

Piston rod cylinder ▶ Standard cylinders

Mini cylinder, Series MNI

▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ cushioning: elastic ▶ corrosion-protected ▶ with integrated rear eye ▶ Piston rod: external thread ▶ ATEX optional



00106379

Standards	ISO 6432
Compressed air connection	Internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +80 °C
Medium temperature min./max.	-25 °C / +80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Piston	Brass, Aluminum
Front cover	Aluminum, anodized
End cover	Aluminum, anodized
Seal	Acrylonitrile Butadiene Rubber; Polyurethane
Nut for cylinder mounting	Steel, galvanized
Nut for piston rod	Steel, galvanized
Scraper	Polyurethane

Technical Remarks


- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.
- Clamping piece for magnetic field sensor necessary
- ATEX-certified cylinders are available at AVENTICS sales centres
- ATEX ID: II 2G c IIB T4 II 2D c IP65 T125 °C X
- The operating temperature range for ATEX-certified cylinders is -20 °C to 50 °C.

Piston Ø		[mm]	10	12	16	20	25
Retracting piston force		[N]	42	53	109	166	260
Extracting piston force		[N]	49	71	127	198	309
Impact energy		[J]	0.04	0.07	0.14	0.23	0.35
Weight	0 mm stroke	[kg]	0.042	0.073	0.091	0.149	0.249
	+10 mm stroke	[kg]	0.0024	0.0046	0.0055	0.009	0.013
Stroke max.		[mm]	250	600	800	1100	1300

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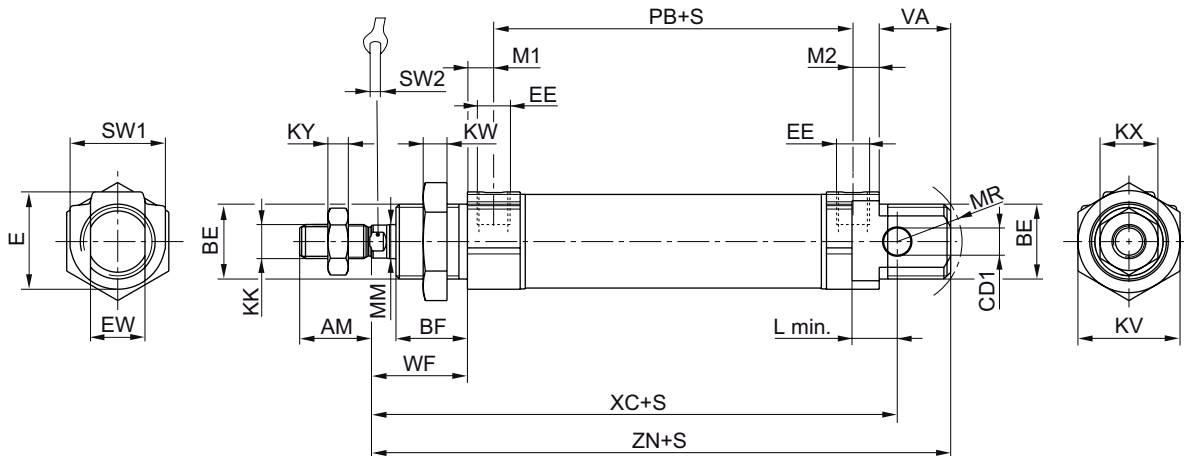
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Piston Ø	Piston rod thread	Ports	Piston rod Ø	Cylinder outer thread	10	12	16	20	25
					M4	M6	M6	M8	M10x1,25
					M5	M5	M5	G 1/8	G 1/8
			4		6	6	6	8	10
				M12x1,25	M16x1,5	M16x1,5	M16x1,5	M22x1,5	M22x1,5
	Stroke 10	0822330201	0822331201	0822332201	0822333201	0822334201			
	25	0822330202	0822331202	0822332202	0822333202	0822334202			
	50	0822330203	0822331203	0822332203	0822333203	0822334203			
	80	0822330204	0822331204	0822332204	0822333204	0822334204			
	100	0822330205	0822331205	0822332205	0822333205	0822334205			
	125	0822330215	0822331206	0822332206	0822333206	0822334206			
	160	0822330209	0822331207	0822332207	0822333207	0822334207			
	200	0822330235	0822331218	0822332208	0822333208	0822334208			
	250	0822330219	0822331219	0822332209	0822333209	0822334209			
	320	-	0822331223	0822332210	0822333210	0822334210			
	400	-	0822331217	0822332219	0822333214	0822334211			
	500	-	0822331233	0822332220	0822333220	0822334212			

Other versions can be ordered from AVENTICS sales offices.

Dimensions



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S = stroke

Piston Ø	AM-2	BE	BF	CD H9	E	EE	EW d13	KK	KV	KW	KX	KY
10	12	M12x1,25	11	4	14	M5 t=5	8	M4	17	5.5	7	2.2
12	16	M16x1,5	16	6	19	M5 t=5	12	M6	22	6	10	3.2
16	16	M16x1,5	16	6	19	M5 t=5	12	M6	22	6	10	3.2
20	20	M22x1,5	18	8	28	G 1/8 t=8	16	M8	30	7	13	4
25	22	M22x1,5	21	8	28	G 1/8 t=8	16	M10x1,25	30	7	17	6

Piston Ø	L min	MM f8	M1/M2	MR	PB ±1	VA	WF ±1,4	XC ±1	ZN ± 1,4	SW 1	SW 2		
10	6	4	4.8	12	47	11	16	74	83.5	13	3		
12	8	6	4.8	16	41	16	22	75	88.5	19	5		
16	8	6	4.8	16	47	17	22	82	95.5	19	5		
20	12	8	7	18	51	19	24	95	109.5	28	6		
25	12	10	7	19	55	21	28	104	119.5	28	8		

t = depth of thread