



# Piston rod cylinders, Series 102

- Ø 60-250 mm
- Ports G 1/4 G 1/2
- Single-acting, retracted without pressure
- Piston rod External thread
- fine thread



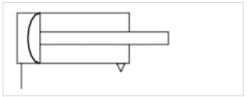
Compressed air connection Internal thread
Working pressure min./max. 2 ... 8 bar
Ambient temperature min./max. -20 ... 70 °C
Medium temperature min./max. -20 ... 70 °C
Medium Compressed air

Max. particle size  $$50~\mu m$$ 

Oil content of compressed air 0 ... 5 mg/m³

Pressure for determining piston forces 6 bar

Weight See table below



#### Technical data

Piston Ø	60 mm	85 mm	250 mm	
Piston rod thread	M12x1,25	M12x1,25	M24x2	
Ports	G 1/4	G 1/4	G 1/2	
Stroke 80	1022100000	1022200000	-	
100	-	-	1022300000	

#### Technical data

Piston Ø	60 mm	85 mm	250 mm
Extracting piston force	1600 N	3000 N	25000 N
Spring force min max.	130 320 N	130 320 N	900 2750 N

### Technical information

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. Further information can be found in the "Technical information" document (available in the MediaCentre).

Tolerance at 40 mm, 50 mm, 80 mm stroke: ± 3 mm

Tolerance at 100 mm stroke: + 6 mm /- 1 mm



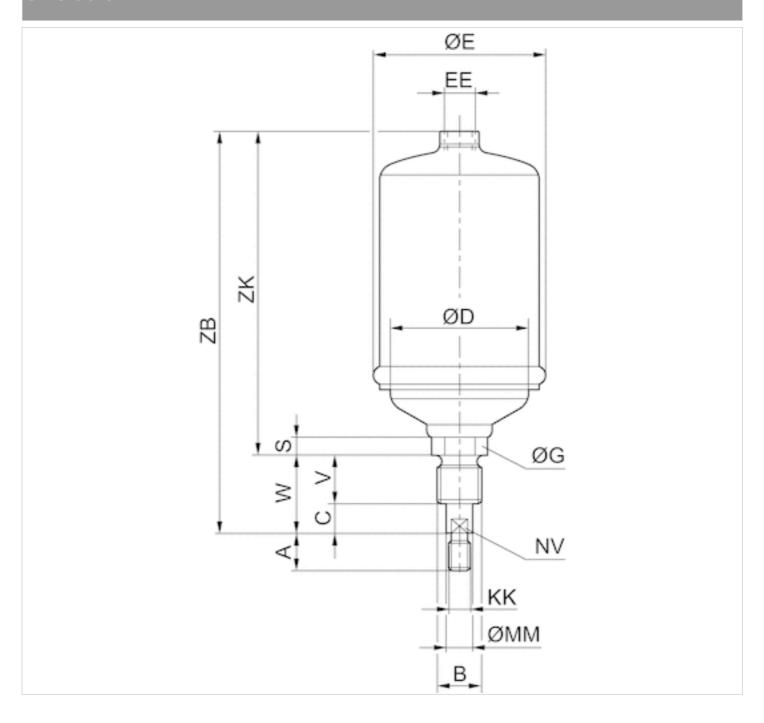


# Technical information

Material	
Cylinder tube	Steel
Piston rod	Steel
Front cover	Steel
Seal	Acrylonitrile butadiene rubber

## Dimensions

#### Dimensions





# Dimensions

Piston Ø	А	В	С	D	Е	G	S	V	W	EE	KK	MM	NV	ZB	ZK
60 mm	24	M 24	11	54	66	30	18	30	41	G 1/4	M12x1,25	14	12	222	181
85 mm	24	M24	11	77	93	30	18	30	41	G 1/4	M12x1,25	14	12	222	181
250 mm	48	M48x3	20	56	268	50	33	40	60	G 1/2	M24x2	28	25	385	325

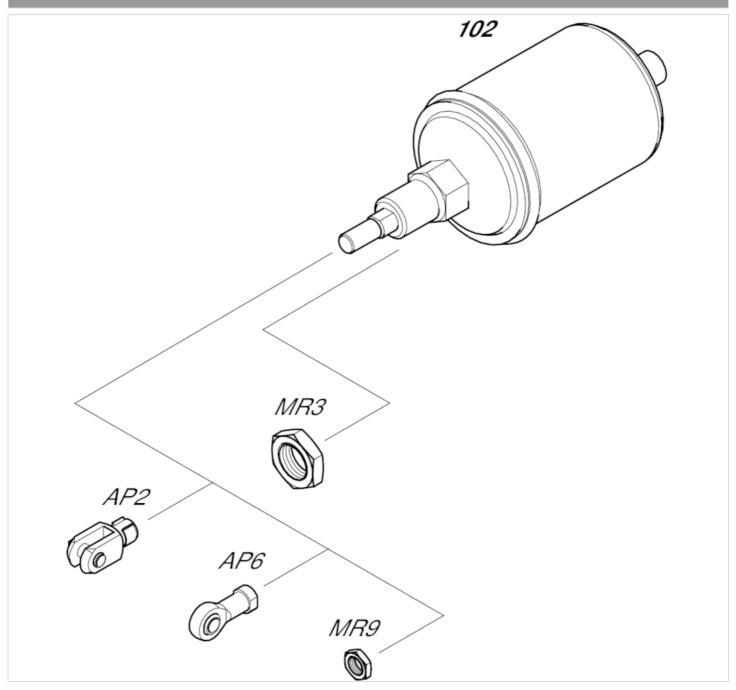
Piston Ø	S	Weight kg
60 mm	80 mm	1 kg
85 mm	80 mm	1,5 kg
250 mm	100 mm	22,2 kg

S = stroke



### Accessories overview

#### 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.

# Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: Emerson.com/Aventics

Your local contact: Emerson.com/contactus



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR\_Automation

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that the products are subject to a natural process of wear and again.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. 

2020 Emerson Electric Co. All rights reserved.

