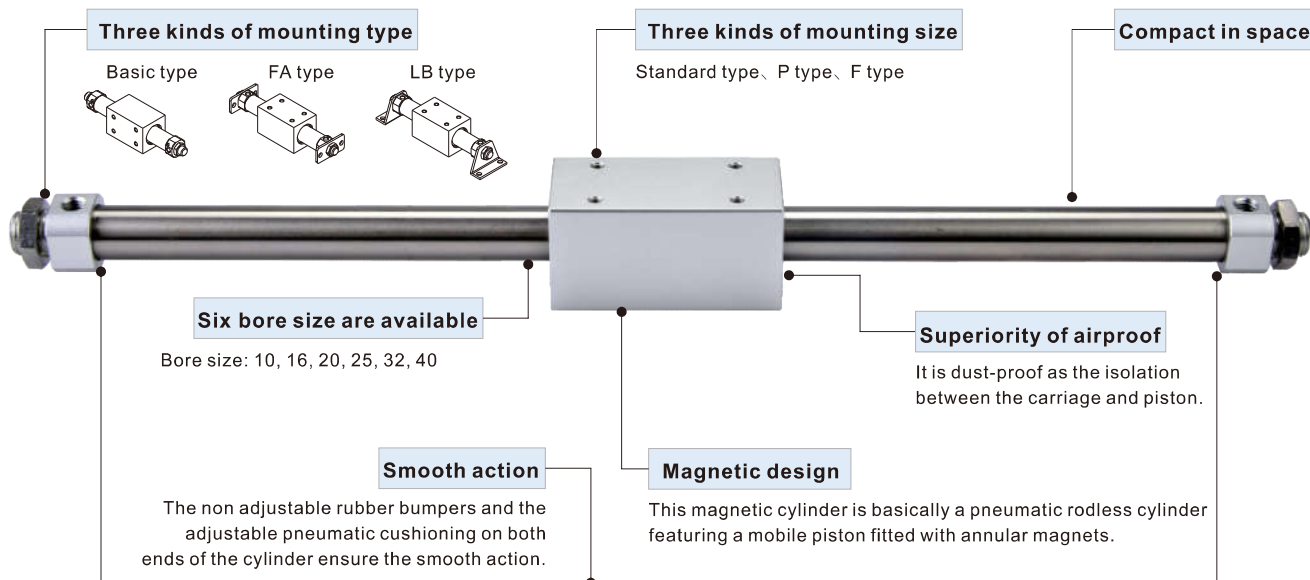




Rodless magnetic cylinder——RMS Series

Compendium of RMS Series



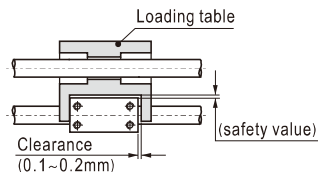
Installation and application

1. The maxi load to move must be less than the theoretical holding force.

2. How to mount load:

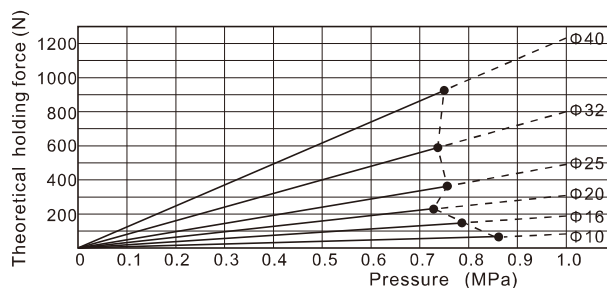
2.1. Horizontal mounting: the permissible radial load must be lower than the figures in the chart below.

Horizontal oriented device



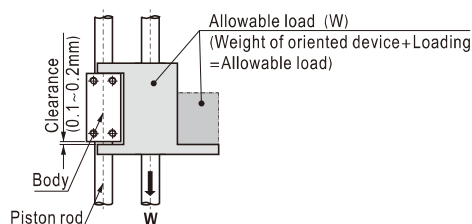
Bore size	Max. allowable load W (Loading+Weight of oriented device)
10	0.4kg
16	1.0kg
20	1.1kg
25	1.2kg
32	1.5kg
40	2.0kg

[Note] If Max. load be larger then the value of above table, please conform with our company.



2.2. Vertical mounting: Loading should be used with oriented device, the allowable direction moment must be lower than the figures in the chart below,

Vertical oriented device



Bore size	Max. allowable load W(Weight of oriented device+Loading)	Max. pressure
10	2.7kg	0.55MPa
16	7.0kg	0.55MPa
20	11.0kg	0.65MPa
25	18.5kg	0.65MPa
32	30.0kg	0.65MPa
40	47.0kg	0.65MPa

[Note] If pressure be larger then the max. pressure, magnetic core might disengage.

3. Dirty substances in the pipe must be eliminated before cylinder is connected with pipeline to prevent the entrance of impurities into the cylinder.

4. The medium used by cylinder shall be filtered to 40 μm or below.

5. If the cylinder is dismantled and stored for a long time, pay attention to conduct anti-rust treatment to the surface. Anti-dust jam cap shall be added in air inlet and outlet ports.



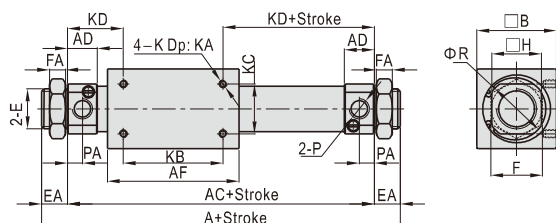
AirTAE

Rodless magnetic cylinder

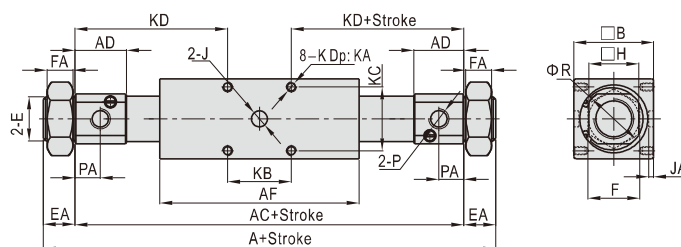
RMS Series

Dimensions

RMS RMS-P



RMS-F



Model\Item	A	AC	AD	AF	B	E	EA	F	FA	H	J	JA	K	KA	KB	KC	KD	P	PA	R
RMS10	91	73	9.5	48	25	M10 × 1.0	9	14	4	15	-	-	M3 × 0.5	4	30	16	21.5	M5 × 0.8	5	17
RMS16	103	83	10	57	35	M10 × 1.0	10	14	4	20	-	-	M4 × 0.7	5	35	19	24	M5 × 0.8	5.5	22
RMSP16	112	92	14.5	57		M10 × 1.0	10	14	4		-	-	M4 × 0.7	7	34	25	29		7.5	
RMSF16	205	181	34	80		M16 × 1.5	12	24	8		8	3	M5 × 0.8	7.5	26	26	77.5		20	
RMS20	132	106	15	66	40	M20 × 1.5	13	26	8	25	-	-	M4 × 0.7	5.5	50	25	28	1/8"	7.5	29
RMSP20	143	115	19.5	66		M20 × 1.5	14	26	8		-	-	M5 × 0.8	7	40	30	37.5		10	
RMSF20	217	185	29.5	90		M22 × 1.5	16	29	7		8	2.5	M5 × 0.8	8.5	32	32	76		15	
RMS25	137	111	15	70	46	M26 × 1.5	13	32	8	30	-	-	M5 × 0.8	7.5	50	30	30.5	1/8"	7.5	33.5
RMSF25	238	206	37.5	90		M22 × 1.5	16	29	7		10	3	M6 × 1.0	10	36	36	85		20	
RMS32	156	124	16	80		M26 × 1.5	16	32	8		-	-	M6 × 1.0	8	50	40	37		8	
RMSP32	165	133	20.5	80	60	M26 × 1.5	16	32	8	36	-	-		8	48	48	41.5	1/8"	10	39.5
RMSF32	270	238	48	110		M30 × 1.5		36	7		10	3.5		12.5			95		28	
RMS40	182	150	22	92	70	M32 × 2.0	16	41	10	46	-	-	M6 × 1.0	9	60	40	45	1/4"	11	49.5
RMSF40	327	295	44.5	130		M38 × 1.5		46	8		12	4.5	M8 × 1.25	16	50	56	122		25	

List for ordering code of accessories

Accessories\Bore size		10		16		20		25		32		40	
		RMS	RMS	RMSP	RMSF	RMS	RMSP	RMSF	RMS	RMSF	RMS	RMSP	RMSF
Mounting accessories	LB	F-PB12LB	F-RMS16LB	F-RMSF16LB	F-RMS20LB	F-RMSF20LB	F-RMS25LB	F-RMSF25LB	F-RMS32LB	F-RMSF32LB	F-RMS40LB	F-RMSF40LB	
	FA	F-PB12FA	F-PB12FA	F-MI12FA	F-MF20FA	F-MA20FA	F-MF32FA	F-MA20FA	F-MF32FA	F-MA40FA	F-MF40FA	-	

Accessory selection

Accessories\Cylinder model		RMS	RMSP	RMSF
Mounting accessories	LB	●	●	●
	FA	●	●	●

Material of accessories

Accessories\Bore size		10		16		20		25		32		40	
		RMS	RMS	RMSP	RMSF	RMS	RMSP	RMSF	RMS	RMSF	RMS	RMSP	RMSF
Mounting accessories	LB	△	△	△	△	△	△	△	△	△	△	△	△
	FA	△	△	△	△	△	○	△	○	△	○	△	-

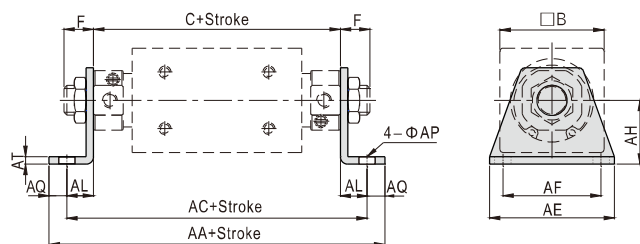
○—Lower carbon steel; △—SPCC

Rodless magnetic cylinder

RMS Series

Dimensions

RMS-LB RMSF-LB

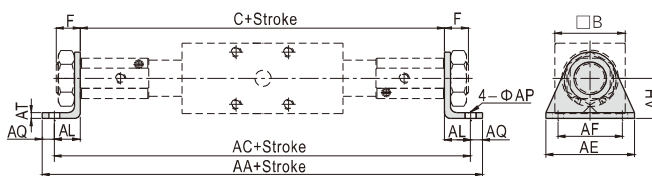


Bore size\Item	AA		AC		C		F	
	RMS	RMSP	RMS	RMSP	RMS	RMSP	RMS	RMSP
10	103	-	91	-	73	-	9	-
16	113	122	101	110	83	92	10	10
20	158	167	142	151	106	115	13	14
25	167	-	151	-	111	-	13	-
32	184	193	170	179	124	133	16	16
40	216	-	196	-	150	-	16	-

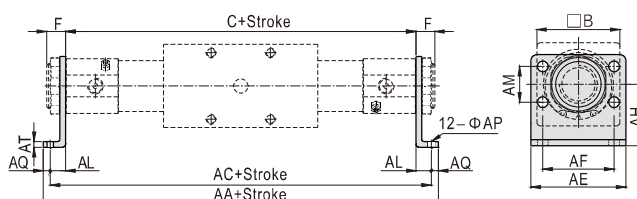
Bore size\Item	AE	AF	AH	AL	AP	AQ	AT	B
10	42	33	14	9	5.5	6	2.5	25
16	42	33	20	9	5.5	6	2.5	35
20	43	30	23	18	6.5	8	3	40
25	54	40	26	20	6.5	8	4	46
32	62	46	33	23	7	7	4	60
40	75	55	38	23	9	10	5	70

RMSF-LB

Φ16~Φ25



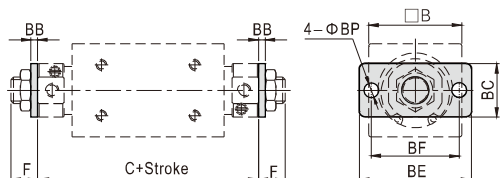
Φ32, Φ40



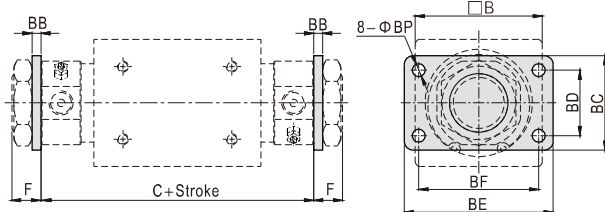
Bore size\Item	AA	AC	AE	AF	AH	AL	AM	AP	AQ	AT	B	C	F
16	221	209	44	32	20	14	-	5.5	6	2.5	35	181	12
20	235	219	54	40	23	17	-	6.5	8	3	40	185	16
25	256	240	54	40	26	17	-	6.5	8	4	46	206	16
32	280	266	66	52	33	14	28	7	7	4	60	238	16
40	353	333	80	60	38	19	30	9	10	5	70	295	16

RMS-FA RMSF-FA

Φ16~Φ32



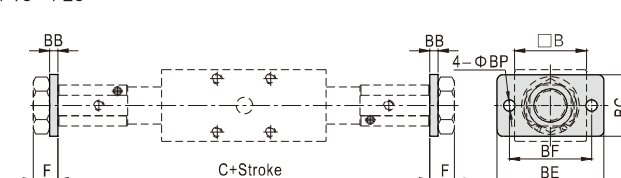
Φ40



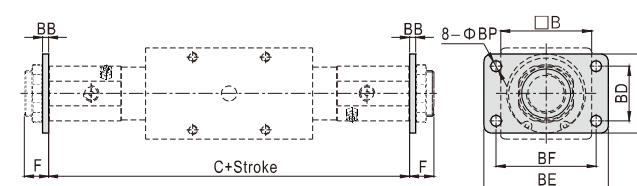
Bore size\Item	B	BB	BC	BD	BE	BF	BP	C		F	
								RMS	RMSP	RMS	RMSP
10	25	3	20	-	42	33	5.5	73	-	9	-
16	35	3	20	-	42	33	5.5	83	92	10	10
20	40	4	34	-	75	60	7	106	115	13	14
25	46	4	40	-	75	60	7	111	-	13	-
32	60	4	40	-	75	60	7	124	133	16	16
40	70	5	52	36	82	66	7	150	-	16	-

RMSF-FA

Φ16~Φ25



Φ32



Bore size\Item	B	BB	BC	BD	BE	BF	BP	C	F
16	35	4	30	-	52	40	5.5	181	12
20	40	4	38	-	64	50	6.5	185	16
25	46	4	38	-	64	50	6.5	206	16
32	60	4	50	36	84	70	6.5	238	16

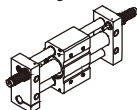


Rodless magnetic cylinder(With guide)—RMT Series

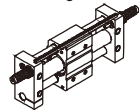
Compendium of RMT Series

With magnet and without magnet are available

Without magnet



With magnet



Magnetic design

This magnetic cylinder is basically a pneumatic rodless cylinder featuring a mobile piston fitted with annular magnets.

Two kinds of cushion type

The non adjustable rubber bumpers and the adjustable pneumatic cushioning on both ends of the cylinder ensure the smooth action. If shock absorber be used, the cushioning effect is more perfection.

Double guides

Double guides ensure high precision and can endure proper side load or prejudicial load.

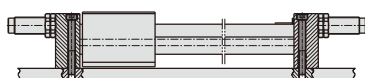
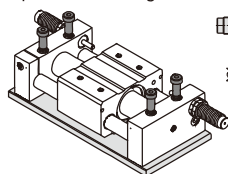
Five bore size are available

Bore size: 16, 20, 25, 32, 40

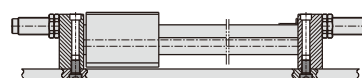
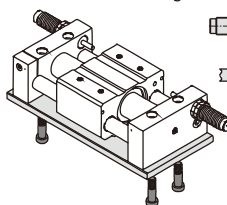
It is compact in space

Can be mounted from top and bottom.

Top bolt mounting



Bottom bolt mounting



Superiority of airproof

It is dust-proof as the isolation between the carriage and piston.



Installation and application

1. Dirty substances in the pipe must be eliminated before cylinder is connected with pipeline to prevent the entrance of impurities into the cylinder.
2. The medium used by cylinder shall be filtered to 40 μ m or below.
3. Anti-freezing measure shall be adopted under low temperature environment to prevent moisture freezing.
4. If the cylinder is dismantled and stored for a long time, pay attention to conduct anti-rust treatment to the surface.
Anti-dust caps shall be added in air inlet and outlet ports.

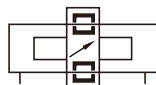


Rodless magnetic cylinder(With guide)

RMT Series



Symbol



Product feature

1. This magnetic cylinder is basically a pneumatic rodless cylinder featuring a mobile piston fitted with annular magnets. The mobile carriage is also equipped with magnets to provide magnetic coupling (carriage/piston). The carriage slide freely along the main tube.
2. It is dust-proof as the isolation between the carriage and piston.
3. It is compact in space.
4. The non adjustable rubber bumpers and the adjustable pneumatic cushioning on both ends of the cylinder ensure the smooth action. If shock absorber be used, the cushioning effect is more perfection.
5. Double guides ensure high precision and can endure proper side load or prejudicial load.

Specification

Bore size(mm)	16	20	25	32	40
Acting type	Double acting				
Fluid	Air(to be filtered by 40 μm filter element)				
Operating pressure	0.2~0.7MPa(30~100psi)(2.0~7bar) 0.25~0.7MPa(36~100psi)(2.5~7bar)				
Proof pressure	1.2MPa(175psi)(12.0bar)				
Temperature ℃	-20~70				
Speed range mm/s	50~400				
Stroke tolerance mm	0~250 ^{+1.0} ₀ 251~1000 ^{+1.5} ₀ 1001~ ^{+2.0} ₀				
Cushion type	Fixed cushion Shock absorber(Available)				
Safe holding force N	140	220	350	550	900
Port size [Note1]	M5×0.8 1/8" 1/4"				

[Note1] PT thread, G thread and NPT thread are available.

Add) Refer to P338 for detail of sensor switch.

Stroke

Bore size (mm)	Standard stroke (mm)	Max.std stroke
16	50 100 150 200 250 300 350 400 450 500	750
20	50 100 150 200 250 300 350 400 450 500 600 700 750 800	1000
25	50 100 150 200 250 300 350 400 450 500 600 700 750 800	1500
32	50 100 150 200 250 300 350 400 450 500 600 700 750 800	1500
40	50 100 150 200 250 300 350 400 450 500 600 700 750 800 900 1000	1500

[Note] Consult us for non-standard stroke.

Ordering code

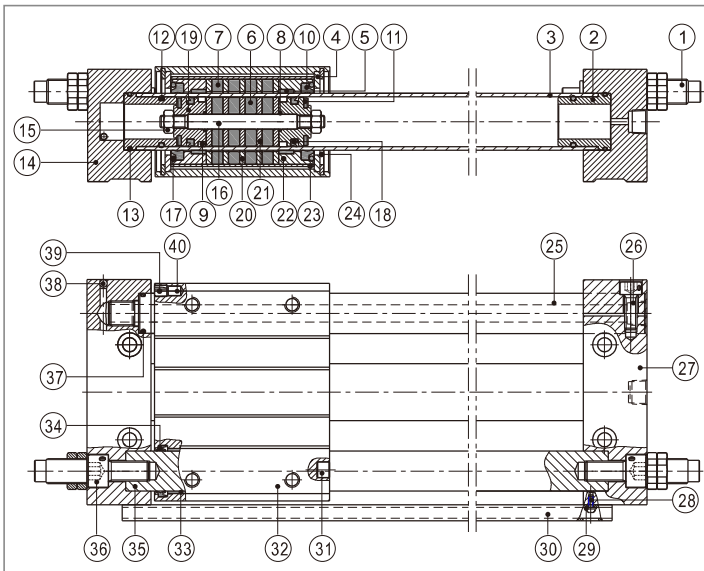
RMT 20 × 100 S □ □					
① Model	② Bore size	③ Stroke	④ Magnet	⑤ Cushion type	⑥ Thread type [Note1]
RMT: Rodless magnetic cylinder(With guide)	16 20 25 32 40	Refer to stroke table for details	Blank: Without magnet	Blank: With two adjustable nuts	Blank: PT G: G T: NPT
			S: With magnet	A: With two shock absorbers	

[Note1] Blank on thread code means metric M thread. There is only metric thread for Φ16. If G or NPT thread is needed, please comment.

Rodless magnetic cylinder(With guide)

RMT Series

Inner structure and material of major parts

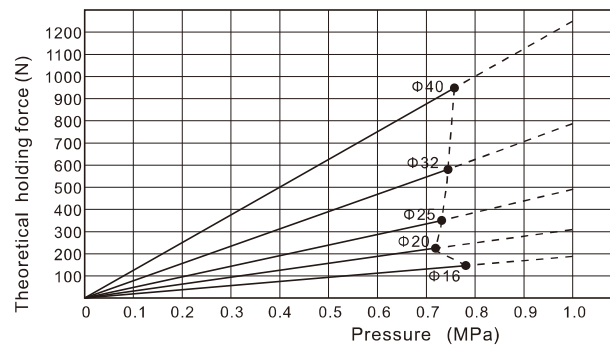


NO.	Item	Material	NO.	Item	Material
1	Shock absorber	Combination	21	Magnet washer	Carbon steel
2	Washer cover	Aluminum alloy	22	End cover	Aluminum alloy
3	Stainless steel barrel	Stainless steel	23	Mobility iron	Aluminum alloy
4	Washer	Carbon steel	24	C clip	Spring steel
5	Wearing ring	Wear resistant material	25	Guide I	Carbon steel
6	Magnet	Rare-earth material	26	Countersink screw	Carbon steel
7	Magnet	Rare-earth material	27	Fixing plate	Aluminum alloy
8	O-ring	NBR	28	Screw	Carbon steel
9	Wear ring	Wear resistant material	29	Spring washer	Spring steel
10	Scraping dust ring	Plastics	30	Rail	Aluminum alloy
11	Bumper	NBR	31	Bumper block	Stainless steel
12	O-ring	NBR	32	Barrel	Aluminum alloy
13	O-ring	NBR	33	Bushing	Bronze+Fill lubricant
14	Fixing plate	Aluminum alloy	34	Gasket	TPU
15	Nut	SS41	35	Guide II	Carbon steel
16	Joint pole	Stainless steel	36	Countersink screw	Carbon steel
17	O-ring	NBR	37	O-ring	NBR
18	Piston seal	TPU	38	Steel ball	Stainless steel
19	Magnet	Aluminum alloy	39	Location washer	NBR
20	Magnet washer	Carbon steel	40	Magnet	Rare-earth material

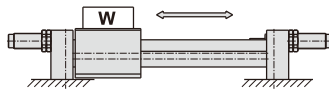
Installation and application

1. How to determine load:

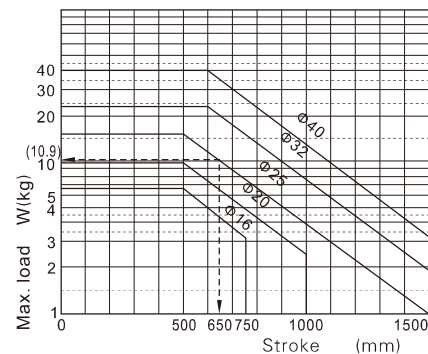
1.1) The maxi load to move must be less than the theoretical holding force.



1.2) The relation between loading and stroke as below(Loading center and slide table center must be superposition)



Bore size	Max.Load W(kg)	Stroke scope
16	5.5	~500mm
20	9.6	~500mm
25	16	~500mm
32	24	~600mm
40	40	~600mm



1.3) You should keep the loading center and the slide table center be superposition, if not you can calculate the load as below method.

First you should calculate the applied load coefficient(σ):

Example) Bore size: 25mm, Stroke: 650mm

(1)Max. Load=16kg

(2)When stroke=650mm, the allowable load=10.9kg

(3) $\sigma = 10.9/16 = 0.68$

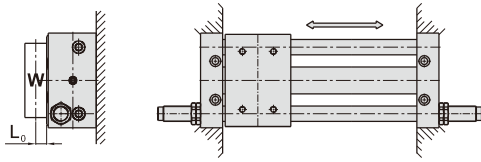
Note) When bore size is $\Phi 16$ and stroke is 500mm, or bore size is $\Phi 20$ and stroke is 500mm,

or bore size is $\Phi 25$ and stroke is 500mm, or bore size is $\Phi 32$ and stroke is 600mm, or bore size is $\Phi 40$ and stroke is 600mm, the $\sigma = 1$.

Rodless magnetic cylinder(With guide)

RMT Series

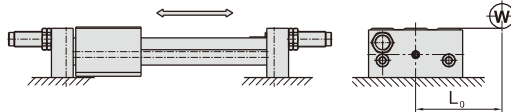
1.3.1) Horizontal acting(Vertical mounting):



Note: The unit of L_0 is "cm".

Bore size	16	20	25	32	40
Max. load W(kg)	$\frac{\sigma \times 36.4}{10.6 + 2 \times L_0}$	$\frac{\sigma \times 74.4}{12 + 2 \times L_0}$	$\frac{\sigma \times 140}{13.8 + 2 \times L_0}$	$\frac{\sigma \times 258}{17 + 2 \times L_0}$	$\frac{\sigma \times 520}{20.6 + 2 \times L_0}$

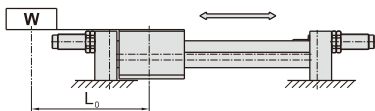
1.3.2) Horizontal acting(Loading center and slide table center offset):



Note: The unit of L_0 is "cm".

Bore size	16	20	25	32	40
Max. load W(kg)	$\frac{\sigma \times 25.48}{5.2 + L_0}$	$\frac{\sigma \times 52.1}{6.2 + L_0}$	$\frac{\sigma \times 98}{7.0 + L_0}$	$\frac{\sigma \times 180}{8.6 + L_0}$	$\frac{\sigma \times 364}{10.4 + L_0}$

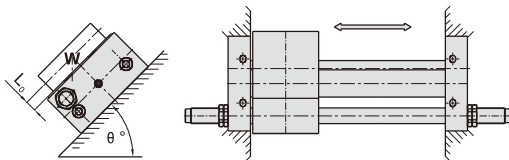
1.3.3) Horizontal acting(Loading barycenter and acting direction is coplanar. Loading center and slide table center offset):



Note: The unit of L_0 is "cm".

Bore size	16	20	25	32	40
Max. load W(kg)	$\frac{\sigma \times 17.5}{5.0 + L_0}$	$\frac{\sigma \times 36}{6.0 + L_0}$	$\frac{\sigma \times 60}{6.0 + L_0}$	$\frac{\sigma \times 105}{7.0 + L_0}$	$\frac{\sigma \times 200}{8.0 + L_0}$

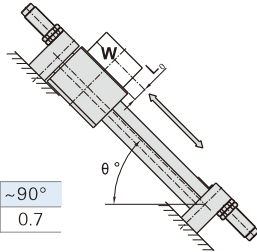
1.3.4) Incline acting(Acting direction and barycenter is vertical):



Note: The unit of L_0 is "cm".

Bore size	16		20			
Max. load W(kg)	$\frac{\sigma \times 36.4}{5.2+2(2.7+L_0)\sin \theta}$		$\frac{\sigma \times 74.4}{6.2+2(2.9+L_0)\sin \theta}$			
Bore size	25		32		40	
Max. load W(kg)	$\frac{\sigma \times 140}{7+2(3.4+L_0)\sin \theta}$		$\frac{\sigma \times 258}{8.6+2(4.2+L_0)\sin \theta}$		$\frac{\sigma \times 520}{10.4+2(5.1+L_0)\sin \theta}$	

1.3.5) Incline acting(Acting direction):

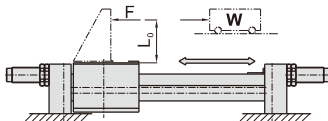


Note: The unit of L_0 is "cm".

角度	~45°	~60°	~75°	~90°
角度系数 K	1	0.9	0.8	0.7

Bore size	16		20			
Max. load W(kg)	$\frac{\sigma \times 35 \times k}{5\cos \theta + 2(2.7 + L_0)\sin \theta}$		$\frac{\sigma \times 72 \times k}{6\cos \theta + 2(2.9 + L_0)\sin \theta}$			
Bore size	25		32		40	
Max. load W(kg)	$\frac{\sigma \times 120 \times k}{6\cos \theta + 2(3.4 + L_0)\sin \theta}$		$\frac{\sigma \times 210 \times k}{7\cos \theta + 2(4.2 + L_0)\sin \theta}$		$\frac{\sigma \times 400 \times k}{8\cos \theta + 2(5.1 + L_0)\sin \theta}$	

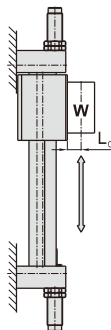
1.3.6) Horizontal acting(Loading offset):



Note: The unit of L_0 is "cm".

Bore size	16	20	25	32	40
Max. load W(kg)	$\frac{\sigma \times 17.5}{2.7 + L_0}$	$\frac{\sigma \times 36}{2.9 + L_0}$	$\frac{\sigma \times 60}{3.4 + L_0}$	$\frac{\sigma \times 105}{4.2 + L_0}$	$\frac{\sigma \times 200}{5.1 + L_0}$

1.3.7) Vertical acting:



Note: The unit of L_0 is "cm".

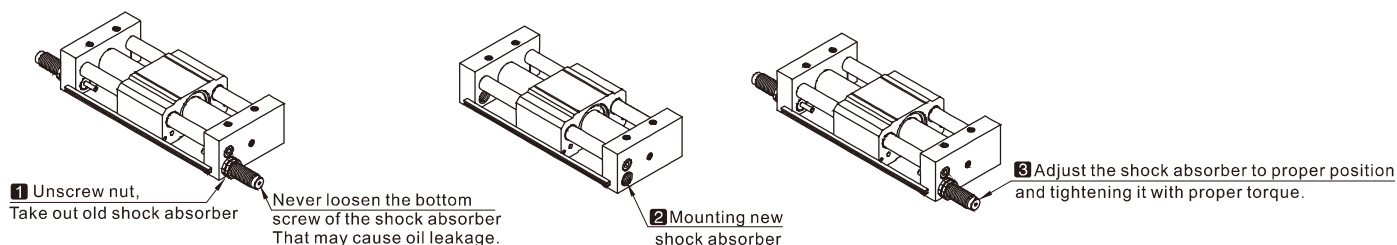
Bore size	16	20	25	32	40
Max. load W(kg)	$\frac{\sigma \times 13.23}{2.7 + L_0}$	$\frac{\sigma \times 26.8}{2.9 + L_0}$	$\frac{\sigma \times 44}{3.4 + L_0}$	$\frac{\sigma \times 88.2}{4.2 + L_0}$	$\frac{\sigma \times 167.8}{5.1 + L_0}$

Rodless magnetic cylinder(With guide)

RMT Series

2. About shock absorber

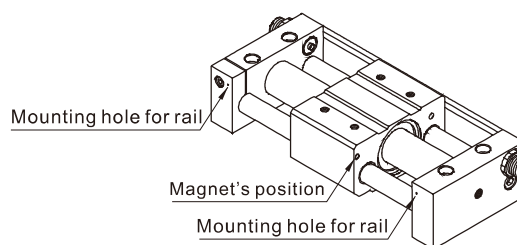
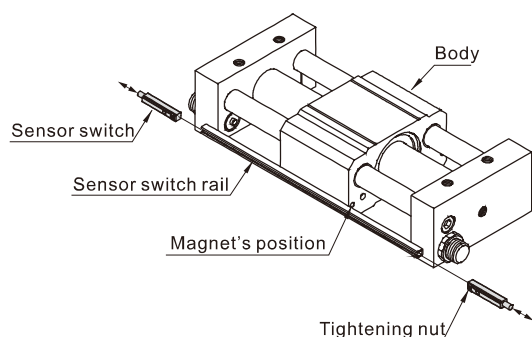
- 2.1) Shock absorbers are consumable parts. When a decrease in energy absorption capacity is noticed, it must be replaced. Refer to the table below for shock absorber type.
- 2.2) Never loosen the bottom screw of the shock absorber. (It is not an adjustment screw.) That may cause oil leakage.
- 2.3) Refer to the table below for tightening torques of the shock absorber setting nut.



Cylinder model	RMT16	RMT20	RMT25	RMT32	RMT40
Shock absorber type	ACA1006-A	ACA1007-1N	ACA1412-1N	ACA2020-1N	ACA2020-1N
Tightening torque(Nm)	1.67	1.67	3.14	10.80	10.80

3. About sensor switch

- 3.1) Sensor switch only can be used for the cylinder with magnet. The magnet is located at the four corners of the body (refer below). The cylinder with magnet has both group mounting holes for mounting rail. Please refer to below for ordering sensor switch, mounting it into the rail's groove, adjusting it to the proper position, and tightening it with proper torque.



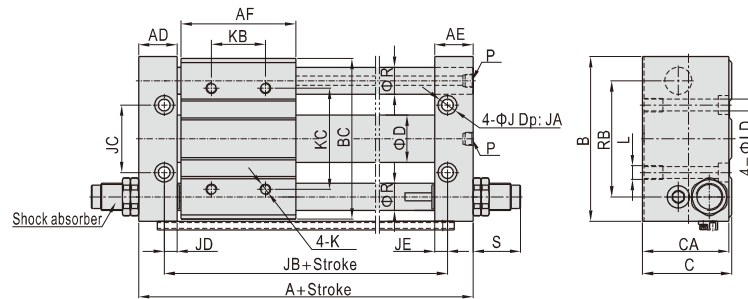
Cylinder model	RMT16	RMT20	RMT25	RMT32	RMT40
Sensor switch	CMSG、DMSG(S)				

Rodless magnetic cylinder(With guide)

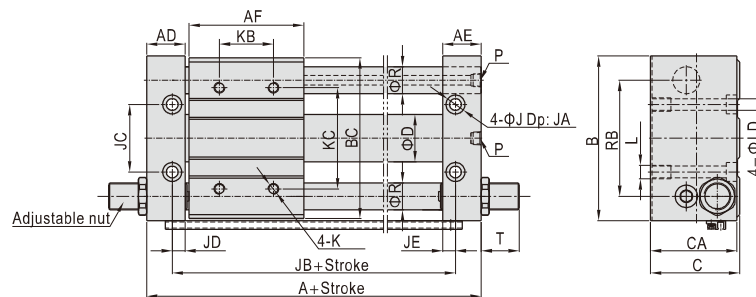
RMT Series

Dimensions

RMT-A



RMT



Bore size\Item	A	AD	AE	AF	B	BC	C	CA	D	J	JA	JB	JC	JD	JE	K	KB	KC	L	LD	P	R	RB	S	T
16	107	22.5	22.5	60	75	72	40	39	18	9.5	5	75	30	6.5	6.5	M5×0.8Dp:10	30	50	M6×1.0Dp:9.5	5.5	M5×0.8	12	52	15.5	8.5
20	124	25.5	25.5	70	90	87	46	45	22.8	9.5	5	90	38	8.5	8.5	M6×1.0Dp:10	40	70	M6×1.0Dp:9.5	5.5	1/8"	16	63	22.5	10.5
25	124	25.5	25.5	70	100	97	54	53	27.8	11	6.5	90	42	8.5	8.5	M6×1.0Dp:10	40	70	M8×1.25Dp:10	7	1/8"	16	70	40.5	11.5
32	148	28.5	28.5	85	122	119	66	64	35	14	8	110	50	9.5	9.5	M8×1.25Dp:12	40	75	M10×1.5Dp:15	8.5	1/8"	20	86	57.5	17.5
40	170	35.5	35.5	95	145	142	76	74	43	14	8	120	64	10.5	10.5	M8×1.25Dp:12	65	105	M10×1.5Dp:15	8.5	1/4"	25	105	50.5	10.5

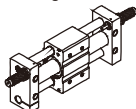


Rodless magnetic cylinder(With exactitude guide)—RMTL Series

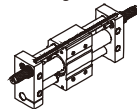
Compendium of RMTL Series

With manget and without magnet are available

Without magnet



With magnet



Magnetic design

This magnetic cylinder is basically a pneumatic rodless cylinder featuring a mobile piston fitted with annular magnets.

Two kinds of cushion type

The non adjustable rubber bumpers and the adjustable pneumatic cushioning on both ends of the cylinder ensure the smooth action. If shock absorber be used, the cushioning effect is more perfection.

Six bore size are available

Bore size: 16, 20, 25, 32, 40

Double guides

Double guides ensure high precision and can endure proper side load or prejudicial load.

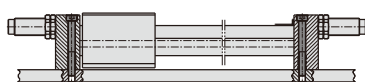
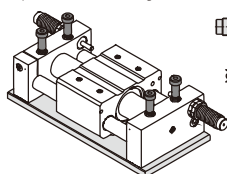
It is compact in space

Can be mounted from top and bottom.

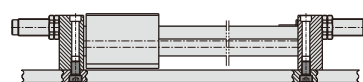
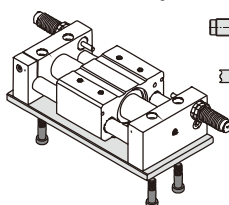
Superiority of airproof

It is dust-proof as the isolation between the carriage and piston.

Top bolt mounting



Bottom bolt mounting



Installation and application



1. Dirty substances in the pipe must be eliminated before cylinder is connected with pipeline to prevent the entrance of impurities into the cylinder.
2. The medium used by cylinder shall be filtered to 40 μ m or below.
3. Anti-freezing measure shall be adopted under low temperature environment to prevent moisture freezing.
4. If the cylinder is dismantled and stored for a long time, pay attention to conduct anti-rust treatment to the surface.
Anti-dust caps shall be added in air inlet and outlet ports.

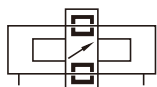


Rodless magnetic cylinder(With exactitude guide)

RMTL Series



Symbol



Product feature

1. This magnetic cylinder is basically a pneumatic rodless cylinder featuring a mobile piston fitted with annular magnets. The mobile carriage is also equipped with magnets to provide magnetic coupling (carriage/piston). The carriage slide freely along the main tube.
2. It is dust-proof as the isolation between the carriage and piston.
3. It is compact in space.
4. The non adjustable rubber bumpers and the adjustable pneumatic cushioning on both ends of the cylinder ensure the smooth action. If shock absorber be used, the cushioning effect is more perfection.
5. Double guides ensure high precision and can endure proper side load or prejudicial load.

Specification

Bore size(mm)	10	16	20	25	32	40
Acting type	Double acting					
Fluid	Air(to be filtered by 40μm filter element)					
Operating pressure	0.2~0.7MPa(30~100psi(2.0~7bar)					
Proof pressure	1.2MPa(175psi)(12.0bar)					
Temperature □	-20~70					
Speed range mm/s	50~500					
Stroke tolerance mm	0~250 ^{+1.0} ₀		251~1000 ^{+1.5} ₀		1001~ ^{+2.0} ₀	
Cushion type	Fixed cushion			Shock absorber(Available)		
Safe holding force N	55	140	220	350	550	900
Port size [Note1]	M5×0.8			1/8"		1/4"

[Note1] PT thread, G thread and NPT thread are available.

Add) Refer to P338 for detail of sensor switch.

Stroke

Bore size (mm)	Standard stroke (mm)																Max.std stroke
10	50	100	150	200	250	300											500
16	50	100	150	200	250	300	350	400	450	500							750
20	50	100	150	200	250	300	350	400	450	500	600	700	750	800			1000
25	50	100	150	200	250	300	350	400	450	500	600	700	750	800			1500
32	50	100	150	200	250	300	350	400	450	500	600	700	750	800			1500
40	50	100	150	200	250	300	350	400	450	500	600	700	750	800	900	1000	1500

[Note] Consult us for non-standard stroke.

Ordering code

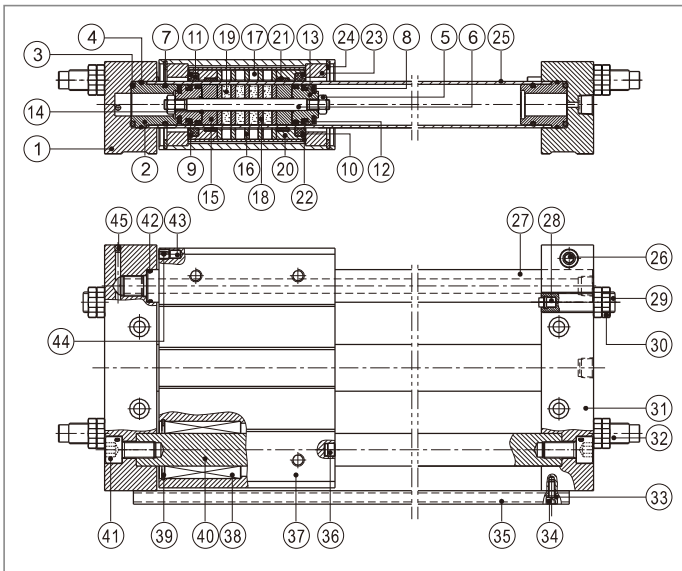
RMTL 20 × 100 S □ □					
① Model	② Bore size	③ Stroke	④ Magnet	⑤ Cushion type [Note1]	⑥ Thread type
RMTL: Rodless magnetic cylinder (With exactitude guide)	10 16	Refer to stroke table for details	Blank: Without magnet	Blank: With two adjustable nuts	Blank: M5
	20 25 32 40		S: With magnet	A: With two shock absorbers	Blank: PT G: G T: NPT

[Note1] When A type is selected, the two adjustable nuts are added too.

Rodless magnetic cylinder(With exactitude guide)

RMTL Series

Inner structure and material of major parts

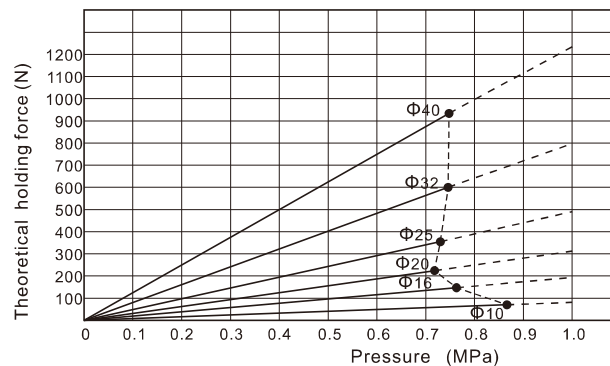


NO.	Item	Material	NO.	Item	Material
1	Fixing plate	Aluminum alloy	24	C clip	Spring steel
2	Washer cover	Aluminum alloy	25	Barrel	Stainless steel
3	O-ring	NBR	26	Countersink screw	Carbon steel
4	O-ring	NBR	27	Guide I	Carbon steel
5	Nut	Carbon steel	28	Bumper	TPU
6	Joint pole	Stainless steel	29	Adjustable screw	Carbon steel
7	O-ring	NBR	30	Nut	Ss41
8	Bumper	NBR	31	Fixing plate	Aluminum alloy
9	Piston seal	TPU	32	Shock absorber	Combination
10	O-ring	NBR	33	Spring washer	Spring steel
11	Scraping dust ring	Plastics	34	Countersink screw	Carbon steel
12	Wearing ring	Wear resistant material	35	Rail	Aluminum alloy
13	Piston	Aluminum alloy	36	Bumper block	Stainless steel
14	O-ring	NBR	37	Body	Aluminum alloy
15	Piston washer	Aluminum alloy	38	Bushing	
16	Magnet washer	Carbon steel	39	C clip	Spring steel
17	Magnet	Rare-earth material	40	Guide II	Carbon steel
18	Magnet washer	Carbon steel	41	Countersink screw	Carbon steel
19	Magnet	Rare-earth material	42	O-ring	NBR
20	Body cover	Aluminum alloy	43	Magnet	Rare-earth material
21	Wearing ring	Wear resistant material	44	Location washer	NBR
22	Mobility iron	Aluminum alloy	45	Steel ball	Stainless steel
23	Washer	Aluminum alloy			

Installation and application

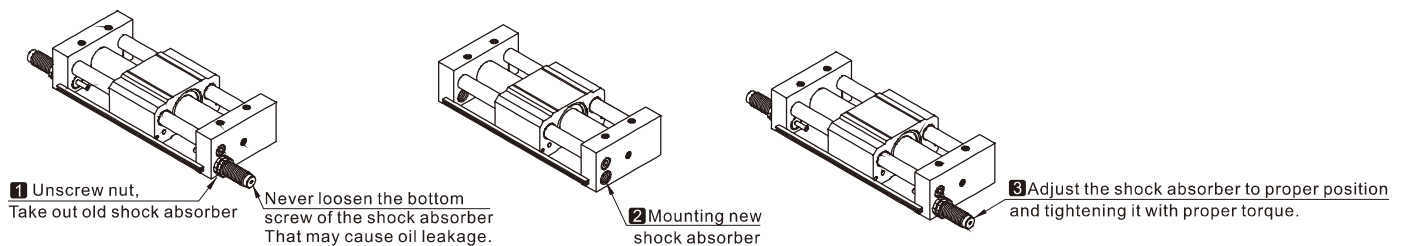
1. How to determine load

The maxi load to move must be less than the theoretical holding force.



2. About shock absorber

- 2.1) Shock absorbers are consumable parts. When a decrease in energy absorption capacity is noticed, it must be replaced. Refer to the table below for shock absorber type.
- 2.2) Never loosen the bottom screw of the shock absorber. (It is not an adjustment screw.) That may cause oil leakage.
- 2.3) Refer to the table below for tightening torques of the shock absorber setting nut.



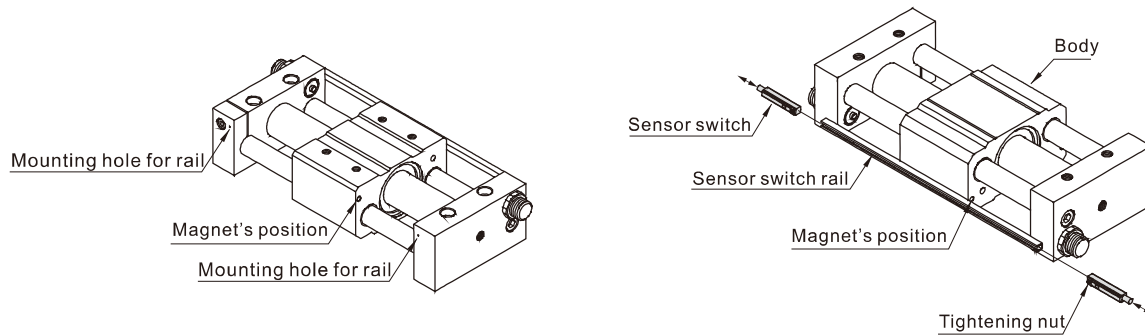
Bore size	10	16	20	25	32	40
Shock absorber type	ACA0806-1N	ACA1006-A	ACA1007-1N	ACA1412-1N	ACA2020-1N	ACA2020-1N
Tightening torque(Nm)	1.67	1.67	1.67	3.14	10.80	10.80

Rodless magnetic cylinder(With exactitude guide)

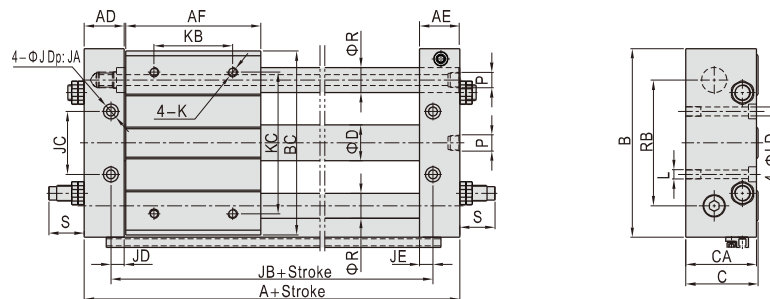
RMTL Series

3. About sensor switch

3.1) Sensor switch only can be used for the cylinder with magnet . The magnet located the four corner of body's(refer below) .The cylinder with magnet have both group mounting hole for mounting rail. please refer to below for ordering sensor switch, mounting it into the rail's groove, adjusting it to proper position, tightening it with proper torque.



Dimensions



Model	A	AD	AE	AF	B	BC	C	CA	D	J	JA	JB	JC	JD	JE	K	KB	KC	L	LD	P	R	RB	S
RMTL10	111	20.5	20.5	68	80	77	34	33	11.2	8	4	85	26	7.5	7.5	M4X0.7Dp:8	30	60	M5X0.8Dp:9.5	4.5	M5X0.8	10	52	16.5
RMTL16	122	22.5	22.5	75	95	92	40	39	18	9.5	5	90	30	6.5	6.5	M5X0.8Dp:10	45	70	M6X1.0Dp:9.5	5.5	M5X0.8	12	65	14.5
RMTL20	139	25.5	25.5	86	120	117	46	45	22.8	9.5	5	105	40	8.5	8.5	M6X1.0Dp:10	50	90	M6X1.0Dp:10	5.5	1/8"	16	80	21.5
RMTL25	139	25.5	25.5	86	130	127	54	53	27.8	11	6.5	105	50	8.5	8.5	M6X1.0Dp:10	60	100	M8X1.25Dp:10	7	1/8"	16	90	39.5
RMTL32	159	28.5	28.5	100	160	157	66	64	35	14	8	121	60	9.5	9.5	M8X1.25Dp:12	70	120	M10X1.5Dp:15	8.5	1/8"	20	110	57.5
RMTL40	209	35.5	35.5	136	190	187	78	74	43	14	8	159	84	10.5	10.5	M8X1.25Dp:12	90	140	M10X1.5Dp:15	8.5	1/4"	25	130	49.5