49 N
Min. ambient temperature -20 °C
Max. ambient temperature 70 °C
Min. working pressure 1.5 bar



## Mini cylinder, Series ICM

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Max. working pressure10 barWeight 0 mm stroke0.035 kgWeight +10 mm stroke0.004 kgStroke max.80 mm

Medium Compressed air

Min. medium temperature  $-20~^{\circ}\text{C}$  Max. medium temperature  $70~^{\circ}\text{C}$  Max. particle size  $50~\mu\text{m}$  Min. oil content of compressed air  $0~\text{mg/m}^3$ 

#### Material

Piston rod Stainless Steel Scraper material Polyurethane

Seal material Acrylonitrile butadiene rubber

Material, front cover

Cylinder tube

End cover

Connection thread

Nut for cylinder mounting

Nut for piston rod

Polyoxymethylene
Stainless Steel
Polyamide
Stainless Steel
Part No.

Stainless Steel
1321001000

#### Technical information

Nut MR3 included in supply

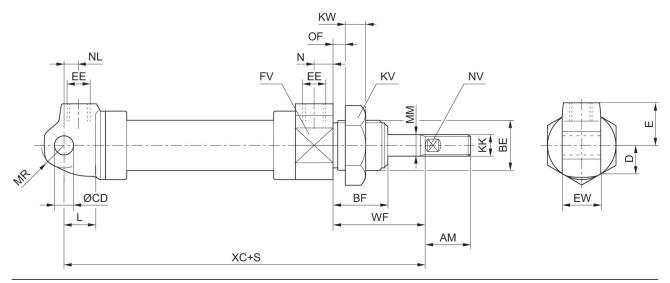
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

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### **Dimensions**



S = stroke

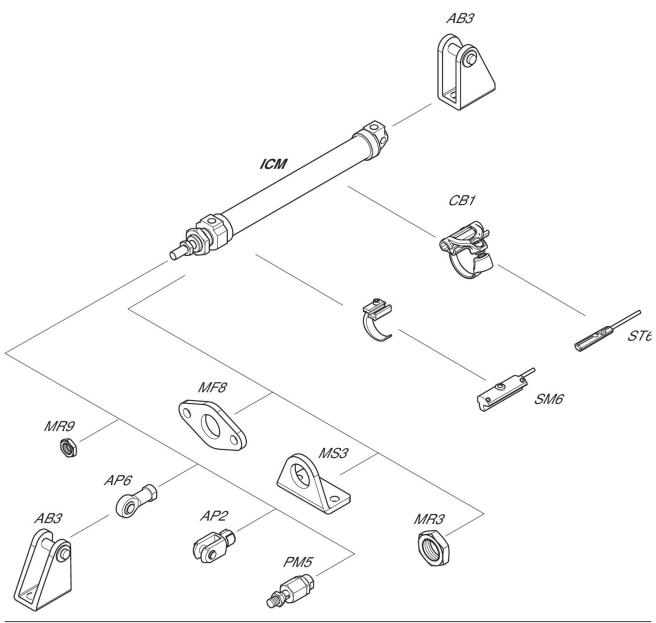
| Piston Ø | AM +0/-2 | BE       | BF | CD H11 | D    | Е    | EE   | EW d13 | FV |
|----------|----------|----------|----|--------|------|------|------|--------|----|
| 8        | 12       | M12x1,25 | 14 | 4      | 7.5  | 12   | M5   | 8      | 14 |
| 10       | 12       | M12x1,25 | 14 | 4      | 8    | 12   | M5   | 8      | 16 |
| 12       | 16       | M16x1,5  | 20 | 6      | 10   | 13.5 | M5   | 12     | 20 |
| 16       | 16       | M16x1,5  | 20 | 6      | 12   | 14   | M5   | 12     | 24 |
| 20       | 20       | M22x1,5  | 22 | 8      | 15   | 18   | G1/8 | 16     | 30 |
| 25       | 27       | M22x1,5  | 22 | 8      | 17   | 18   | G1/8 | 16     | 34 |
| 32       | 32       | M30x1,5  | 29 | 10     | 22.5 | 24   | G1/8 | 26     | 46 |

| Piston Ø | KK       | KV | KW | L  | MM | MR  | N  | NL   | NV |
|----------|----------|----|----|----|----|-----|----|------|----|
| 8        | M4       | 17 | 7  | 7  | 4  | 5   | 5  | 12   | 3  |
| 10       | M4       | 17 | 7  | 7  | 4  | 5   | 5  | 12   | 3  |
| 12       | M6       | 24 | 7  | 9  | 6  | 7.5 | 5  | 7    | 4  |
| 16       | M6       | 24 | 7  | 9  | 6  | 7.5 | 5  | 6    | 4  |
| 20       | M8       | 30 | 8  | 12 | 8  | 10  | 8  | 7    | 6  |
| 25       | M10x1,25 | 30 | 8  | 12 | 10 | 10  | 8  | 6.5  | 8  |
| 32       | M10x1,25 | 41 | 11 | 13 | 12 | 15  | 10 | 10.5 | 11 |

| Piston Ø | OF max. | WF ±1,2 | XC ±1 |
|----------|---------|---------|-------|
| 8        | 4.5     | 16      | 64    |
| 10       | 4.5     | 16      | 64    |
| 12       | 10      | 22      | 62    |
| 16       | 10      | 22      | 58    |
| 20       | 10      | 24      | 73    |
| 25       | 10      | 23      | 72    |
| 32       | 14      | 38      | 98    |

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### Overview drawing



NOTE: This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.