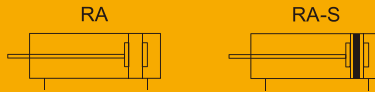


# RA Series Mini Type Cylinder

## RA

### Mini Type Cylinder



### Specifications



Bore size(mm)	16	20	25	32	40	50	63
Acting type	Double Acting/Single Acting						
Working medium	Clean Air(40 μ m filtration)						
Working pressure (MPa)	0.1~0.7(Double Acting) 0.2~0.7(Single Acting)		0.1~1.0(Double Acting) / 0.2~1.0(Single Acting)				
Guaranteed pressure (MPa)	1.5						
Working temperature (°C)	-20~80(No freezing)						
Speed range (mm/s)	Double Acting: 30~800			Single Acting:50~800			
Cushion type	Rubber cushion / Air cushion						
Barrel material	Stainless steel						
Mounting type	LB FA SDB						
Port size	M5 × 0.8	G1/8 ①			G1/4 ①		

① PT、NPT port size is optional.

### How to Order?

Series No	Cushion Type	Type No	Bore	X	Stroke	Adjustable Stroke	Magnet No	Tail Type	Mounting Type	Thread Type
RA:Stainless steel cylinder	C: Air cushion		16		25	10	S: With magnet		Blank: No	Blank: G
	Blank: Rubber cushion		20		50	20			LB	P: PT
	(Rubber cushion is not available for Φ50, Φ63)		25		75	30			FA	T: NPT
			32		...	40		Blank: Swiveling tail (CA)	SDB	
			40			50		U: Flat tail	IJ	
			50			75		CM: Round tail	YJ	
			63			100			BJ	
								....		

Blank: Basic type  
D: Double shaft type  
J: Double shaft and adjustable stroke type  
SA: Single action extend type  
SB: Single action return type  
(Note: single action is available for rubber cushion type only)

#### Order Example:

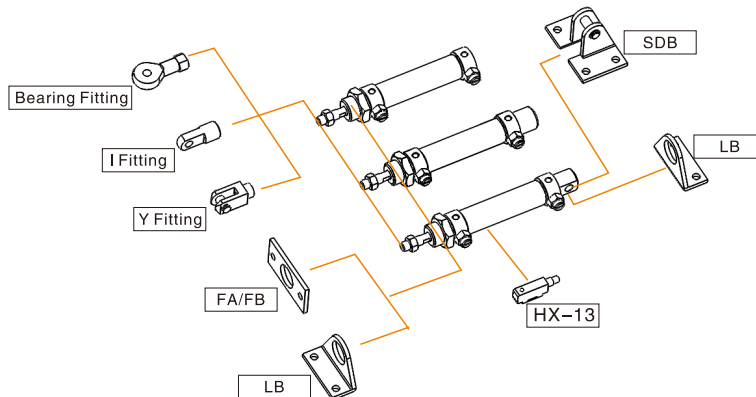
RA series, Double shaft and adjustable stroke type, air cushion, bore 32mm, stroke 25mm, adjustable stroke 20mm, with magnet, no mounting type, round tail, PT thread.

ERP code is: RACJ32\*25-20-S-CM-P

Note: 1. If cylinder with several different mounting accessories, please with this sequential coding: LB/FA/SDB /J/YJ/BJ

2. RA series always with magnet.

### Optional Accessories

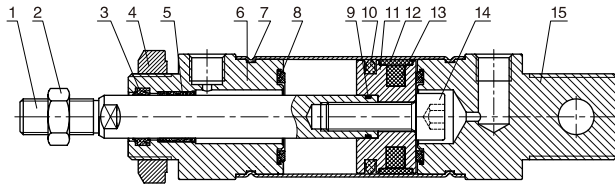


# RA Series Mini Type Cylinder

## Stroke

Bore (mm)		Standard Stroke (mm)	Max. Stroke (mm)
Double Acting	16	25 50 75 80 100 125 150 160 175 200	500
	20	25 50 75 80 100 125 150 160 175 200 250 300	600
	25~63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	800
Single Acting	16	25 50 75 100	100
	20~40	25 50 75 100 125 150	150

## Internal Structure

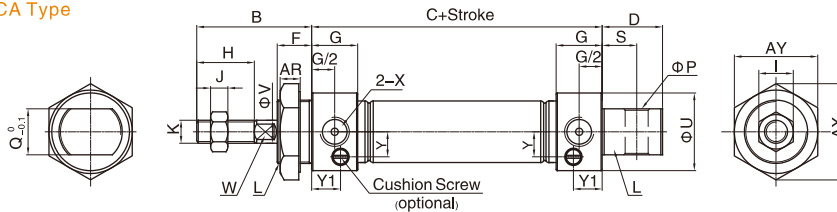


No.	Part Name	Material
1	Piston rod	S45C hard chrome carbon steel
2	Nut	Carbon steel
3	Piston rod seal	NBR
4	Nut	Carbon steel
5	Self lubricating bearing	Bronze powder
6	Head cover	Aluminum alloy
7	Barrel	Stainless Steel
8	Anti-bump cushion	TPU
9	O-ring	NBR
10	Piston seal	NBR
11	Piston	Aluminum alloy
12	Wear ring	PTFE
13	Magnet	Plastic
14	Hexagon screw	Carbon steel
15	Rear cover	Aluminum alloy

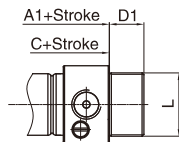
## Main Dimension

RA  $\phi 16$ – $\phi 63$

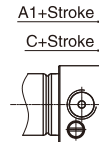
CA Type



CM Type



U Type



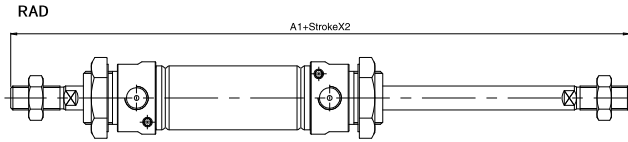
Bore\Sign	(mm)																						
	A1	B	C	D	D1	F	G	H	I	J	K	Y1	L	P	Q	S	U	V	W	X	AX	AY	Y
16	98	38	60	16	16	16	10	16	10	5	M6X1.0	7	M16X1.5	6	12	9	21	6	5	M5X0.8	25	22	6.5
20	116	40	76	21	12	12	16	20	12	6	M8X1.25	12.5	M22X1.5	8	16	12	27	8	6	1/8"	33	29	8
25	120	44	76	21	14	14	16	22	17	6	M10X1.25	12.5	M22X1.5	8	16	12	30	10	8	1/8"	33	29	10
32	120	44	76	27	14	14	16	22	17	6	M10X1.25	12	M24X2.0	10	16	15	35	12	10	1/8"	37	32	12
40	122	46	76	27	14	14	17	24	17	7	M12X1.25	13	M30X2.0	12	20	15	42	16	14	1/4"	47	41	16
50	147	52	95	27	20	20	23	24	19	8	M14X1.25	11.5	M36X2.0	12	20	16	53	20	18	1/4"	53	48	26.5
63	147	52	95	27	20	20	23	24	19	8	M14X1.25	11.5	M36X2.0	12	20	16	66	20	18	1/4"	53	48	33

Note: 1. With magnet and no magnet, the dimensions are same.  
 2. Rubber cushion is not available for  $\phi 50$ ,  $\phi 63$ .

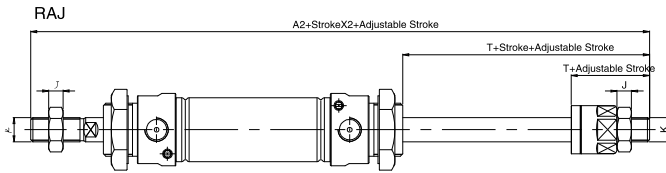
# RA Series Mini Type Cylinder

## Main Dimension

### RAD $\Phi 16-\Phi 40$



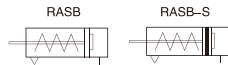
### RAJ $\Phi 16-\Phi 40$



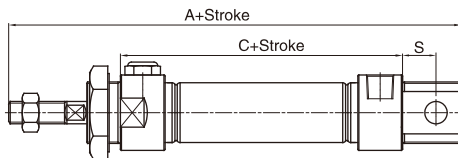
Bore\Sign	A1	A2	J	K	T
16	136	135	5	M6X1.0	21
20	156	153	6	M8X1.25	25
25	164	161	6	M10X1.25	27
32	164	161	6	M10X1.25	27
40	168	164	7	M12X1.25	28

Note: Unlabeled the same size as standard type.

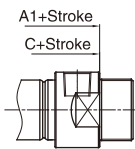
### RASB $\Phi 16-\Phi 40$



#### CA Type



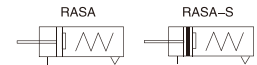
#### CM Type



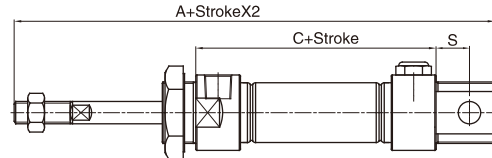
#### U Type



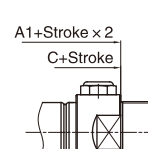
### RASA $\Phi 16-\Phi 40$



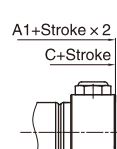
#### CA Type



#### CM Type



#### U Type



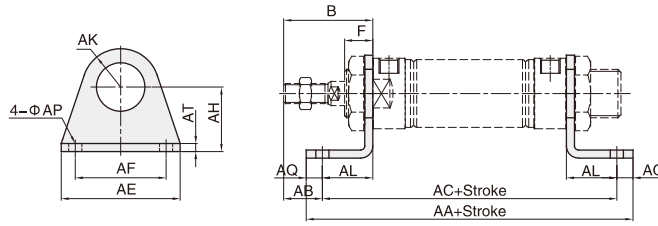
Bore\Sign	A			A1			C			S
	0-50	51-100	101-150	0-50	51-100	101-150	0-50	51-100	101-150	
16	139	164	-	123	148	-	85	110	-	9
20	162	187	212	141	166	191	101	126	151	12
25	166	191	216	145	170	195	101	126	151	12
32	172	197	222	145	170	195	101	126	151	15
40	174	199	224	147	172	197	101	126	151	15

Note: Unlabeled the same size as standard type.

# RA Series Mini Type Cylinder

## Main Dimension

### LB

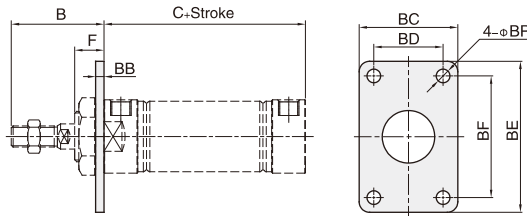


Bore\Sign	B		F		AA		AA(RALSB)			AA(RASB)			AB	
	RAL	RA	RAL	RA	RAL	RA	0-50	51-100	101-150	0-50	51-100	101-150	RAL	RA
FJ-RA16LB	36	38	14	16	96	100	121	146	-	125	150	-	22	24
FJ-RA20LB	40	40	12	12	118	124	143	168	193	149	174	199	24	24
FJ-RA20LB	44	44	14	14	118	124	143	168	193	149	174	199	28	28
FJ-RA32LB	44	44	14	14	138	144	163	188	213	169	194	219	18	18
FJ-RA40LB	46	46	14	14	162	146	187	212	237	171	196	221	19	19

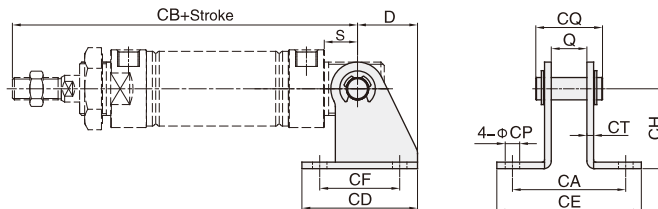
Bore\Sign	AC		AC(RALSB)			AC(RASB)			AE	AF	AH	AK	AL	AP	AQ	AT
	RAL	RA	0-50	51-100	101-150	0-50	51-100	101-150								
FJ-RA16LB	84	88	109	134	-	113	138	-	44	32	20	14	14	5.5	6	3
FJ-RA20LB	102	108	127	152	177	133	158	183	54	40	25	17	16	6.5	8	3
FJ-RA20LB	102	108	127	152	177	133	158	183	54	40	25	17	16	6.5	8	3
FJ-RA32LB	122	128	147	172	197	153	178	203	59	45	32	19	26	6.5	8	3
FJ-RA40LB	146	130	171	196	221	155	180	205	64	50	36	23	27	6.5	8	3

### FA



Bore\Sign	B		C		C(RALSB)			C(RASB)			BB	BC	BD	BE	BF	BP	F	
	RAL	RA	RAL	RA	0-50	51-100	101-150	0-50	51-100	101-150							RAL	RA
FJ-RA16FA	36	38	56	60	81	106	-	85	110	-	3	26	-	52	40	5.5	14	16
FJ-RA20FA	40	40	70	76	95	120	145	101	126	151	4	33	-	64	50	6.5	12	12
FJ-RA20FA	44	44	70	76	95	120	145	101	126	151	4	33	-	64	50	6.5	14	14
FJ-RA32FA	44	44	70	76	95	120	145	101	126	151	4	47	33	72	58	6.5	14	14
FJ-RA40FA	46	46	92	76	117	142	167	101	126	151	4	50	36	84	70	6.5	14	14

### SDB



Bore\Sign	D	S		Q	CA	CB		CB(RALSB)			CB(RASB)			CD	CE	CF	CH	CP	CQ	CT
		RAL	RA			RAL	RA	0-50	51-100	101-150	0-50	51-100	101-150							
FJ-RA16SDB	18	7	9	12.1	42.1	99	107	124	149	-	132	157	-	36	55.1	24	25.5	5.5	22.5	3
FJ-RA20SDB	24.5	12	12	16.1	51.1	122	128	147	172	197	153	178	203	48	66.1	32	32	6.5	27	3
FJ-RA20SDB	24.5	12	12	16.1	51.1	126	132	151	176	201	157	182	207	48	66.1	32	32	6.5	27	3
FJ-RA32SDB	27	15	15	16.1	50.1	129	135	154	179	204	160	185	210	52	65.1	36	35.5	6.5	27.5	3
FJ-RA40SDB	27	15	15	20.1	52.1	153	137	178	203	228	162	187	212	56	69.1	40	40	6.5	32.5	3