



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 provide the action smoothly.

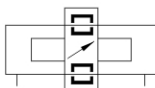
Ordering code

RMS - □ - 20 X 500 - □ - P			
Version	Stroke	Mounting	Thread type
Blank: basic version		Blank: non bracket	P: PT
P: P size version		LB: LB type	T: NPT
F: F size version		FA: FA type ①	G: G
Model			
Bore size			
RMS: Rodless magnetic cylinder			

Remark:

- ① RMSF40 series do not have FA mounting accessories.
- ② Blank on thread code means metric M or PT thread. There is on metric thread for $\phi 16$. If G or NPT thread is needed, please comment.

Symbol



Specification

Series name	RMS、RMSF Series					RMSP Series		
Bore size (mm)	16	20	25	32	40	16	20	32
Acting	Double acting type							
Fluid	Air (to be filtered by 40 μ m filter element)							
Operating pressure	0.15 ~ 0.7MPa (23 ~ 100psi) (1.5 ~ 7bar)							
Proof pressure	1.05MPa (152psi) (10.5bar)							
Temperature range	-10 ~ 60 $^{\circ}$ C							
Speed range	50 ~ 400mm/s							
Cushion type	Variable cushion + Fixed cushion							
Stroke tolerance (mm)	0~250: $^{+1.0}_0$ 251~1000: $^{+1.4}_0$ 1001~: $^{+1.8}_0$							
Port size ①	M5X0.8	1/8"	1/4"	M5X0.8	1/8"			
Theoretical holding force (N)	195	290	390	710	1090	195	290	710

Note①: PT thread、NPT thread and G thread are available.

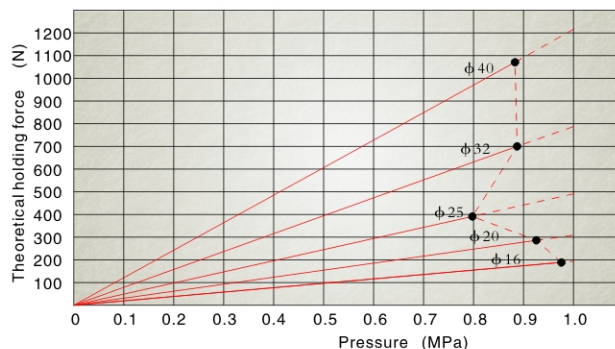
Stroke

Unit: mm

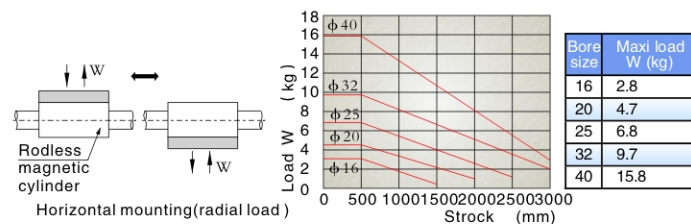
Bore size (mm)	Standard stroke															Max. stroke
16	50	100	150	200	250	300	350	400	450	500						1500
20	50	100	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
25	50	100	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
32	50	100	150	200	250	300	350	400	450	500	600	700	750	800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

Installation and operation

1. The maxi load to move should be lower than the theoretical holding force.

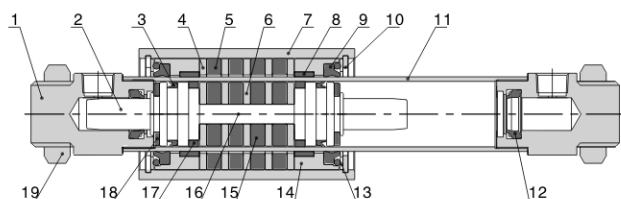


2. Horizontal mounting, the permissible radial load should be lower than the date in the chart below.



Remark: It is suggested that the guide device is adopted according to the load.

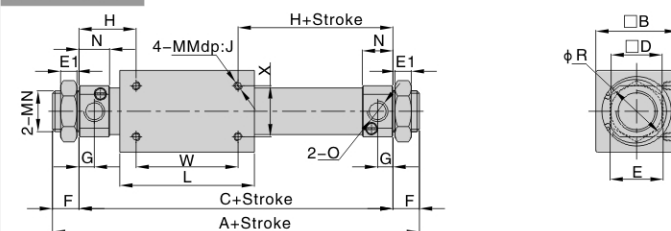
Inner structure



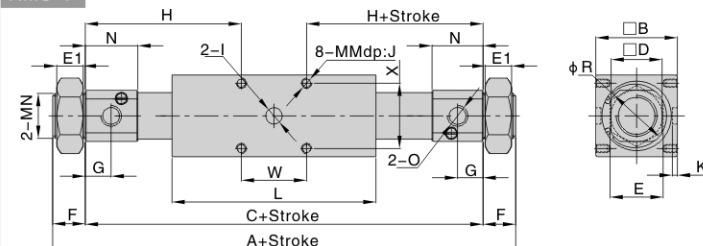
No.	Item	Material	No.	Item	Material
1	Guiding rods endplate	Aluminum alloy	11	Barrel	Stainless steel
2	Piston	Aluminum alloy	12	Cushion O-ring	TPU
3	Piston O-ring	TPU	13	Washer	Stainless steel
4	Magnet washer	Free cutting steel	14	End cover	Aluminum alloy
5	Magnet	Rare-earth material	15	Magnet	Rare-earth material
6	Magnet washer	Free cutting steel	16	Connecting rod	Stainless steel
7	Body	Aluminum alloy	17	Wear ring	Wear resistant material
8	Wear ring	Wear resistant material	18	Bumper	NBR
9	Scraping dust ring	Plastics	19	Nut	Stainless steel
10	C-clip	Spring steel			

Dimensions

RMS, RMS-P



RMS-F



Item Model	A	B	C	D	E	E1	F	G	H	I	J	K
RMS16	103		83		14	4	10	5.5	24	-	5	-
RMSP16	112	35	92	20	14	4	10	7.5	29	-	7	-
RMSF16	205		181		24	8	12	20	77.5	8	7.5	3
RMS20	132		106		26	8	13	7.5	28	-	5.5	-
RMSP20	141	40	115	25	26	8	14	10	37.5	-	7	-
RMSF20	217		185		29	7	16	15	76	8	8.5	2.5
RMS25	137	46	111	30	32	8	13	7.5	30.5	-	7.5	-
RMSF25	238		206		29	7	16	20	85	10	10	3
RMS32	156		124		32	8		8	37	-	8	-
RMSP32	165	60	133	36	32	8	16	10	41.5	-	8	-
RMSF32	270		238		36	7		28	94.6	10	12.5	3.5
RMS40	182	70	150	46	41	10		11	45	-	9	-
RMSF40	327		295		46	8	16	25	122	12	16	4.5

Item Model	L	N	MM	MN	O	R	X	W
RMS16	57	10	M4X0.7	M10X1.0	M5X0.8	22	19	35
RMSP16	57	14.5	M4X0.7	M10X1.0			25	34
RMSF16	80	34	M5X0.8	M16X1.5			26	26
RMS20	66	15	M4X0.7	M20X1.5	1/8"	29	25	50
RMSP20	66	19.5	M5X0.8	M20X1.5	G1/8		30	40
RMSF20	90	29.5	M5X0.8	M22X1.5			32	32
RMS25	70	15	M5X0.8	M26X1.5	1/8"	33.5	30	50
RMSF25	90	37.5	M6X1.0	M22X1.5	G1/8		36	36
RMS32	80	16	M6X1.0	M26X1.5	1/8"	39.5	40	50
RMSP32	80	20.5		M26X1.5	G1/8		48	48
RMSF32	110	48		M30X1.5				
RMS40	92	22	M6X1.0	M32X2.0	1/4"	49.5	40	60
RMSF40	130	44.5	M8X1.25	M38X1.5	G1/4		56	50

Ordering code

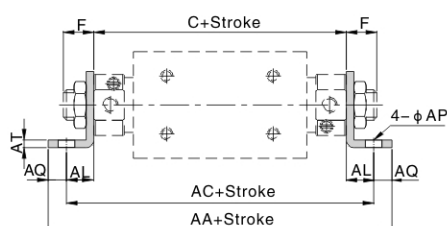
Accessories that are adaptable to PB, MA, MF, MI cylinders are not shown. Please refer to accessory list for selection and ordering information.

Accessory selection

Accessory Cylinder model	Mounting accessory	
	LB	FA
RMS	●	●
RMSP	●	●
RMSF	●	●

Dimensions

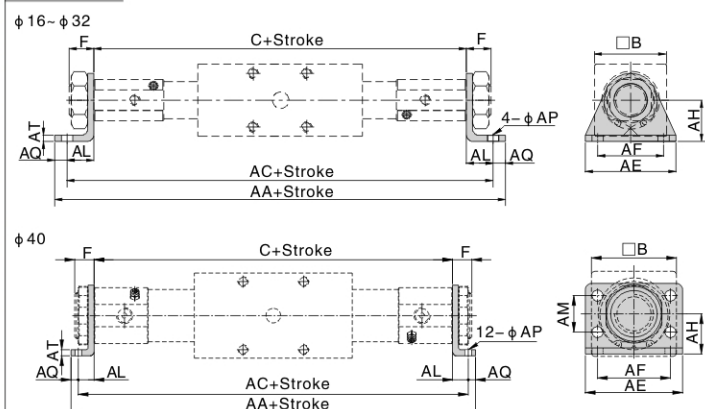
RMS-LB\RMSP-LB



Item Bore size	AA		AC		C	
	RMS	RMSP	RMS	RMSP	RMS	RMSP
16	113	122	101	110	83	92
20	162	171	146	155	106	115
25	167	-	151	-	111	-
32	180	189	164	173	124	133
40	216	-	196	-	150	-

Item Bore size	AE	AF	AH	AL	AP	AQ	AT	B	F	
									RMS	RMSP
16	42	33	14	9	5.5	6	2.5	35	10	-
20	55	40	25	20	7	8	3	40	13	14
25	55	40	28	20	7	8	3	46	13	-
32	55	40	28	20	7	8	3	60	16	-
40	75	55	30	23	7	10	3	70	16	-

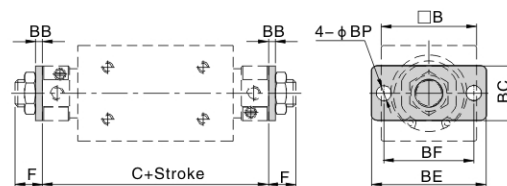
RMSF-LB



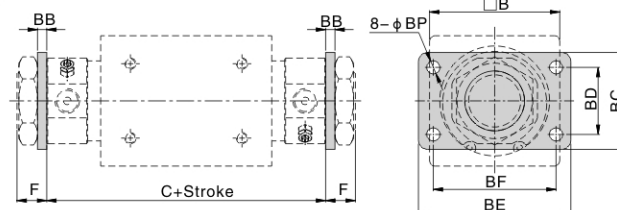
Item Bore size	AA	AC	AE	AF	AH	AL	AM	AP	AQ	AT	B	C	F
16	219	207	44	32	20	13	-	5.5	6	3	35	181	12
20	231	215	54	40	25	15	-	6.5	8	3	40	185	16
25	252	236	54	40	25	15	-	6.5	8	3	46	206	16
32	304	288	64	50	36	25	-	6.5	8	4	60	238	16
40	355	335	80	60	33	20	30	9	10	5	70	295	16

RMS-FA\RMSP-FA

φ 16~φ 32



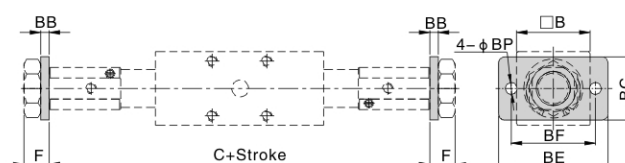
φ 40



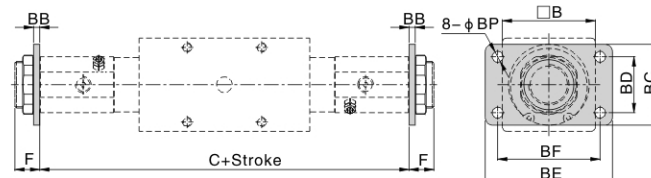
Item Bore size	B	BB	BC	BD	BE	BF	BP	C		F	
								RMS	RMSP	RMS	RMSP
16	35	2.5	20	-	42	33	5.5	83	92	10	-
20	40	4	34	-	75	60	7	106	115	13	14
25	46	4	40	-	75	60	7	111	-	13	-
32	60	4	40	-	75	60	7	124	133	16	-
40	70	5	52	36	82	66	7	150	-	16	-

RMSP-FA

φ 16~φ 25



φ 32



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

List for ordering code of accessories

Accessories Bore size	Cylinder model	Mounting accessory	
		LB	FA
16	RMS	F-PB12LB	F-PB12FA
	RMSP	F-MA16LB	F-MI12FA
	RMSF	F-MF20LB	F-MF20FA
20	RMS	F-MF20LB	F-MF20FA
	RMSP	F-MA20LB	F-MA20FA
	RMSF	F-MF25LB	F-MF25FA
25	RMS	F-MF25LB	F-MF25FA
	RMSP	F-MA20LB	F-MA20FA
	RMSF	F-MF25LB	F-MF25FA
32	RMS	F-MF25LB	F-MF25FA
	RMSP	F-MA40LB	F-MA40FA
	RMSF	F-MF40LB	F-MF40FA
40	RMS	F-MF40LB	F-MF40FA
	RMSF	F-MI40LB	-