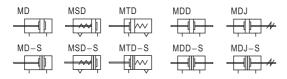
AITTAE

MD Series



Symbol



MD,MK

Product feature

- 1. Manufactured by our enterprise.
- 2. There are several ways to fix the cylinder and it is convenient to install and
- 3. Several cylinders can be assembled together to effectively save the installation space.
- 4. The guide precision of piston rod is high and no additional lubricant is needed.
- $\ \, 5.\ Cylinders\ of\ various\ specifications\ are\ optional.$
- 6. The seal material with high temperature resistance is adopted to guarantee the normal operation of cylinder at 150° C(Option).

Specification

Bore size	e(mm)	6	10	16	20	25	32						
Acting	MD, MDD, MDJ		Double acting										
type	MSD, MTD		Single acting-Push type, Single acting-Pull type										
Fluid				Air(to be filtered	by 40 μ m fi	ilter element)							
Operating Double acting				0.1~1.0	MPa(14~14	5psi)							
pressure	Single acting		0.2~1.0MPa(28~145psi)										
Proof pres	ssure		1.5MPa(215psi)										
Temperatu	ure °C		-20~80										
Speed rar	nge mm/s		Double acting: 30~500 Single acting: 50~500										
Stroke tole	erance		+1.0										
Cushion ty	уре		Bumper										
Port size	1		M5 × 0.8										

1 PT thread, NPT thread and G thread are available. Add) Refer to P419~442 for detail of sensor switch.

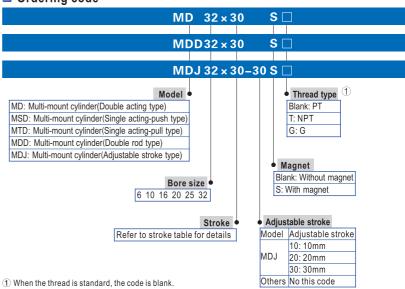
Stroke

Bore s	ize (mm)	Standard stroke (mm)	Max. std stroke	Max. stroke
	Double acting	5 10 15 20 25 30 35	35	40
6	Single acting	5 10 15 20	20	-
10	Double acting	5 10 15 20 25 30 35	35	40
10	Single acting	5 10 15 20	20	-
16	Double acting	5 10 15 20 25 30 40 50	50	70
10	Single acting	5 10 15 20	20	-
20	Double acting	5 10 15 20 25 30 40 50 60	60	80
20	Single acting	5 10 15 20	20	-
25	Double acting	5 10 15 20 25 30 40 50 60	60	80
25	Single acting	5 10 15 20	20	-
32	Double acting	5 10 15 20 25 30 40 50 60	60	80
32	Single acting	5 10 15 20	20	-

Note) 1. Please contact the company for other special strokes.

The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 23mm stroke cylinder has the same dimensions of 25 std. stroke cylinder.

Ordering code

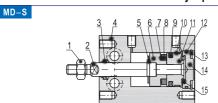


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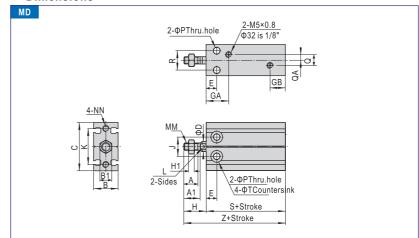
MD Series

Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Carbon steel
2	Piston rod	Stainless steel
3	Rod packing	NBR
4	Body	Aluminum alloy
5	Bumper	TPU
6	Magnet holder	Aluminum alloy
7	Magnet washer	NBR
8	Magnet	Sintered metal(Neodymium-iron-boron)
9	Piston seal	NBR
10	Wear ring	Wear resistant material
11	Piston	Aluminum alloy
12	O-ring	NBR
13	C-clip	Spring steel
14	Back cover	Aluminum alloy
15	Bumper	TPU

Dimensions



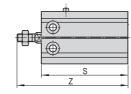
Bore size\Item	Α	A1	В	В1	С	D	Е	GA	GB	Н	H1		K		MM	NN
6	7	8	16.5	5.5	22	3	7	14	10	13	2.4	10	17	-	$M3 \times 0.5$	$M3 \times 0.5Dp:5$
10	10	11	16.5	7	24	4	7	15.5	10	16	2.2	11	18	-	$M4 \times 0.7$	$M3 \times 0.5Dp:5$
16	11	12.5	20	8	32	6	7	14.5	10	16	4	14	25	5	$M5 \times 0.8$	M4 × 0.7Dp:5
20	12	14	26	10	40	8	9	19	11	19	5	16	30	6	$M6 \times 1.0$	$M5 \times 0.8$ Dp:7.5
25	15.5	18	32	12	50	10	10	21.5	8.5	23	6	20	38	8	$M8 \times 1.25$	$M5 \times 0.8Dp:8$
32	19.5	22	40	17	62	12	11	23	12.5	27	6	24	48	10	$M10 \times 1.25$	M6 × 1.0Dp:9

D			0.4		_	S		Z		
Bore size\Item P		Q	QA	R		Without magnet	With magnet	Without magnet With magnet		
6	3.2	-	-	7	6Dp:5	33	33	46	46	
10	3.2	-	_	9	6Dp:5.6	36	36	52	52	
16	4.5	3	1.5	12	7.6Dp:6.5	30	40	46	56	
20	5.5	9	4.5	16	9.3Dp:8	36	46	55	65	
25	5.5	12	6	20	9.3Dp:9	40	50	63	73	
32	6.6	13	4.5	24	11Dp:11.5	42	52	69	79	

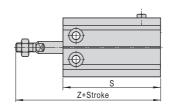


MD,MK





MTD



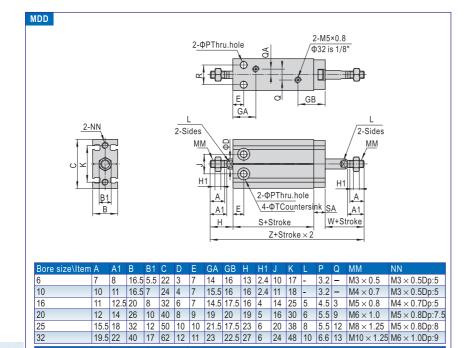
Item	S(V	Vithou	t mag	net)	S((With I	magn	et)	Z(V	∕ithou	t mag	net)	Z(With magnet)			
Bore size\Stroke	5St	10St	15St	20St	5St	10St	15St	20St	5St	10St	15St	20St	5St	10St	15St	20St
6	43	48	58	63	43	48	58	63	56	61	71	76	56	61	71	76
10	46	51	61	66	46	51	61	66	62	67	77	82	62	67	77	82
16	45	50	65	70	55	60	75	80	61	66	81	86	71	76	91	96
20	51	56	71	76	61	66	81	86	70	75	90	95	80	85	100	105
25	55	60	75	80	65	70	85	90	78	83	98	103	88	93	108	113
32	57	62	77	82	67	72	87	92	84	89	104	109	94	99	114	119

Remark) The unmarked dimension is the same as MD standard type.

Multi-mount cylinder

AITTAC

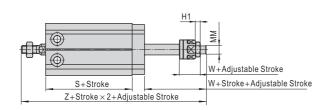
MD Series





			0.4	_	W	S		Z		
Bore size\Item	QA	K	SA			Without magnet	With magnet	Without magnet	With magnet	
6	_	7	6	6Dp:5	13	38	38	70	70	
10	-	9	6	6Dp:5.6	16	36	36	74	74	
16	1.5	12	7.5	7.6Dp:6.5	16	30	40	69.5	79.5	
20	4.5	16	9	9.3Dp:8	19	36	46	83	93	
25	6	20	9	9.3Dp:9	23	40	50	95	105	
32	4.5	24	10	11Dp:11.5	27	42	52	106	116	

MD,MK



5				S		Z		
Bore size\Item	IVIIVI	H1	VV	Without magnet	With magnet	Without magnet	With magnet	
6	$M3 \times 0.5$	2.4	13	38	38	70	70	
10	$M4 \times 0.7$	2.2	14.7	36	36	72.7	72.7	
16	$M5 \times 0.8$	4	17	30	40	70.5	80.5	
	M6 × 1.0	5	21	36	46	85	95	
25	M8 × 1.25	6	25	40	50	97	107	
32	$M10 \times 1.25$	6	27	42	52	106	116	

Remark) The unmarked dimension is the same as MD standard type.