

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

- CNOMO / NFE 49-001
- Ø 25-200 mm
- Ports G 1/8 G 1/4 G 3/8 G 1/2 G 3/4
- double-acting
- Cushioning pneumatically adjustable
- Piston rod External thread
- Optionally heat-resistant



Standards

Compressed air connection

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Max. particle size

Oil content of compressed air

Pressure for determining piston forces

CNOMO / NFE 49-001

Internal thread

2 ... 10 bar

-20 ... 80 °C

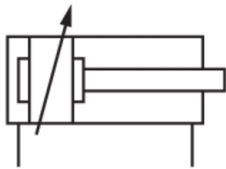
-20 ... 80 °C

Compressed air

50 µm

0 ... 5 mg/m³

6.3 bar



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	7472021375	7472022357	7472406622	7472409225	R422700862	R422702161
50	7471323938	7472407255	7471323782	7472022353	7472408333	7472407308
75	7471326291	7471323019	7471323635	7471314844	7471323636	7472413875
80	-	-	-	7472410143	7471325687	R422702930
100	7472021306	7472022359	7471323351	7471325013	7471323565	R422711132
125	7472021423	7472415023	R422701702	7472406738	7471323564	R422701689
150	7471325225	7472020278	7472406392	7472020771	7472405191	7472407112
200	7472021307	7472406069	7471327025	7472406297	7471317716	7471325322
250	7472021425	7472408135	7472408589	7472406739	7471324119	7472406380
300	7472410994	7472407872	7471323634	7472410346	7472409996	R422710660
350	7472021270	7472415302	7472411100	R422701688	-	7472408586
400	7472401648	-	7472407010	7472409603	7472409320	7472407310
450	-	-	7471324059	-	-	R422702463

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500	7472415190	7471323208	7472409157	7472409483	R422702553	-

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	7472407578	R422709969	-	-
50	7472406603	7472408335	7472408336	7472408337
75	7471322980	7471325478	7472406019	7471326900
80	R422706127	7472409363	-	-
100	7472406081	7472023817	7472408334	7472408338
125	7471323871	7471323873	7471323872	7472020636
150	7472406273	7471325104	7472407361	7471305476
200	7472407023	R422705433	R422705841	7472408625
250	7471325321	7471323026	7471315415	-
300	7472025400	7472406294	7472411971	-
350	7471323563	7472410120	-	-
400	7472406082	R422703534	R422705879	7472023503
450	7472022334	7472408587	-	-
500	7471326316	7471323826	7472414254	7472406281

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

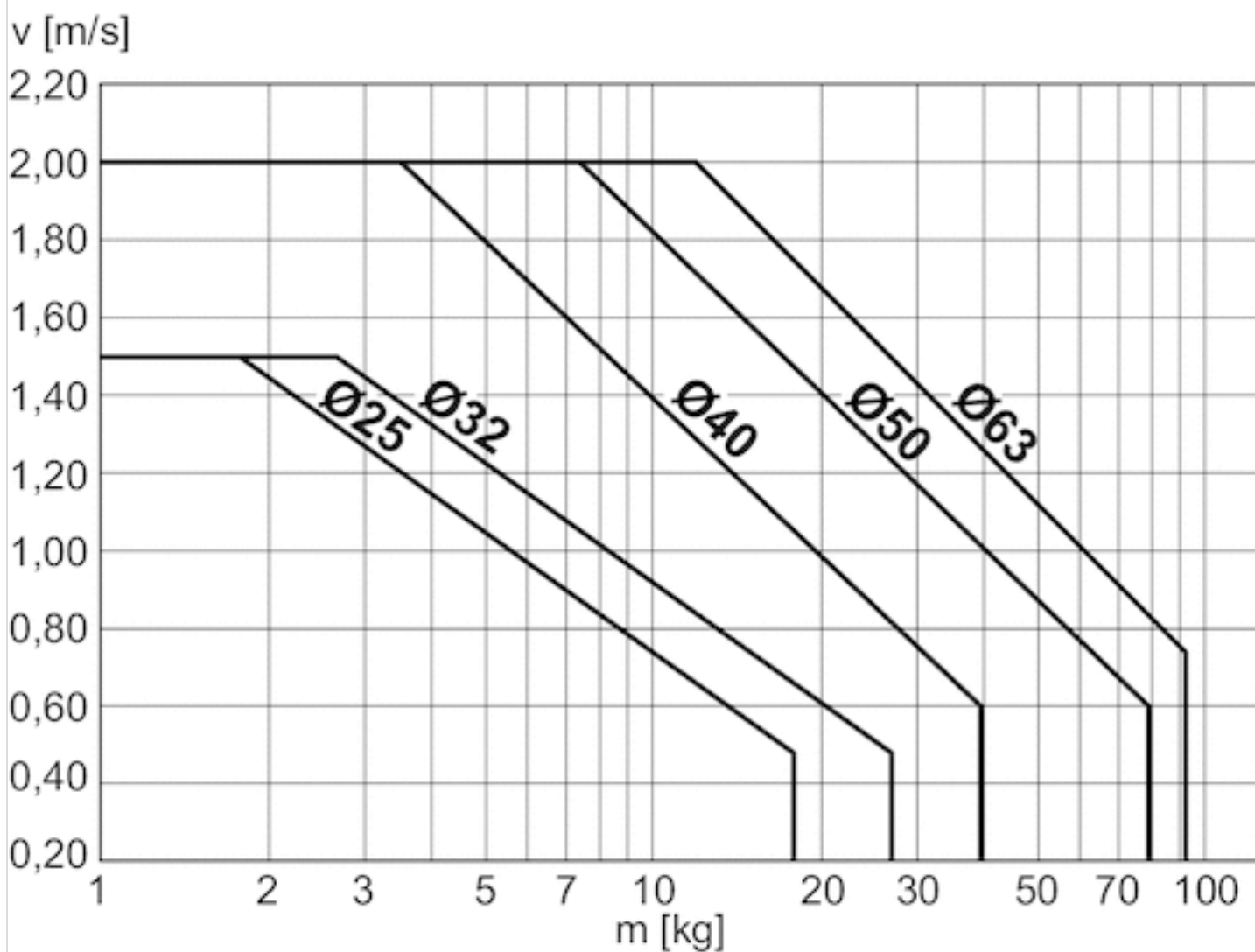
Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Nut for piston rod	Steel, galvanized
Tie-rods	Stainless steel

Piston Ø	AM	BB	Ø B e9	Ø DD	E	Ø EE	K	Ø KK	KV	KW	Ø MM	PL	SW	TG	V	VD	WH	Y
80 mm	46	28	45	M10	95	G3/8	10	M20x1,5	30	10	22	14	17	75	9	20	39	71
100 mm	63	28	55	M10	115	G1/2	16	M27x2	41	13,5	30	18	22	90	-	20	47	84
125 mm	63	34	55	M12	140	G1/2	16	M27x2	41	13,5	30	18	22	110	-	20	47	84
160 mm	85	42	65	M16	180	G3/4	16	M36x2	55	18	40	25	32	140	-	25	50	95
200 mm	85	42	65	M16	220	G3/4	16	M36x2	55	18	40	25	32	175	-	25	50	95

Piston Ø	ZJ1
25 mm	105
32 mm	105
40 mm	144
50 mm	144
63 mm	164
80 mm	164
100 mm	192
125 mm	192
160 mm	230
200 mm	230

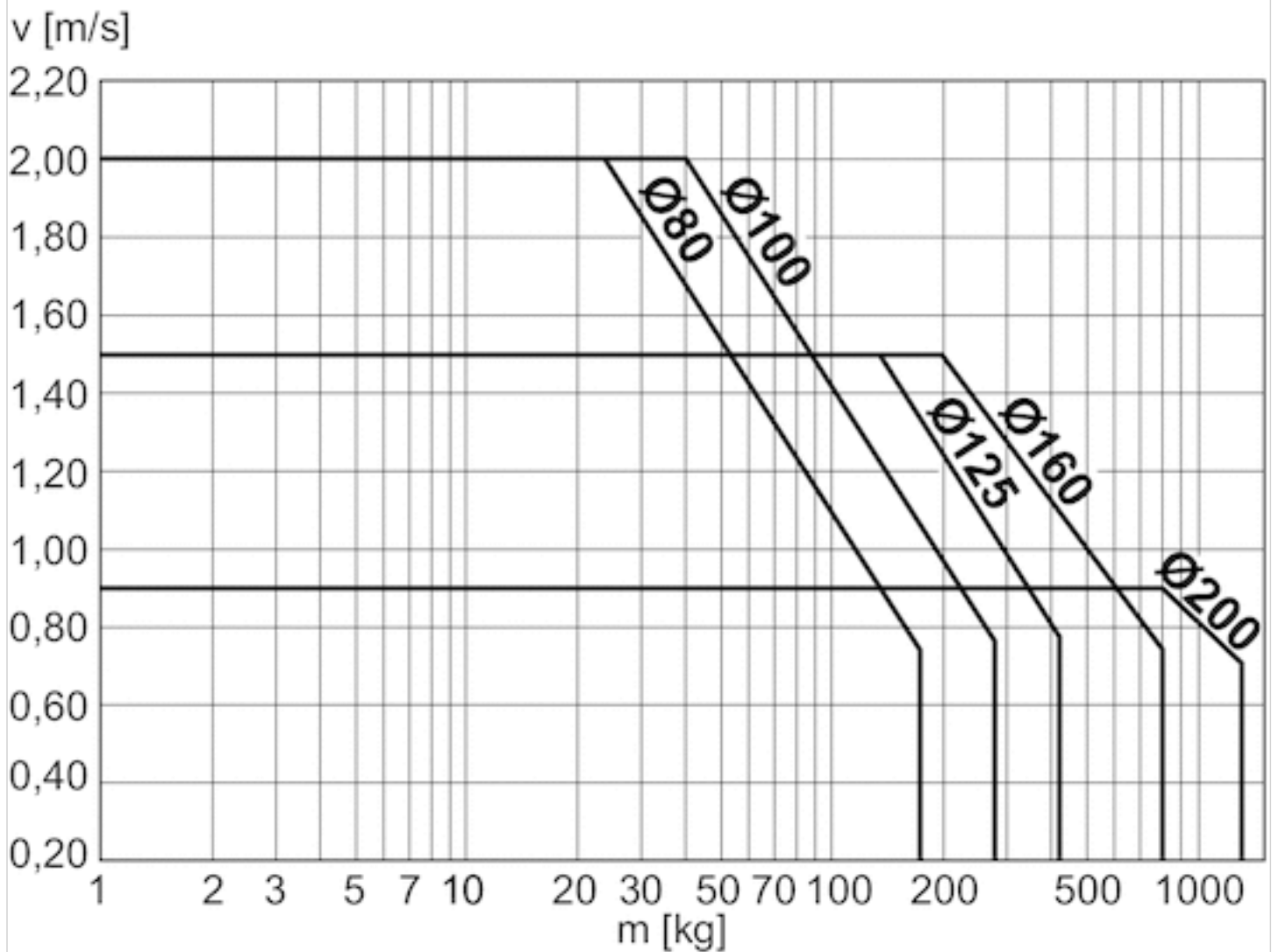
Diagrams

Cushioning diagram



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

Cushioning diagram

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

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