

MCDA series

DUAL-ROD CYLINDER

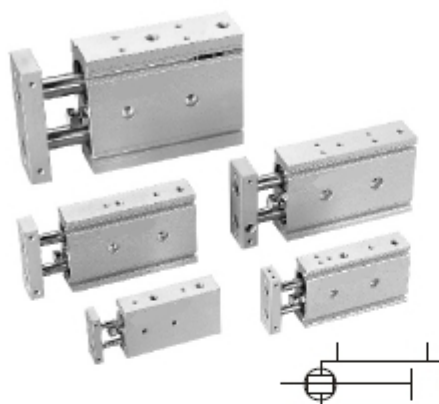


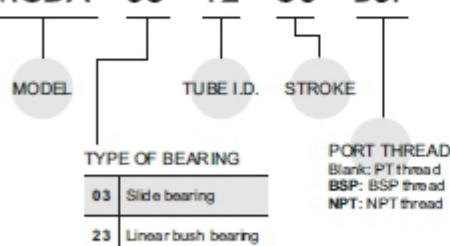
Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke
φ6	10,20,30	50
φ12	10,15,20,25,30,35,40,45,50,60,70	70
φ16		120
φ20	10,15,20,25,30,35,40,45,50,60,70	130
φ25	75,80,90,100	150
φ32		150

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.
- It is possible to adjust length of basic stroke by 0~5mm.

Order example:

MCDA-03-12-50-BSP



Anti-roll accuracy :



Tube I.D.	φ6~φ32
MCDA-03	±0.1°
MCDA-23	±0.15°

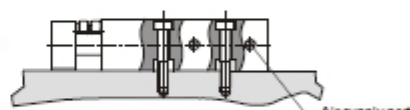
Features:

- Compact in width and length with precision guidance.
- High lateral loads can be applied on both slide and linear bearing unit.
- Non rotation is standard.
- Magnetic as standard.

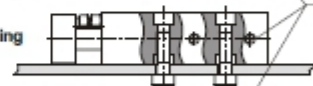
Specification:

Model		MCDA					
Acting type		Double acting					
Tube I.D.(mm)		6	12	16	20	25	32
Port size Rc/PT		M5 x 0.8				PT 1/8	
Medium		Air					
Operating pressure range kgf/cm ²	Max.	7					
	Min.	1.5	1.0		0.5		
Pro of pressure		10 kgf/cm ²					
Ambient temperature		-5~+60℃ (No freezing)					
Lubrication		Not required (If lubrication is used, apply turbine oil NO.1 ISO VG32)					
Cushion		With rubber cushion pad (both side)					
Magnet		With magnet					
Sensor switch		RCE / E1	RCB, RCE, RCE1				

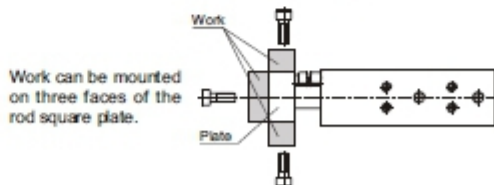
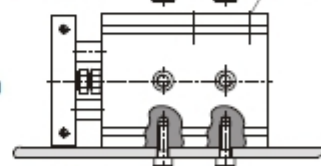
Top mounting



Bottom mounting



Side mounting



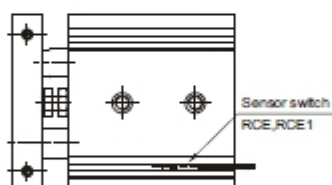
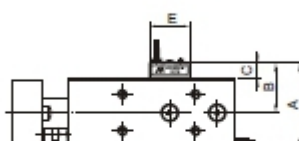
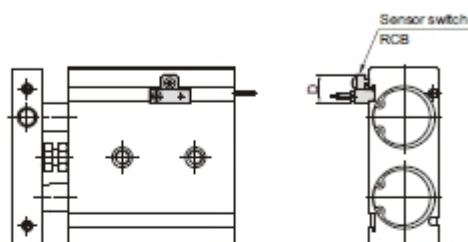
Work can be mounted on three faces of the rod square plate.

MCDA Installation of sensor switch $\phi 6 \sim \phi 32$

DUAL-ROD CYLINDER

Installation of sensor switch

Sensor switch: RCB, RCE, RCE1

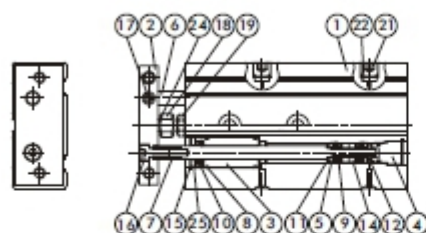


Code Tube I.D.	A	B	C	D	E
12	26.5	17.5	8.5	16	22
16	28.5	18.5	8.5	16	22
20	33.5	21	8.5	16	22
25	38.5	23.5	8.5	16	22
32	46.5	27.5	8.5	16	22

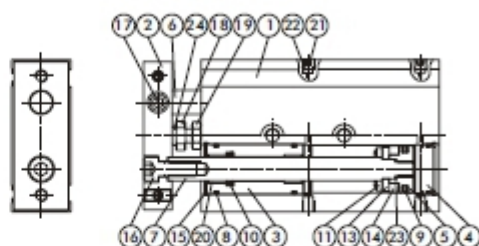
MCDA-03 Inside structure & Parts list

DUAL-ROD CYLINDER

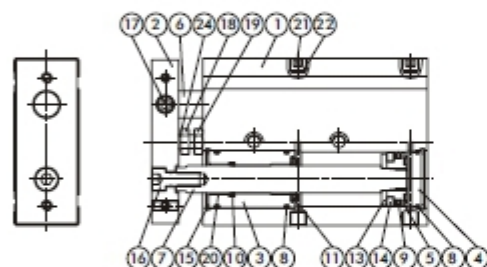
φ 6



φ 12~ φ 20



φ 25, φ 32



Material

No.	Part name	Tube I.D.	6	12	16	20	25	32	Note
1	Body		Aluminum alloy						
2	Plate		Aluminum alloy						
3	Rod cover	※1	Aluminum alloy						
4	End cover		Aluminum alloy						
5	Piston		Aluminum alloy						
6	Piston rod #1		Stainless steel			※2			
7	Piston rod #2		Stainless steel			※2			
8	Cover ring		NBR						
9	Piston packing		NBR						
10	Rod packing		NBR						
11	Rod cushion		NBR						
12	End cushion		NBR						only φ 6
13	Magnet holder		Stainless steel						

No.	Part name	Tube I.D.	6	12	16	20	25	32	Note
14	Magnet ring		Magnet material						
15	Snap ring		Spring steel						
16	Screw		Stainless steel						
17	Set screw		Stainless steel						
18	Cushion screw		Copper						
19	Nut		Carbon steel						
20	Rod bush		Copper						
21	Plug(set screw)		Carbon steel						
22	Plug ring		NBR						
23	O-ring		NBR						only φ 20
24	Bumper		Polyurethane						
25	Rod cover washer		Stainless steel						only φ 6

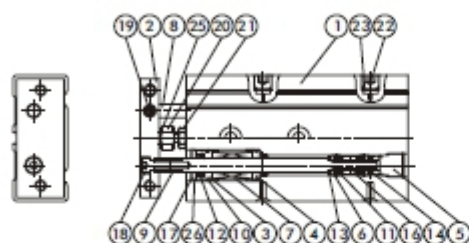
※ 1 : Copper

※ 2 : Medium carbon steel

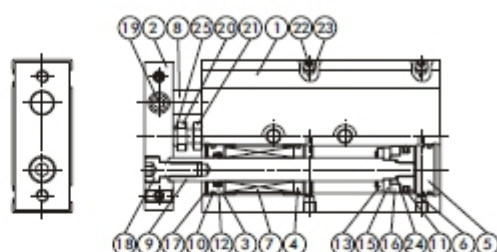
MCDA-23 Inside structure & Parts list

DUAL-ROD CYLINDER

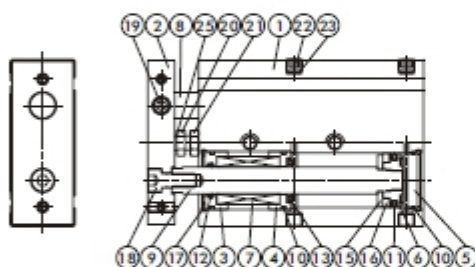
φ 6



φ 12~ φ 20



φ 25, φ 32



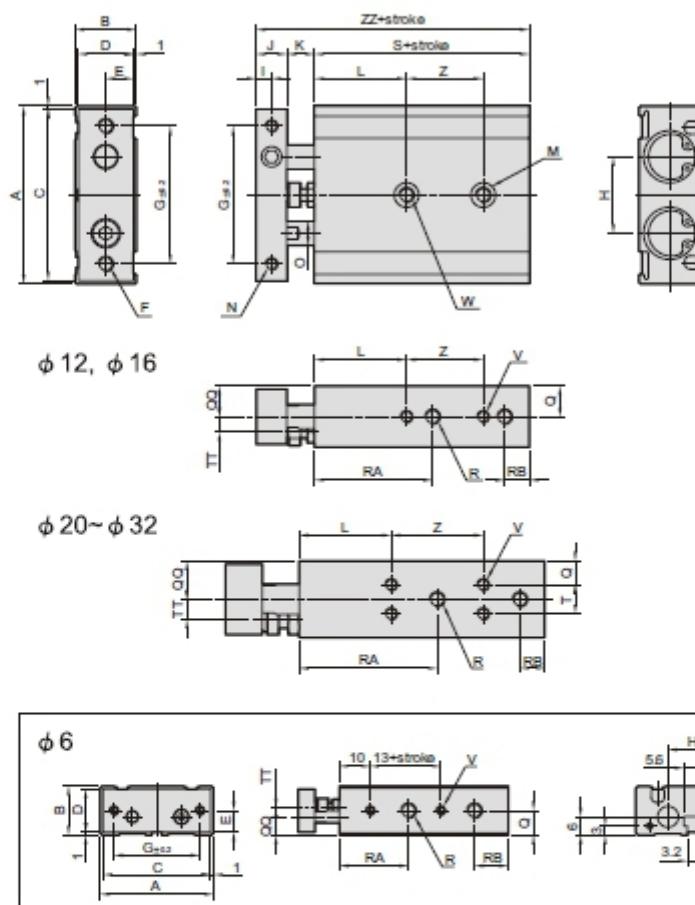
Material

No.	Part name	Tube I.D.	6	12	16	20	25	32	Note
1	Body		Aluminum alloy						
2	Plate		Aluminum alloy						
3	Rod cover #1		Aluminum alloy						
4	Rod cover #2		Aluminum alloy						
5	End cover		Aluminum alloy						
6	Piston		Aluminum alloy						
7	Slide bush		—						
8	Piston rod #1		Bearing steel						
9	Piston rod #2		Bearing steel						
10	Cover ring		NBR						
11	Piston packing		NBR						
12	Rod packing		NBR						
13	Rod cushion		NBR						

No.	Part name	Tube I.D.	6	12	16	20	25	32	Note
14	End cushion		NBR						only φ 6
15	Magnet holder		Stainless steel						
16	Magnet ring		Magnet material						
17	Snap ring		Spring steel						
18	Screw		Stainless steel						
19	Set screw		Stainless steel						
20	Cushion screw		Copper						
21	Nut		Carbon steel						
22	Plug(set screw)		Carbon steel						
23	Plug ring		NBR						
24	O-ring		NBR						only φ 20
25	Bumper		Polyurethane						
26	Rod cover washer		Stainless steel						only φ 6

MCDA Dimensions $\phi 6 \sim \phi 32$

DUAL-ROD CYLINDER



MCDA-03/MCDA-23

Code Tube I.D.	A	B	C	D	E	F (Thru)	G	H	I	J	K	L	M (Both side)	N (Both side)	O	Q	QQ	R (Both side)	RA	RB	S	T
6	37	16	35	14	7	2-M3×0.5	28	16	2.75	5.5	8	13	2-φ6.5×3.3dp @ 1	2-M3×0.5 thru	4	8	6	4-M5×0.8	22.5	11	45	
12	46	18	44	16	8	2-M4×0.7	35	19	4	8	9	20	4-φ6.5×3.3dp	4-M3×0.5×5dp	6	9	10	4-M5×0.8	30	8	55	
16	58	20	56	18	9	2-M5×0.8	45	25	5	10	9	30	4-φ8×4.4dp	4-M4×0.7×6dp	8	10	10	4-M5×0.8	38.5	8	60	
20	64	25	62	23	11.5	2-M5×0.8	50	28	6	12	12	30	4-φ9.5×5.3dp	4-M4×0.7×6dp	10	7.75	12.5	4-M5×0.8	45	8	70	9.5
25	80	30	78	28	14	2-M6×1.0	60	35	6	12	12	30	4-φ11×6.3dp	4-M5×0.8×8dp	12	8.5	15	4-PT 1/8	46	9	72	13
32	98	38	96	36	18	2-M6×1.0	75	44	8	16	14	30	4-φ11×6.3dp	4-M5×0.8×8dp	16	9	19	4-PT 1/8	56	10	82	20

Code Tube I.D.	TT	V (Both side)	W (Thru)	Z (Stroke)	ZZ
6	3	4-M3×0.5×4.5dp	2-φ3.4	10+1/2 stroke (@ 2)	58.5
12	3.5	4-M3×0.5×4.5dp	2-M4×0.7		72
16	5	4-M4×0.7×5dp	2-M5×0.8		79
20	6.5	8-M4×0.7×5.5dp	2-M6×1.0		94
25	9	8-M5×0.8×7.5dp	2-M8×1.25		96
32	11.5	8-M5×0.8×7.5dp	2-M8×1.25		112

@1: φ6- single side.
 @2: φ6-stroke (10, 20, 30)