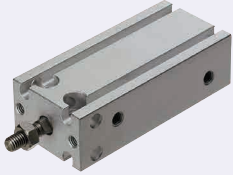


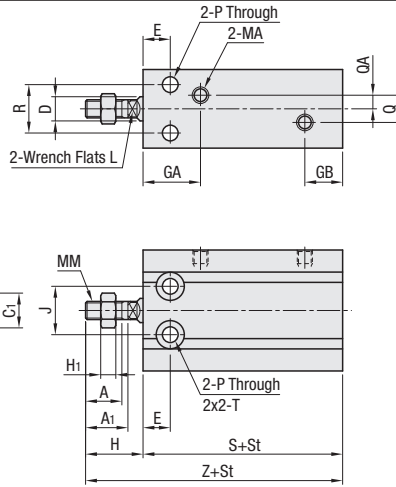
Small Cylinders

Small Cylinders



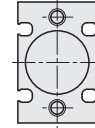
RoHS10

MSCFA



MSCFA : Basic Specifications

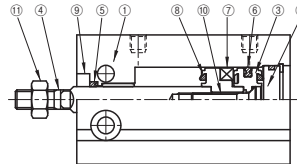
Tube I.D. (mm)	6	10	16	20	25	32
Operating Type	Double Acting					
Applicable Fluid	Air					
Min. Operating Pressure (MPa)	0.12	0.06	0.05			
Max. Operating Pressure (MPa)	0.7					
Pressure Resistance (MPa)	1.0					
Operating Temp. Range (°C)	5~60					
Piston Speed (mm/s)	50~500					
Cushion Mechanism	NBR					
Stroke Tolerance (mm)	0~±2.0					
Lubrication	Lubrication Free					
Pipe Connection Bore Dia.	M5x0.8 Rc1/8					



Tube I.D. (mm)	A	A1	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MA	MM	NN	P	Q	QA	R	S	T	Z
6	7	-	13	5.5	22	6.4	3	7	15	10	13	1.8	10	17	-	M5x0.8	M3x0.5	M3x0.5 Depth 5	3.2	-	-	7	33	06 Counterbore Depth 4.8	46
10	10	-	15	7	24	8.1	4	7	16.5	10	16	2.4	11	18	-	M5x0.8	M4x0.7	M3x0.5 Depth 5	3.2	-	-	9	36	06 Counterbore Depth 5	52
16	11	12.5	20	8	32	9.2	6	7	16.5	11.5	16	4	14	25	5	M5x0.8	M5x0.8	M4x0.7 Depth 6	4.5	4	2	12	40	07.6 Counterbore Depth 6.5	56
20	12	14	26	10	40	11.5	8	9	19	12.5	19	5	16	30	6	M5x0.8	M6x1.0	M5x0.8 Depth 8	5.2	9	4.5	16	46	09.3 Counterbore Depth 8	65
25	15.5	18	32	13	50	15	10	10	21.5	13	23	5	20	38	8	M5x0.8	M8x1.25	M5x0.8 Depth 8	5.5	9	4.5	20	50	09.3 Counterbore Depth 9	73
32	19.5	22	40	17	62	19.6	12	11	23	12.5	27	6	24	48	10	Rc1/8	M10x1.25	M6x1.0 Depth 9	6.6	13.5	4.5	24	52	011 Counterbore Depth 11.5	79

Part Number	Type	Tube I.D. (mm)	St Stroke (mm) Selection	Body Price						
				St Stroke (mm)	10	20	30	50		
MSCFA		6								
		10	10 20 30							
		16								
		20								
		25	10 20 30 50							
		32								

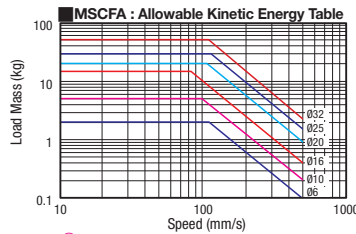
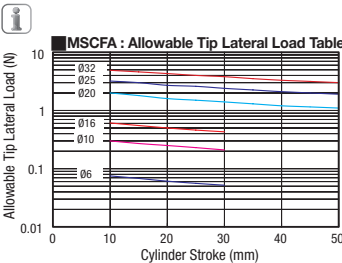
Small Cylinder Structure Diagram



MSCFA : Part List

Number	Part Name	06	010	016	020	025	032
①	Main Body	A6061					
②	End Cover	A6061	A5052	A6061			
③	Piston (*)	A6061x2 pcs.					
④	Piston Rod	SUS303					
⑤	Rod Gasket	NBR					
⑥	Piston Gasket	NBR					
⑦	Magnet	Plastic Magnet					
⑧	Cushion	NBR					
⑨	Rod Cover	A6061	NBR				
⑩	Piston Bolt	SUS303					
⑪	Rod Nut	SS400					

(*) One piece of A6061 and C3604-CD each are applied for 016 rod piston.



See P.1483 for the theoretical reference speed.

MSCFA : Theoretical Output

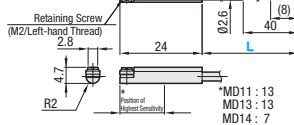
Tube I.D. (mm)	Operating Direction	Operating Pressure (MPa)					Unit : (N)
		0.2	0.3	0.4	0.5	0.6	
6	Push	5.7	8.5	11.3	14.1	17.0	19.8
	Pull	4.2	6.4	8.5	10.6	12.7	14.8
10	Push	15.7	23.6	31.4	39.3	47.1	55.0
	Pull	13.2	19.8	26.4	33.0	39.6	46.2
16	Push	40	60	80	101	121	141
	Pull	35	52	69	86	104	121
20	Push	63	94	126	157	188	220
	Pull	53	79	106	132	158	185
25	Push	98	147	196	245	295	344
	Pull	82	124	165	206	247	289
32	Push	161	241	322	402	483	563
	Pull	138	207	276	346	415	484

Sensors for Cylinders

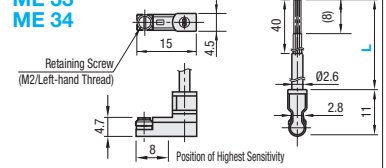


RoHS10

MD 11
MD 13
MD 14



ME 33
ME 34



Part Number	Type	L	Load Voltage	Load Current	Indicator Light	Sensor Type	Line	Wire Exit	Unit Price	
									L1 (1m)	L3 (3m)
MD11	L1 (1m)	L3 (3m)	24VDC	24VDC	LED	Contact	2-Line	Rear		
MD13			110VAC	110VAC						
MD14			28VDC or Less	0.1~40mA						
ME33			10~28VDC	5~20mA						
ME34			28VDC or Less	0.1~40mA						
			10~28VDC	5~20mA		No Contact	3-Line	Top		

Operating Temp. Range: 0 ~ 60°C
For detailed specifications of the Sensors, see P.1484.



Ordering Example
Small Cylinders

Part Number - St Stroke
MSCFA6 - 10

Sensors for Cylinders

Part Number
MD14L1