# Mini cylinder, Series MNI

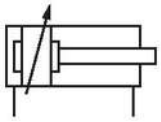
**0822233007**

AVENTICS
Series
MNI Mini
cylinders
(ISO 6432)

## AVENTICS Series MNI Mini cylinders (ISO 6432)

The AVENTICS Series MNI (ISO 6432) round cylinders for general machine construction are characterized by its robust and long service life.





## Technical data

| | |
|---|---|
| Industry | Industrial |
| Standards | ISO 6432 |
| Piston Ø | 20 mm |
| Stroke | 160 mm |
| Ports | G 1/8 |
| Functional principle | Double-acting |
| Cushioning | Pneumatic adjustable cushioning |
| Magnetic piston | Piston without magnet |
| Environmental requirements | Industry standard<br>ATEX optional |
| Piston rod thread - type | External thread |
| Piston rod thread | M8 |
| Piston rod | single |
| Scraper | Standard Industry Scraper |
| Pressure for determining piston forces | 6,3 bar |
| Retracting piston force | 166 N |
| Extracting piston force | 198 N |
| Min. ambient temperature | -25 °C |
| Max. ambient temperature | 80 °C |
| Min. working pressure | 1 bar |

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| | |
|---|---|
| Max. working pressure | 10 bar |
| Cushioning length | 13 mm |
| Cushioning energy | 1.5 J |
| Weight | 0.29 kg |
| Weight 0 mm stroke | 0.146 kg |
| Weight +10 mm stroke | 0.009 kg |
| Stroke max. | 1100 mm |
| Medium | Compressed air |
| Min. medium temperature | -25 °C |
| Max. medium temperature | 80 °C |
| Max. particle size | 50 µm |
| Min. oil content of compressed air | 0 mg/m³ |
| Max. oil content of compressed air | 5 mg/m³ |

## Material

| | |
|---|---|
| Piston rod | Stainless Steel |
| Piston material | Brass<br>Aluminum |
| Scraper material | Polyurethane |
| Seal material | Acrylonitrile butadiene rubber<br>Polyurethane |
| Material, front cover | Aluminum |
| Cylinder tube | Stainless Steel |
| End cover | Aluminum |
| Nut for cylinder mounting | Steel, chrome-plated |
| Nut for piston rod | Steel, chrome-plated |
| Part No. | 0822233007 |

## Technical information

ATEX-certified cylinders with identification II 2G Ex h IIC T4 Gb / II 2D Ex h IIIC T135°C Db_X can be generated in the Internet configurator.

The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

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.

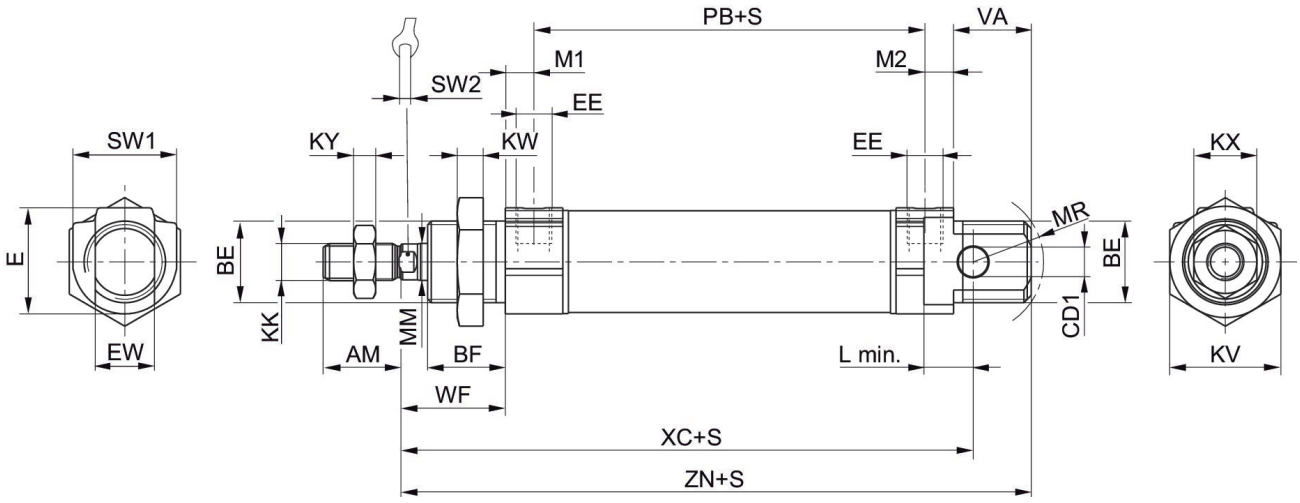
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in https://www.emerson.com/en-us/support).

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## Dimensions



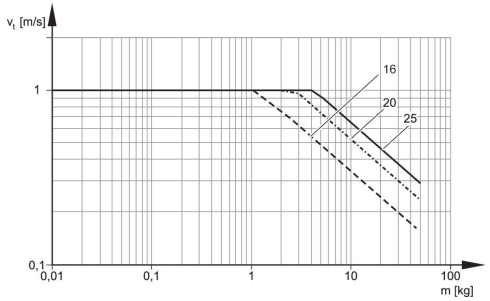

S = stroke

| Piston Ø | AM –2 | BE | BF | CD H9 | E | EE t = depth of thread | EW d13 | KK | KV |
|---|---|---|---|---|---|---|---|---|---|
| 16 | 16 | M16x1,5 | 16 | 6 | 19 | M5 t=5 | 12 | M6 | 22 |
| 20 | 20 | M22x1,5 | 18 | 8 | 28 | G1/8 t=8 | 16 | M8 | 30 |
| 25 | 22 | M22x1,5 | 21 | 8 | 28 | G1/8 t=8 | 16 | M10x1,25 | 30 |

| Piston Ø | KW | KX | KY | L min | MM f8 | M1/M2 | MR | PB ±1 | VA |
|---|---|---|---|---|---|---|---|---|---|
| 16 | 6 | 10 | 3.2 | 8 | 6 | 4.8 | 16 | 47 | 17 |
| 20 | 7 | 13 | 4 | 12 | 8 | 7 | 18 | 51 | 19 |
| 25 | 7 | 17 | 6 | 12 | 10 | 7 | 19 | 55 | 21 |

| Piston Ø | WF ±1,4 | XC ±1 | ZN ± 1,4 | SW 1 | SW 2 |
|---|---|---|---|---|---|
| 16 | 22 | 82 | 95.5 | 19 | 5 |
| 20 | 24 | 95 | 109.5 | 28 | 6 |
| 25 | 28 | 104 | 119.5 | 28 | 8 |

## Cushioning diagram

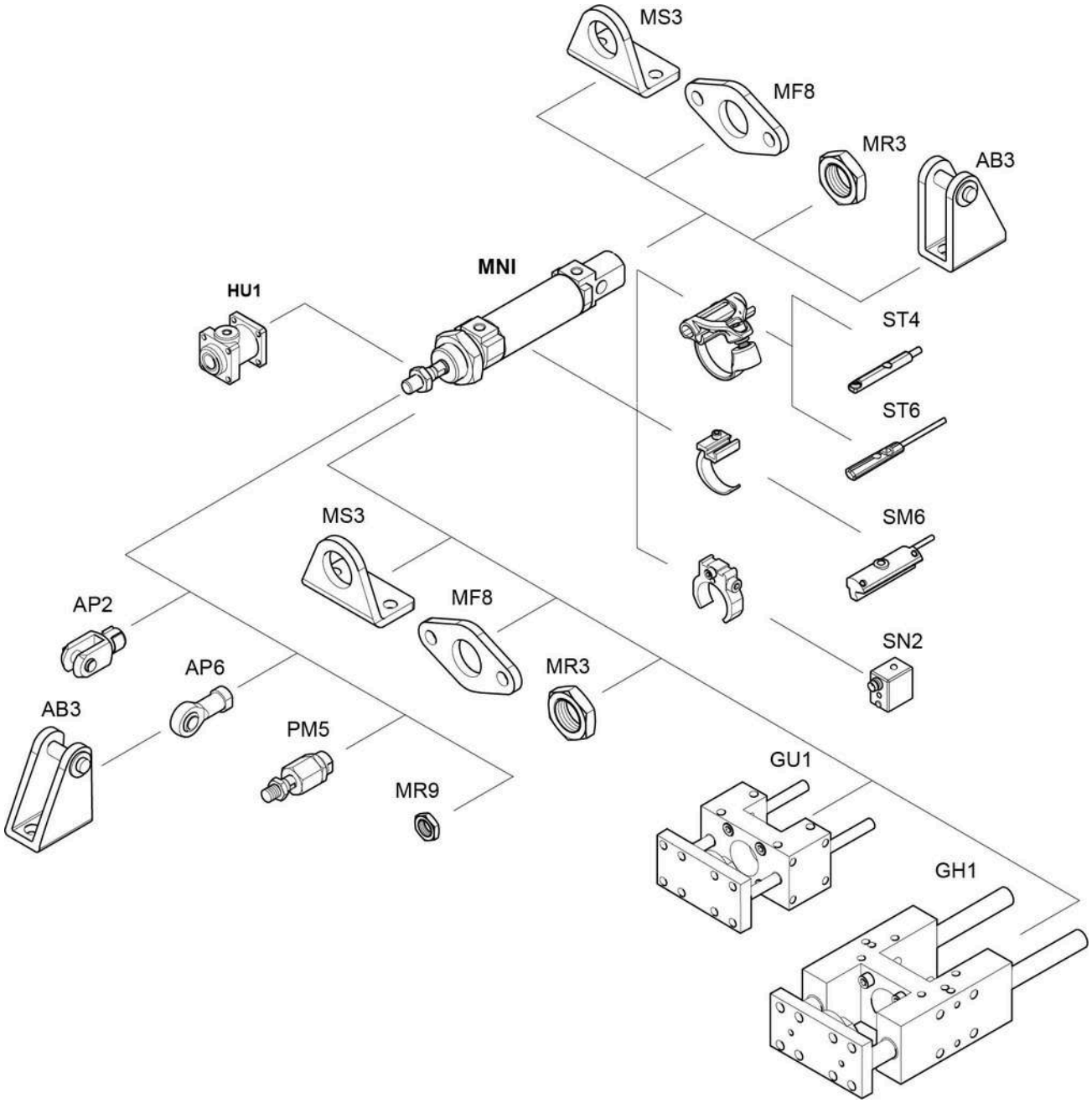


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## Overview drawing




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.