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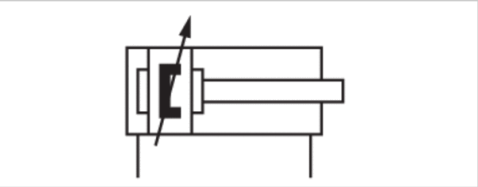
Tie rod cylinder, CNOMO NFE 49-001, Series C12P

- Ø 25-200 mm
- Ports G 1/8 G 1/4 G 3/8 G 1/2 G 3/4
- double-acting
- with magnetic piston
- Cushioning Pneumatically adjustable
- with trunnion mounting MT4
- Piston rod External thread
- Optionally heat-resistant



Standards	CNOMO / NFE 49-001
Compressed air connection	Internal thread
Working pressure min./max.	2 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

The delivered product may vary from that in the illustration.

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	25 mm M10x1,5 G 1/8 12 mm	32 mm M10x1,5 G 1/8 12 mm	40 mm M16x1,5 G 1/4 18 mm	50 mm M16x1,5 G 1/4 18 mm	63 mm M20x1,5 G 3/8 22 mm	80 mm M20x1,5 G 3/8 22 mm
Stroke 25	R422715102	R422715104	R422715106	R422715108	R422715110	-
50	R422715103	R422715105	R422715107	R422715109	R422715111	R422715112
100	-	-	-	-	-	R422715113

Piston Ø Piston rod thread Ports Piston rod Ø	100 mm M27x2 G 1/2 30 mm	125 mm M27x2 G 1/2 30 mm	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm
Stroke 25	-	-	-	-
50	R422715114	R422715116	R422715118	R422715120
100	R422715115	R422715117	R422715119	R422715121

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Other versions can be ordered from AVENTICS sales offices.

Technical data

Piston Ø	25 mm	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	238 N	435 N	600 N	1077 N	1724 N	2927 N	4503 N
Extracting piston force	309 N	507 N	792 N	1237 N	1964 N	3167 N	4948 N
Weight 0 mm stroke	0,33 kg	0,38 kg	0,75 kg	1,1 kg	1,93 kg	2,03 kg	4,2 kg
Weight +10 mm stroke	0,028 kg	0,035 kg	0,055 kg	0,068 kg	0,086 kg	0,137 kg	0,183 kg
Stroke max.	1600 mm	1600 mm	1900 mm	2100 mm	2500 mm	2600 mm	2600 mm

Piston Ø	125 mm	160 mm	200 mm
Retracting piston force	7286 N	11875 N	19000 N
Extracting piston force	7731 N	12667 N	19792 N
Weight 0 mm stroke	5,06 kg	11,6 kg	14,5 kg
Weight +10 mm stroke	0,202 kg	0,352 kg	0,54 kg
Stroke max.	2600 mm	2600 mm	2600 mm

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).

Optional heat-resistant variants are suitable for applications at temperatures up to 120 °C and do not have a magnetic piston.
You will find the order key and all valid configurations (customer information) in the Media Centre.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Nut for piston rod	Steel, galvanized
Tie-rods	Stainless steel

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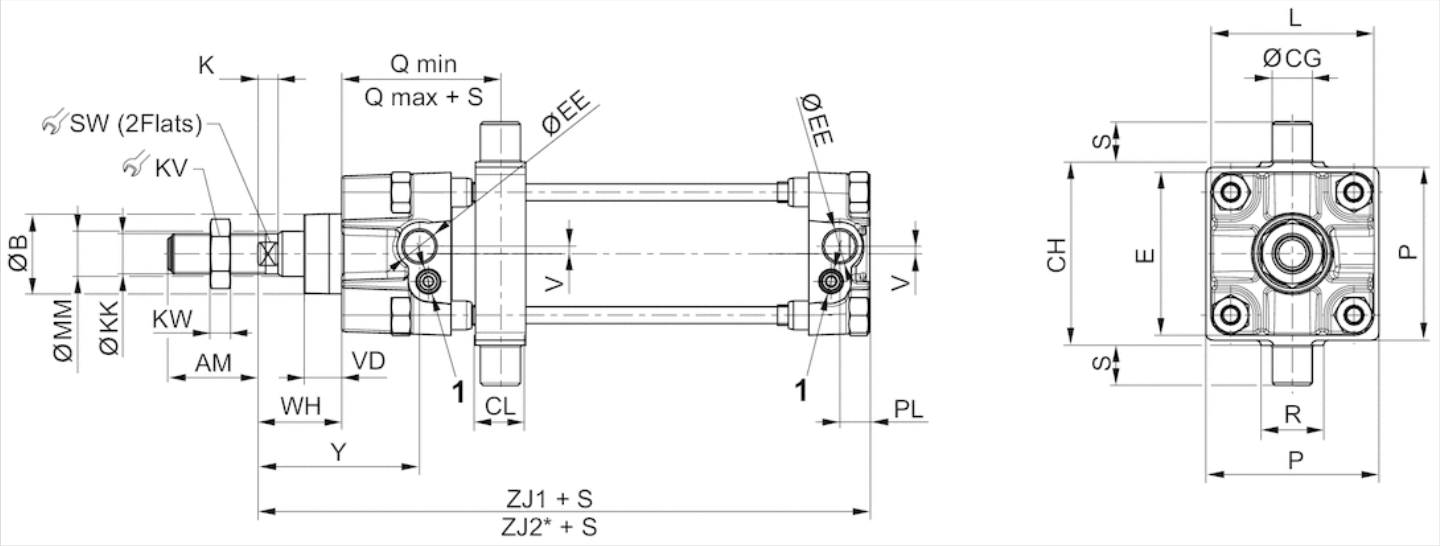
Dimensions

Dimensions



1) Flow control screw
S=stroke

Dimensions

Piston Ø	AM	Ø Be9	Ø CG	CH	CL	E	Ø EE	K	Ø KK	KV	KW	Ø MM	P	PL	Q 1)
25 mm	20	25	12	42	22	40	G1/8	6	M10x1,5	17	5	12	38	9	40
32 mm	20	25	12	50	15	45	G1/8	6	M10x1,5	17	5	12	46	9	42
40 mm	36	32	16	63	20	52	G1/4	8	M16x1,5	24	8	18	59	12	55
50 mm	36	32	16	73	20	65	G1/4	8	M16x1,5	24	8	18	69	12	62
63 mm	46	45	20	90	25	75	G3/8	10	M20x1,5	30	10	22	84	14	65
80 mm	46	45	20	108	25	95	G3/8	10	M20x1,5	30	10	22	102	14	67
100 mm	63	55	25	131	30	115	G1/2	16	M27x2	41	13.5	30	125	18	72
125 mm	63	55	25	160	32	140	G1/2	16	M27x2	41	13.5	30	155	18	76
160 mm	85	65	32	200	50	180	G3/4	16	M36x2	55	18	40	-	25	75
200 mm	85	65	32	250	50	220	G3/4	16	M36x2	55	18	40	-	25	79

Piston Ø	Q 2) + S	R	S	SW	TG	V	VD	WH	Y	ZJ1	ZJ2
25 mm	50	20	12	8	28	-	15	25	44	105	-
32 mm	43	20	12	8	33	-	15	25	44	105	128
40 mm	74	25	16	13	40	3	15	34	65	144	165
50 mm	65	25	16	13	49	3	15	34	65	144	167
63 mm	76	30	20	17	59	5	20	39	71	164	189
80 mm	72	30	20	17	75	9	20	39	71	164	188
100 mm	89	36	25	22	90	-	20	47	84	192	221
125 mm	87	36	25	22	110	-	20	47	84	192	237
160 mm	106	45	32	32	140	-	25	50	95	230	272
200 mm	101	45	32	32	175	-	25	50	95	230	277

1) min.

2) max.

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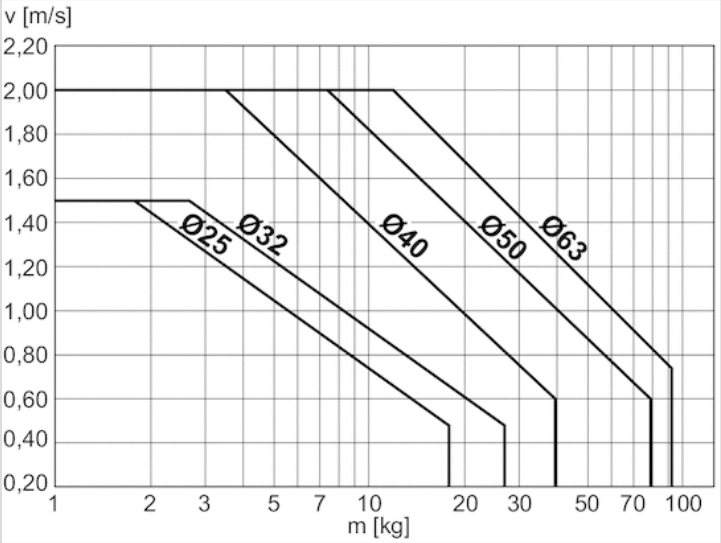
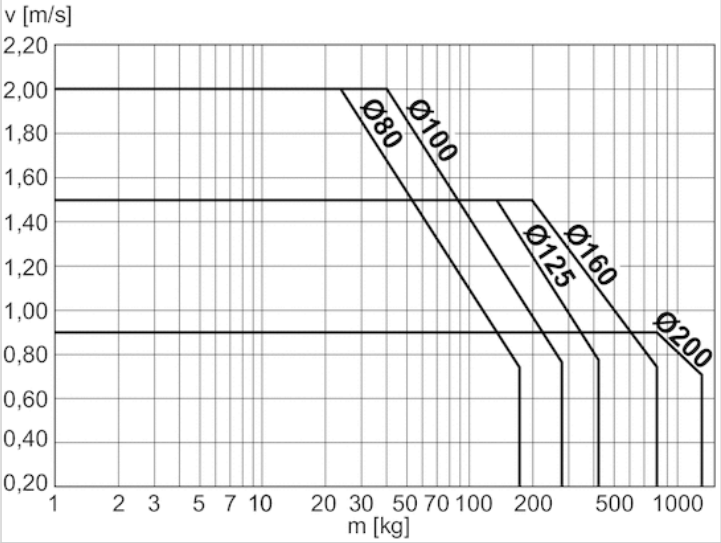
Diagrams

Cushioning diagram



v = Piston velocity [m/s]m = Cushionable mass [kg]

Cushioning diagram



v = Piston velocity [m/s]m = Cushionable mass [kg]