

# Profile cylinder NFPA, TaskMaster®, Series TM5

R480698777

AVENTICS  
Series  
TaskMaster  
Profile  
Cylinders

## AVENTICS Series TaskMaster Profile 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 MS4 Piston rod thread KK1
Piston Ø	50.8 mm
Stroke	177.8 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
Medium	Compressed air
Min. medium temperature	-23.33 °C
Max. medium temperature	73.88 °C

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## 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.	R480698777

## Technical information

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

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Dimensions in inches



S = stroke

## Dimensions affected by rod diameter

Ø [inch]	MM	W	EE	RM	DT	ZJ	A	D	Y
1 1/2	0.625	0.63	3/8	1.12	0.31	4.63	0.75	0.5	1.35
2	0.625	0.63	3/8	1.12	0.34	4.63	0.75	0.5	1.26
2 1/2	0.625	0.63	3/8	1.12	0.44	4.75	0.75	0.5	1.36
3 1/4	1	0.75	1/2	1.5	0.50	5.63	1.12	0.875	1.66
4	1	0.75	1/2	1.5	0.64	5.63	1.12	0.875	1.59

Ø [inch]	XT
1 1/2	1.44
2	1.44
2 1/2	1.44
3 1/4	1.69
4	1.69

## Dimensions not affected by rod diameter

Ø [inch]	E	G	J	P	V	AA	LB	NT	RC
1 1/2	2.00	1.4	1.08	2.85	0.25	2.02	4.00	1/4-20	0.47
2	2.50	1.22	1.05	2.90	0.25	2.60	4.00	5/16-18	0.50
2 1/2	3.00	1.33	1.04	2.94	0.25	3.10	4.12	3/8-16	0.50
3.25	3.75	1.64	1.22	3.46	0.25	3.90	4.88	1/2-13	0.53

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Ø [inch]	E	G	J	P	V	AA	LB	NT	RC
4	4.5	1.55	1.22	3.50	0.25	4.7	4.88	1/2-13	0.62

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Ø [inch]	RT	SN	TN
1 1/2	1/4-28	2.75	0.63
2	5/16-24	2.75	0.88
2 1/2	5/16-24	2.88	1.25
3.25	3/8-24	3.38	1.5
4	3/8-24	3.38	2.06

