

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	16 mm
Stroke	320 mm
Ports	M5
Functional principle	Double-acting
Cushioning	elastic cushioning
Magnetic piston	Piston with magnet
Environmental requirements	Industry standard Heat resistant
Piston rod thread - type	External thread
Piston rod thread	M6
Piston rod	single
Scraper	Heat-Resistant Scraper
Pressure for determining piston forces	6,3 bar
Retracting piston force	109 N
Extracting piston force	127 N
Min. ambient temperature	-10 °C
Max. ambient temperature	120 °C
Min. working pressure	1 bar

Max. working pressure	10 bar
Impact energy	0.14 J
Weight	0.201 kg
Weight 0 mm stroke	0.091 kg
Weight +10 mm stroke	0.0055 kg
Stroke max.	800 mm
Medium	Compressed air
Min. medium temperature	-10 °C
Max. medium temperature	120 °C
Max. particle size	50 µm
Min. oil content of compressed air	0 mg/m ³
Max. oil content of compressed air	5 mg/m ³
Clamping piece for magnetic field sensor necessary	Clamping piece for magnetic field sensor necessary

Material

Piston rod	Stainless Steel
Piston material	Brass Aluminum
Scraper material	Fluorocaoutchouc
Seal material	Fluorocaoutchouc
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.	R412009449

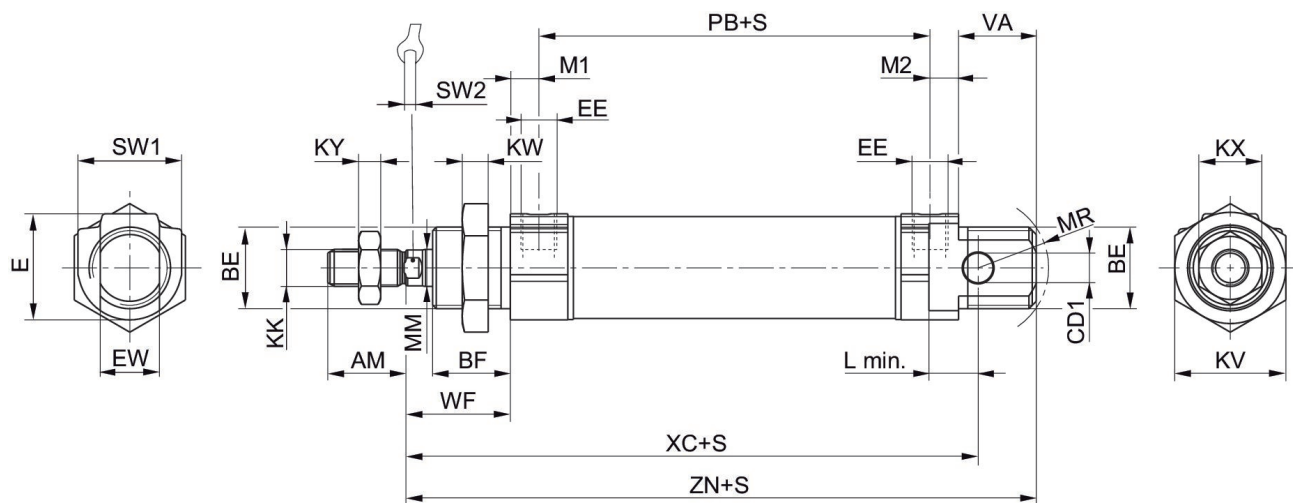
Technical information

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.

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>).

Dimensions



S = stroke

Piston Ø	AM-2	BE	BF	CD H9	E	EE t=depth of thread	EW d13	KK	KV	KW
10	12	M12x1,25	11	4	14	M5 t=5	8	M4	17	5.5
12	16	M16x1,5	16	6	19	M5 t=5	12	M6	22	6
16	16	M16x1,5	16	6	19	M5 t=5	12	M6	22	6
20	20	M22x1,5	18	8	28	G1/8 t=8	16	M8	30	7
25	22	M22x1,5	21	8	28	G1/8 t=8	16	M10x1,25	30	7

Piston Ø	KX	KY	L min	MM f8	M1/M2	MR	PB ±1	VA	WF ±1,4	XC ±1
10	7	2.2	6	4	4.8	12	47	11	16	74
12	10	3.2	8	6	4.8	16	41	16	22	75
16	10	3.2	8	6	4.8	16	47	17	22	82
20	13	4	12	8	7	18	51	19	24	95
25	17	6	12	10	7	19	55	21	28	104

Piston Ø	ZN ± 1,4	SW 1	SW 2
10	83.5	13	3
12	88.5	19	5
16	95.5	19	5
20	109.5	28	6
25	119.5	28	8

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.