

DOUBLE ACTING PNEUMATIC CYLINDERS SERIES MCDA DOUBLE PISTON ROD



STRÁNSKÝ A PETRŽÍK



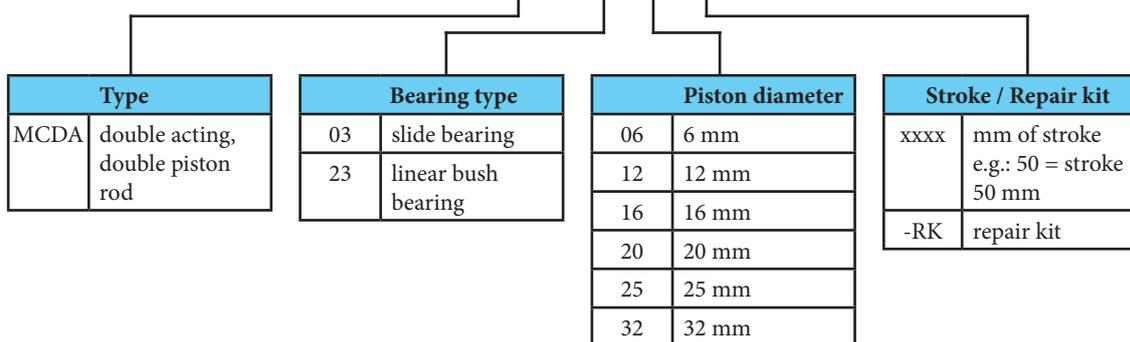
Thin and compact double piston rod cylinders series MCDA with high precision guiding are used not only for precision picking and placing. High lateral load can be applied due to highly accurate slide bearing and linear bush bearing. Cylinders are equipped with magnet for proximity switches. The body and plate are reserved with many holes and threads for mounting. It is suitable for various mounting requirements. There is no adjustable cushioning, for cushioning at the end positions the rubber pad is used.

Working pressure	0,5 MPa
Min. pressure	0,15 MPa for $\varnothing 6$ 0,1 MPa for $\varnothing 12$ and 16 0,05 MPa for $\varnothing 20$ to 32
Max. pressure	0,7 MPa
Temp. range	-5°C to +60°C
Working medium	modified compressed air

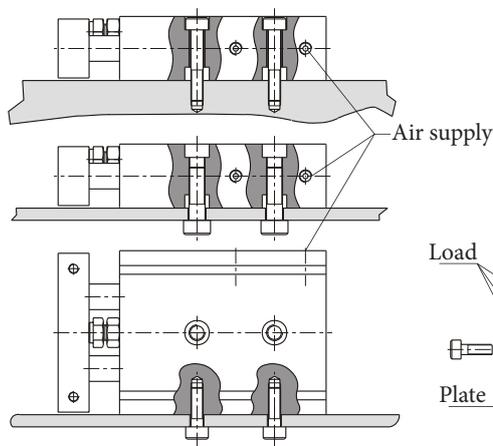
Piston diameter [mm]	6	12	16	20	25	32
Thrust at 0.6 MPa [N]	34	136	241	377	589	965
Return force at 0.6 MPa [N]	19	102	181	283	453	724
Connection	M5	M5	M5	G1/8"	G1/8"	G1/8"
Weight 0 mm stroke [kg]	0,086	0,150	0,222	0,376	0,557	1,105
Weight add. per 1 mm stroke [kg]	0,0015	0,0016	0,0026	0,0036	0,0054	0,0084

Order codes

P MCDA 03 12 50



Various examples of mounting the cylinder:

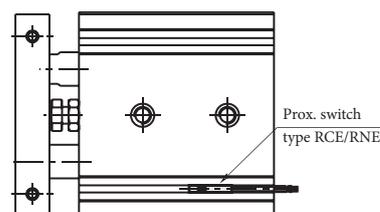


Piston \varnothing [mm]	Standard stroke [mm]*
6	10, 20, 30, 40, 50
12, 16	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100, 110, 120, 125, 150
20, 25, 32	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100, 110, 120, 125, 150, 175, 200

*) Please consult us if stroke is out of specification

Note: Each standard stroke is adjustable in range 0 to +5 mm

Installation of proximity switch



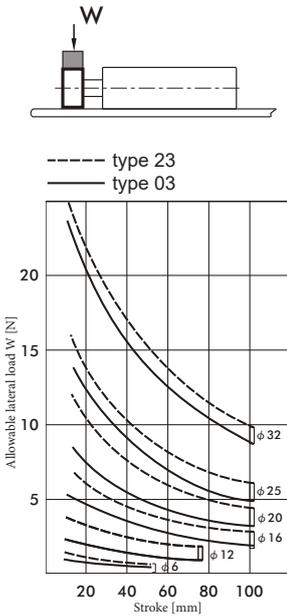
Construction / materials

- caps: aluminium alloy
- body: aluminium alloy
- piston rod (type 03): stainless steel for piston dia. up to 20 mm incl., carbon steel for piston dia. 25 and 32 mm
- piston rod (type 23): bearing steel
- plate: aluminium alloy
- bearing: copper alloy for slide bearing, linear bush bearing

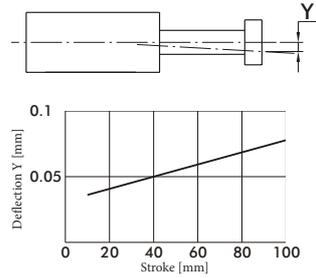


In case of proximity sensing request, please use switches series RCE/RPE/RNE - see page 3-8 for detail

Allowable load
Allowable lateral load

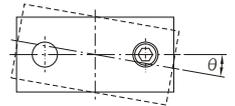


Capacity for use as a pusher

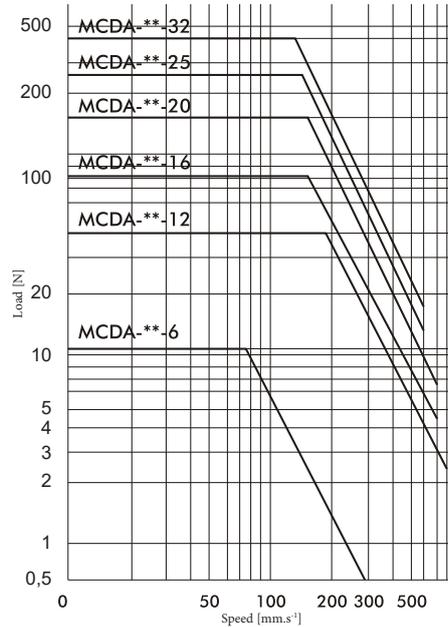


In the actual operation, load at the top should be below the allowable top load.

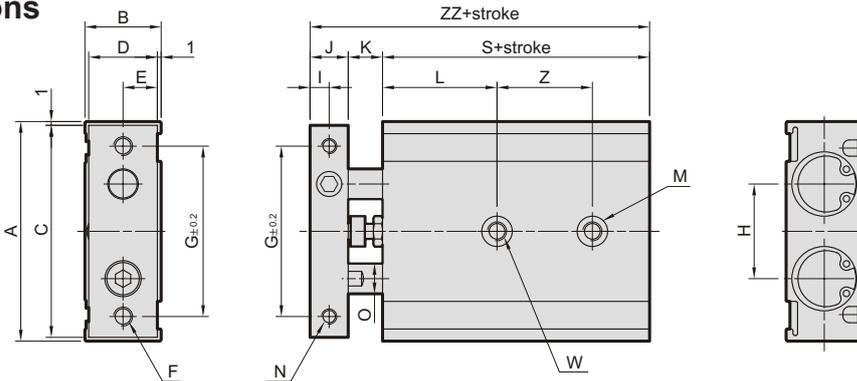
Anti-roll accuracy



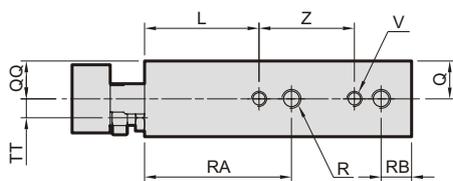
Type	Piston dia. [mm]
03	$\pm 0.1^\circ$
23	$\pm 0.15^\circ$



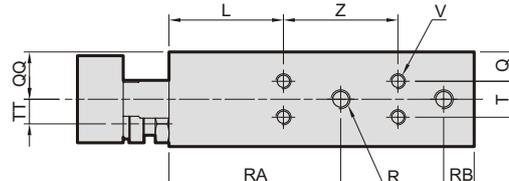
Dimensions



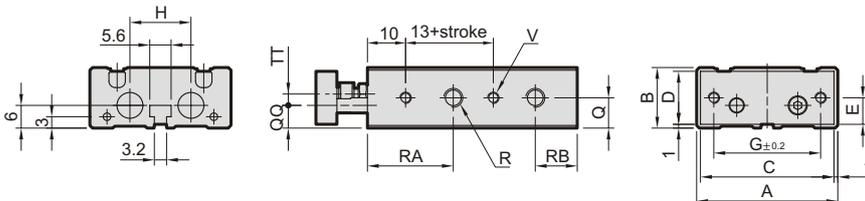
Piston diameter 12 and 16 mm



Piston diameter 20 to 32 mm



Piston diameter 6 mm



Ø	Z (for stroke)				
	10-25	30-50	60-75	80	90-100
6	10+1/2 stroke (10-30mm)				
12	30	40	50	—	—
16	25	35	45	45	55
20	30	40	60	60	60
25	30	40	60	60	60
32	40	50	70	70	70

Ø	A	B	C	D	E	F (thru)	G	H	I	J	K	L	M (both sides)	N (both sides)	O	Q	QQ	R (both sides)	RA	RB	S	T	TT	V (both sides)	W (thru)	ZZ
6	37	16	35	14	7	2xM3	28	16	2.75	5.5	8	13	2x $\phi 6.5$ dp. 3.3 ¹⁾	2xM3 thru	4	8	6	4xM5	22.5	11	45	—	3	4xM3 dp. 4.5	2x $\phi 3.4$	58.5
12	46	18	44	16	8	2xM4	35	19	4	8	9	20	4x $\phi 6.5$ dp. 3.3	4xM3 dp. 5	6	9	10	4xM5	30	8	55	—	3.5	4xM3 dp. 4.5	2xM4	72
16	58	20	56	18	9	2xM5	45	25	5	10	9	30	4x $\phi 8$ dp. 4.4	4xM4 dp. 6	8	10	10	4xM5	38.5	8	60	—	5	4xM4 dp. 5	2xM5	79
20	64	25	62	23	11.5	2xM5	50	28	6	12	12	30	4x $\phi 9.5$ dp. 5.3	4xM4 dp. 6	10	7.75	12.5	4xM5	45	8	70	9.5	6.5	8xM4 dp. 5.5	2xM6	94
25	80	30	78	28	14	2xM6	60	35	6	12	12	30	4x $\phi 11$ dp. 6.3	4xM5 dp. 8	12	8.5	15	4xG1/8"	46	9	72	13	9	8xM5 dp. 7.5	2xM8	96
32	98	38	96	36	18	2xM6	75	44	8	16	14	30	4x $\phi 11$ dp. 6.3	4xM5 dp. 8	16	9	19	4xG1/8"	56	10	82	20	11.5	8xM5 dp. 7.5	2xM8	112

1) single side only