R480698493

AVENTICS Series TaskMaster Profile Cylinders

# <u>AVENTICS Series TaskMaster Profile</u> Cylinders

The AVENTICS Series TM5 TaskMaster is an NFPA compatible cylinder available in profile and tie-rod constructions with five bore sizes. Built to perform in the most demanding applications, the pneumatic cylinder has been enhanced with ideal cushioning. This helps to achieve improved cycle time, reduced wear and vibration, providing the best-in-class solution in industrial applications. Its rugged, non-corroding aluminum body construction and high-strength steel piston rod are paired with a complete range of standard precision-machined mountings.





#### Technical data

Industry Industrial Standards NFPA

Type Bore size: Ø 1-1/2" - 4"

Built-in mounting: NFPA MX5

Piston rod thread KK1

Piston Ø 50.8 mm

Stroke 76.2 mm

Ports 3/8" NPTF

Functional principle Double-acting

Cushioning Pneumatically

Magnetic piston with magnetic piston

Piston rod thread - type External thread Piston rod thread 7/16-20 UNF

Pressure for determining piston forces [[90] psi]
Retracting piston force 943.06 N
Extracting piston force 1258.9 N
Min. ambient temperature -23.33 °C
Max. ambient temperature 73.88 °C
Min. working pressure 1.38 bar
Max. working pressure 10 bar

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Max. speed 2 m/s Cylinders

Medium Compressed air

Min. medium temperature -23.33 °C

Max. medium temperature 73.88 °C

#### Material

Piston rod Carbon steel
Scraper material Polyurethane
Material, front cover Die-cast aluminum
Cylinder tube Aluminum

End cover Die-cast aluminum

Piston seal Nitrile rubber

Cylinder tube seal Polyester elastomer
Rod bearing Sintered bronze
Cushion ring Polyurethane
Nut for piston rod Carbon steel
Part No. R480698493

#### Technical information

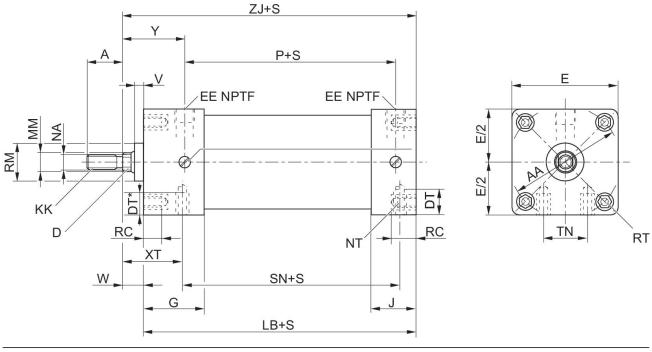
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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

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#### Dimensions in inches



S = stroke

#### Dimensions not affected by rod diameter

| Ø [inch] | Е    | G    | J    | Р    | V    | AA   | LB   | RC   | RT      |
|----------|------|------|------|------|------|------|------|------|---------|
| 1 1/2    | 2.00 | 1.4  | 1.08 | 2.85 | 0.25 | 2.02 | 4.00 | 0.47 | 1/4-28  |
| 2        | 2.50 | 1.22 | 1.05 | 2.90 | 0.25 | 2.60 | 4.00 | 0.50 | 5/16-24 |
| 2 1/2    | 3.00 | 1.33 | 1.04 | 2.94 | 0.25 | 3.10 | 4.12 | 0.50 | 5/16-24 |
| 3.25     | 3.75 | 1.64 | 1.22 | 3.46 | 0.25 | 3.90 | 4.88 | 0.53 | 3/8-24  |
| 4        | 4.5  | 1.55 | 1.22 | 3.50 | 0.25 | 4.7  | 4.88 | 0.62 | 3/8-24  |

| Ø [inch] | SN   |
|----------|------|
| 1 1/2    | 2.75 |
| 2        | 2.75 |
| 2 1/2    | 2.88 |
| 3.25     | 3.38 |
| 4        | 3.38 |

### Dimensions affected by rod diameter

| Ø [inch] | MM    | W    | EE  | RM   | ZJ   | А    | D     | Y    |
|----------|-------|------|-----|------|------|------|-------|------|
| 1 1/2    | 0.625 | 0.63 | 3/8 | 1.12 | 4.63 | 0.75 | 0.5   | 1.35 |
| 2        | 0.625 | 0.63 | 3/8 | 1.12 | 4.63 | 0.75 | 0.5   | 1.26 |
| 2 1/2    | 0.625 | 0.63 | 3/8 | 1.12 | 4.75 | 0.75 | 0.5   | 1.36 |
| 3 1/4    | 1     | 0.75 | 1/2 | 1.5  | 5.63 | 1.12 | 0.875 | 1.66 |

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| Ø [inch] | MM | W    | EE  | RM  | ZJ   | А    | D     |      |
|----------|----|------|-----|-----|------|------|-------|------|
| 4        | 1  | 0.75 | 1/2 | 1.5 | 5.63 | 1.12 | 0.875 | 1.59 |

2024-04-15

