

RODLESS PNEUMATIC CYLINDERS SERIES OSP-P



STRÁNSKÝ A PETRŽÍK



The rodless cylinders of the OSP-P series are particularly useful where there is no space for a standard cylinder. The piston rod does not extend from the cylinder. Thanks to their maximum stroke of up to 6 meters, they can also be used in applications where the use of a conventional cylinder would be impossible. This series uses the proven two-strip principle. The cylinders are equipped with a magnetic piston as standard for contactless position sensing. The air connection is standardly from the side of the cover and can be turned to any side.

Working pressure	0,6 MPa
Min. pressure	0,35 MPa
Max. pressure	0,8 MPa
Temp. range	-10°C to +80°C
Working medium	modified compressed air

Piston diameter [mm]	25	32	40	50	63	80
Force at 0.6 MPa [N]	250	420	640	1000	1550	2600
Connection	G1/8"	G1/4"	G1/4"	G1/4"	G3/8"	G1/2"
Length of adjustable cushioning [mm]	17	20	27	30	32	39
Max. stroke [mm]	6000	6000	6000	6000	6000	6000
Carriage speed [m.s ⁻¹]	standard: 0,2 to 3, with low speed lubrication: 0,005 to 0,2					
Weight 0 mm stroke [kg]	0,65	1,44	1,95	3,53	6,41	12,46
Weight of 100 mm stroke [kg]	0,197	0,354	0,415	0,566	0,925	1,262

Order codes

P OSP-P 50 - 0 0 0 0 0 - 0500

Piston diameter	Supply port	Sealing	Lubrication	Nuts	Stroke
25 25 mm	0 standard	0 standard NBR	0 standard	0 standard (zinc plated steel)	xxxx mm of stroke e.g.: 0500 = stroke 500 mm
32 32 mm	1 from the front side	1 Viton®	1 slow speed	1 stainless	
40 40 mm	2 one-sided				
50 50 mm					
63 63 mm					
80 80 mm					

i If you require proximity sensing, please contact our technical department.

Construction / materials

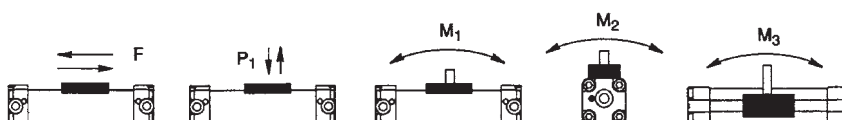
- end caps: aluminium, painted
- body: drawn aluminium tube, anodized
- carrier (piston): aluminium, anodized
- sealing strips: stainless steel
- seals: NBR (optional Viton®)
- screws: steel, galvanized (optional stainless steel)
- scraper covers: plastic

i Verification of the effectiveness of internal damping and permissible load with respect to length and supports can be found on our website www.sappv.cz/r/v18e

Allowable load

Allowed static stress values

Ø	F [N]	P1 [N]	M1 [Nm]	M2 [Nm]	M3 [Nm]
25	250	300	15	1,5	3
32	420	450	30	3	5
40	640	750	60	6	8
50	1000	1200	115	10	15
63	1550	1650	200	12	24
80	2600	2400	360	24	48



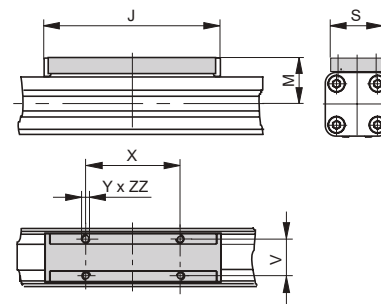
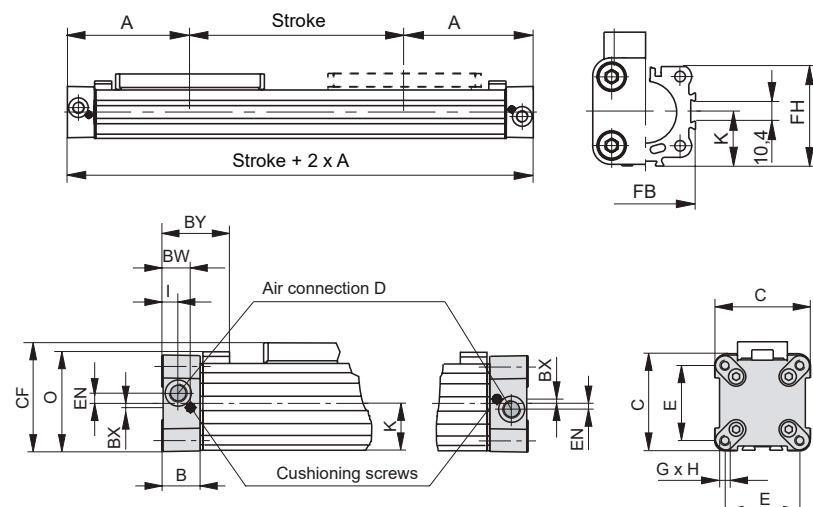
Allowed dynamic stress values

Depending on the speed of piston movement, we determine a coefficient by which we multiply the static stress values and thus obtain the maximum allowable value for dynamic stress.

Speed [m/s]	0,1	0,2	0,3	0,6	0,9	1,2	1,5	1,8	2,1	2,4	2,7	3,0
Coefficient	1,00	0,90	0,67	0,45	0,33	0,24	0,18	0,14	0,11	0,08	0,07	0,06

Dimensions Standard

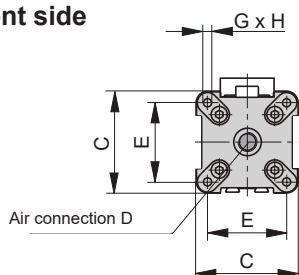
Carrier



The end caps can be rotated 90° and the air port can be turned to the desired position.

Ø	A	B	BW	BX	BY	C	CF	D	E	EN	FB	FH	G	H	I	J	K	M	O	S	V	X	Y	ZZ
25	100	22	17,5	2,2	40	41	52,5	G1/8"	27	3,6	40	39,5	M5	15	9	117	21,5	31	47	33	25	65	M5	8
32	125	25,5	20,5	2,5	44	52	66,5	G1/4"	36	5,5	52	51,7	M6	15	11,5	152	28,5	38	59	36	27	90	M6	10
40	150	28	21	3	54	69	78,5	G1/4"	54	7,5	62	63	M6	15	12	152	34	44	72	36	27	90	M6	10
50	175	33	27	-	59	87	92,5	G1/4"	70	11	76	77	M6	15	14,5	200	43	49	86	36	27	110	M6	10
63	215	38	30	-	64	106	117	G3/8"	78	12	96	96	M8	21	14,5	256	54	63	107	50	34	140	M8	16
80	260	47	37,5	-	73	132	147	G1/2"	96	16,5	122	122	M10	25	22	348	67	80	133	52	36	190	M10	20

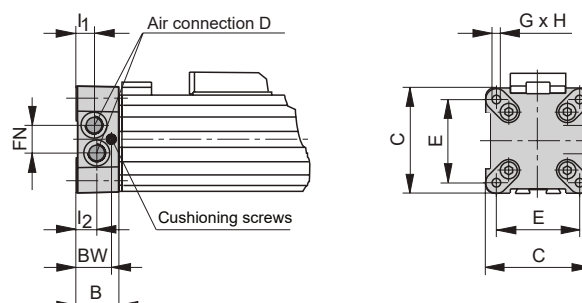
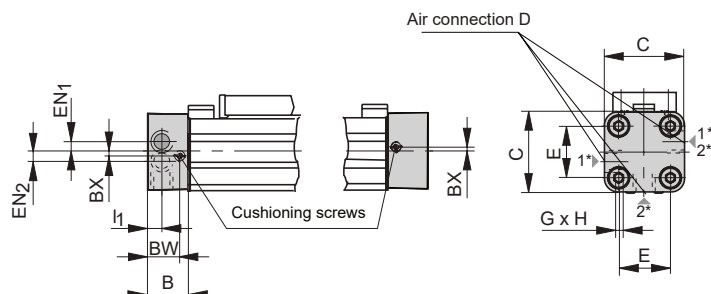
Supply port from the front side



One-sided supply ports

Piston diameter 25 mm

Piston diameters 32 to 80 mm



Ø	EN1	EN2	FN	I1	I2
25	3,6	3,9	-	9	-
32	-	-	15,2	12,2	10,5
40	-	-	17	12	12
50	-	-	22	14,5	14,5
63	-	-	25	16,5	13,5
80	-	-	34,5	22	17