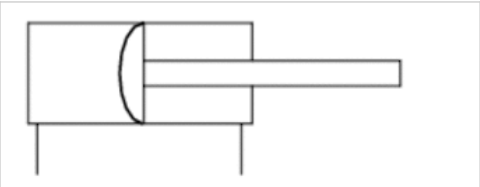
Diaphragm-type cylinder, Series 102

- Ø 3.15-6.3 inch
- Ports G 1/4 G 1/2
- double-acting
- Piston rod External thread
- Coarse-pitch threads



Compressed air connection	Internal thread
Working pressure min./max.	29 ... 116 psi
Ambient temperature min./max.	-4 ... 158 °F
Medium temperature min./max.	-4 ... 158 °F
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	87 psi
Weight	See table below

Technical data

Piston Ø Piston rod thread Ports	3.15 inch M12 G 1/4	4.45 inch M16 G 1/4	6.3 inch M20 G 1/2
Stroke 1.57	1026100000	-	-
1.97	-	1026200000	1026300000

Technical data

Piston Ø	3.15 inch	4.45 inch	6.3 inch
Retracting piston force	647.42 lbf	1303.84 lbf	2607.68 lbf
Extracting piston force	674.4 lbf	1348.8 lbf	2697.6 lbf
Spring force min. - max.	-	22.48 lbf	-

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .
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).

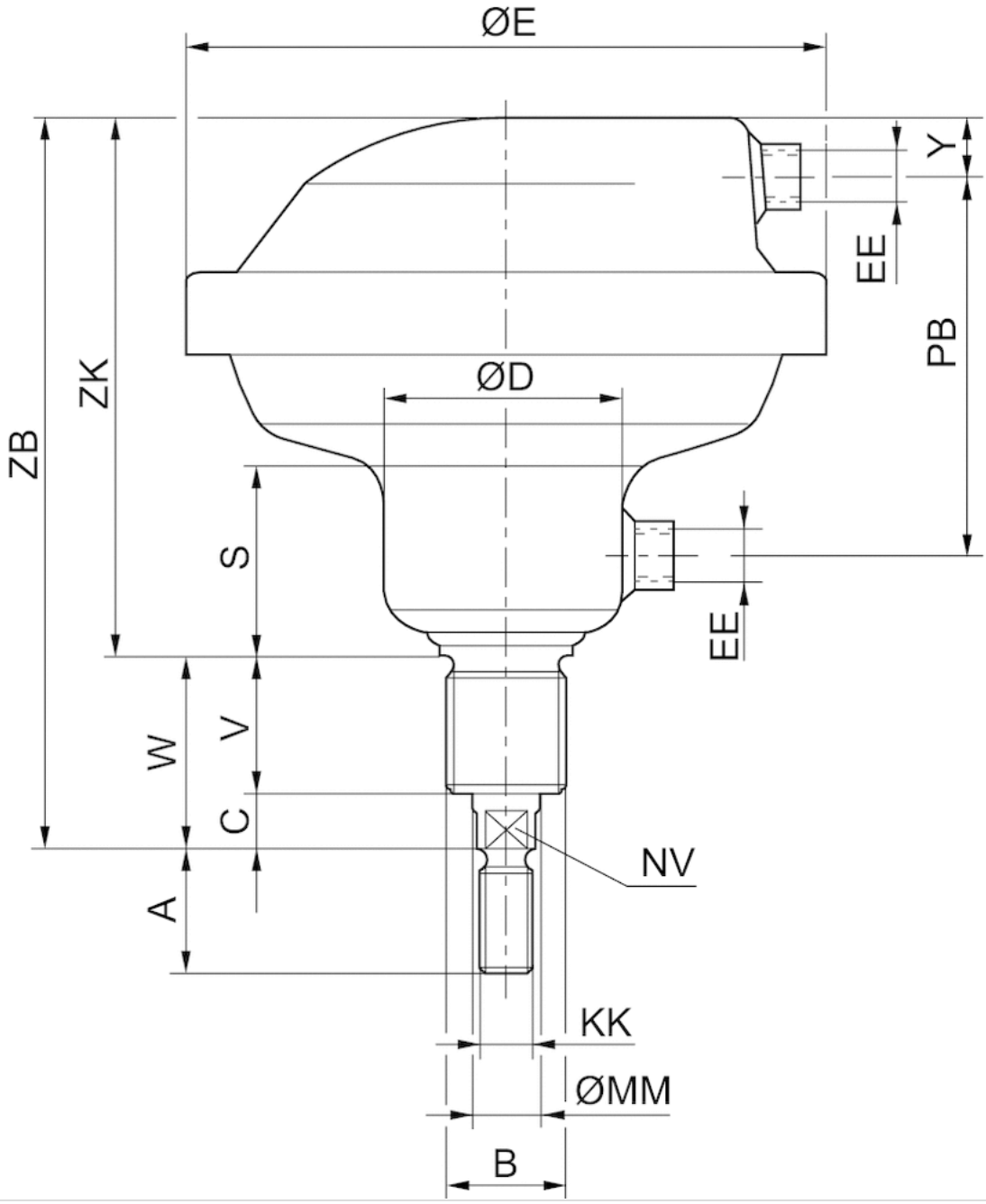
Diaphragm actuator strokes are tolerance-dependent.
Tolerance at 1.575 in , 1.969 in , 3.15 in stroke: ± 0.118 in

Technical information

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

Dimensions

Dimensions



Dimensions

Piston Ø	A	B	C	D	E	S	V	W	Y	EE	KK	MM	NV	PB	ZB	ZK
3.15 inch	24	M24x2	14	55	150	48	38	52	15	G 1/4	M12	16	13	90	183	131
4.45 inch	32	M36x3	20	71	195	55	38	58	15	G 1/4	M16	20	17	107	212	154
6.3 inch	40	M36x3	20	88	261	58	45	65	26	G 1/2	M20	25	22	117	243	178

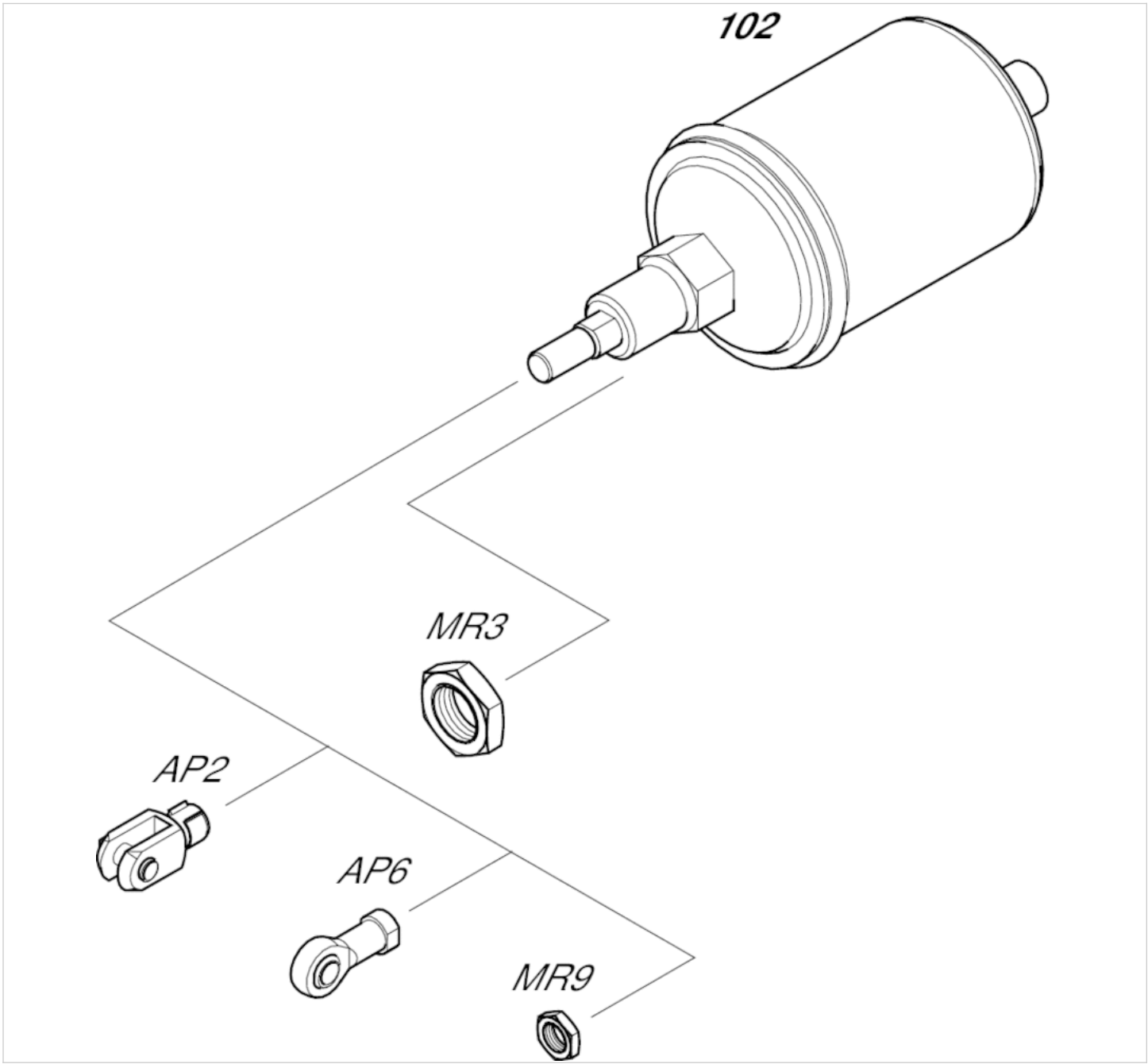
Weight [kg]

Piston Ø	S	Weight kg
3.15 inch	40	5.73 lbs
4.45 inch	50	11.9 lbs
6.3 inch	50	25.13 lbs

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.