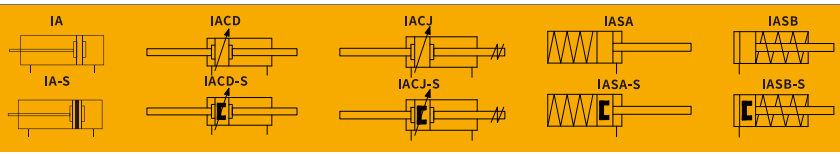
IA/IAC
Mini Type Cylinder



Specifications

Bore size(mm)	8	10	12	16	20	25	32	40
Acting type	Double Acting/Single Acting							
Working medium	Clean Air(40 μ m filteration)							
Working pressure (MPa)	0.1~1.0(Double Acting) / 0.2~1.0(Single Acting)							
Guaranteed pressure (MPa)	1.5							
Working temperature (℃)	–20~70(No freezing)							
Speed range (mm/s)	Double Acting: 30~800 Single Acting:50~800							
Cushion type	Rubber cushion		Rubber cushion(Standard) / Air cushion(Opitional)					
Barrel material	Stainless steel							
Mounting type	LB FA SDB						/	
Port size	M5 × 0.8				G1/8❶			G1/4

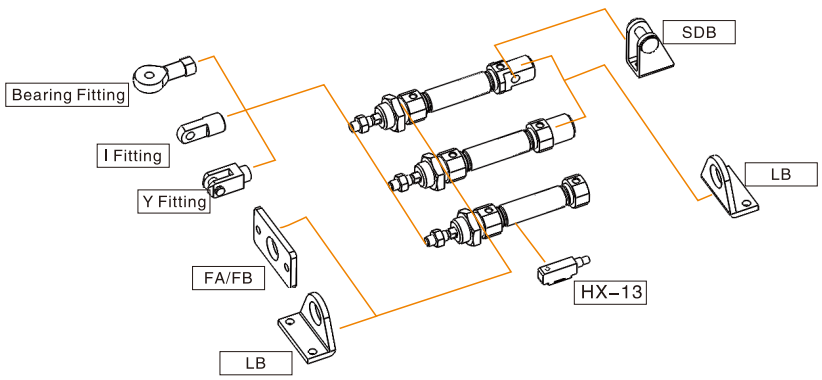
❶ PT、NPT port size is optional.

How to Order?

Series No	Cushion Type	Type No	Bore	X	Stroke	–	Adjustable Stroke	–	Magnet No	–	Tail Type	–	Mounting Type	–	Thread Type
IA: Stainless steel barrel	C: Air Cushion Blank: Rubber Cushion	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)	8 10 12 16 20 25 32 40		25 50 75 …		10 20 30 40 50 75 100		Blank: No Magnet S: With Magnet		Blank: Swiveling tail (32/40 need to be customized) U: Flat tail CM: Round tail		Blank: No LB FA SDB TC IJ YJ BJ		Blank: G P: PT T : NPT

Order Example:
IA series, Double shaft and adjustable stroke type, air cushion, bore 25mm, stroke 25mm, adjustable stroke 20, with magnet, no mounting type, round tail, PT thread.
ERP code is: IACJ25 × 25–20–S–CM–P
Note: 1.If cylinder with several different mounting accessories, please use this sequential coding: LB/FA/SDB /IJ/YJ/BJ
2.IA Series,Bore 8mm and Bore 10mm,No round tail type is optional.
3.IAC Series,Φ16、Φ20、Φ25 、Φ32、Φ40is optional.

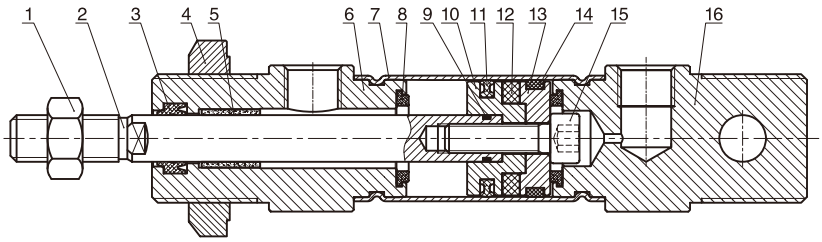
Optional Accessories



Stroke

Bore (mm)		Standard Stroke (mm)	Max. Stroke (mm)
Double Acting	8	25 50 75 100 125 150	200
	10	25 50 75 100 125 150 175 200	200
	12	25 50 75 100 125 150 175 200 225 250	500
	16	25 50 75 100 125 150 175 200 225 250 300 350 400 500	500
	20~25	25 50 75 100 125 150 175 200 225 250 300 350 400 500	800
	32~40	25 50 75 100 125 150 175 200 225 250 300 350 400 500	800
Single Acting	8	10 15 20 25 30 40 50	50
	10	10 15 20 25 30 40 50	50
	12	10 15 20 25 30 40 50	50
	16	10 15 20 25 30 40 50 60 75 80 100	100
	20~25	10 15 20 25 30 40 50 60 75 80 100 125 150	150
	32~40	10 15 20 25 30 40 50 60 75 80 100 125 150	150

Internal Structure

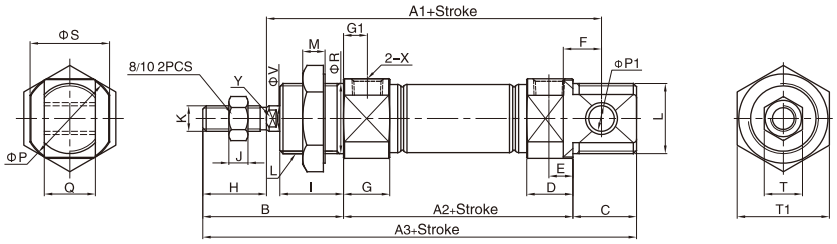


NO.	Part name	Material
1	Nut	Carbon steel
2	Piston rod	Ia8、10: SUS304 hard chrome carbon steel / IA12~IA40: S45C hard chrome carbon steel
3	Piston rod seal	NBR
4	Nut	Carbon steel
5	Self lubricating bearing	Bronze powder
6	Head cover	Aluminum alloy
7	Barrel	Stainless Steel
8	Anti–bump cushion	TPU
9	O–ring	NBR
10	Piston	IA8、10：Stainless steel / IA12~IA40：Aluminum alloy
11	Piston seal	NBR
12	Magnet	Plastic
13	Magnet base	IA8、10：Stainless steel / IA12~IA40：Aluminum alloy
14	Wear ring	PTFE
15	Hexagon screw	Carbon steel
16	Rear cover	Aluminum alloy

Main Dimension

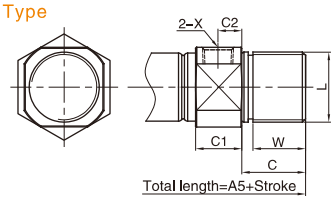
IA Φ8–Φ25

Swiveling tail
(CA Type)



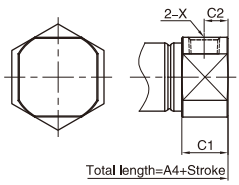
IA Φ12–Φ40

CM Type



IA Φ8–Φ40

U Type



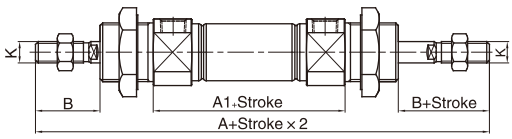
(mm)

Bore\Sign	A1	A2	A3	A4	A5	B	C	C1	C2	D	E	F	G	G1	H	I	J	K	L	M	P	P1	Q	R	S
8	64	46	86	74	–	28	12	9.5	5	9.5	5.2	6	11.5	7	12	12	3	M4X0.7	M12X1.25	7	17	4	8	12	15
10	64	46	86	74	–	28	12	9.5	5	9.5	5.2	6	11.5	7	12	12	3	M4X0.7	M12X1.25	7	17	4	8	12	15
12	75	50	105	88	105	38	17	10	5	10	5	9	12	7	16	17	5	M6X1.0	M16X1.5	6	19.7	6	12	16	18.3
16	82	56	111	94	111	38	17	10.5	5.5	10.5	5.5	9	12.5	7	16	17	5	M6X1.0	M16X1.5	6	22	6	12	16	20
20	95	62	126	106	126	44	20	14.5	7.5	14.5	7.5	12	14.5	7.5	20	20	6	M8X1.25	M22X1.5	7	29	8	16	22	25
25	104	65	137	115	137	50	22	16	8	16	8	12	16	8	22	22	6	M10X1.25	M22X1.5	7	33.5	8	16	22	30
32	–	68	–	126	140	58	14	17	9	–	–	–	17	9	20	30	6	M10X1.25	M30X1.5	7	37.2	–	–	30	34.5
40	–	89	–	158	174	69	16	22.5	12	–	–	–	22.5	12	24	35	7	M12X1.25	M38X1.5	8	46.2	–	–	38	42.5

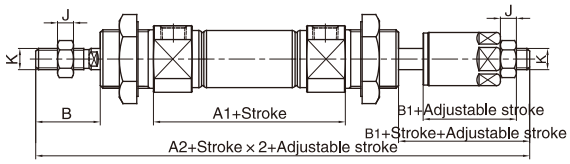
Bore\Sign	T	T1	X	V	W	Y
8	7	17	M5X0.8	4	–	–
10	7	17	M5X0.8	4	–	–
12	10	22	M5X0.8	6	15	5
16	10	22	M5X0.8	6	15	5
20	12	29	1/8"	8	18	6
25	17	29	1/8"	10	20	8
32	17	36	1/8"	12	11.5	10
40	17	46	1/4"	16	13.5	14

Note: With magnet and no magnet, the dimensions are same.

IAD Φ8–Φ40



IAJ Φ8–Φ40



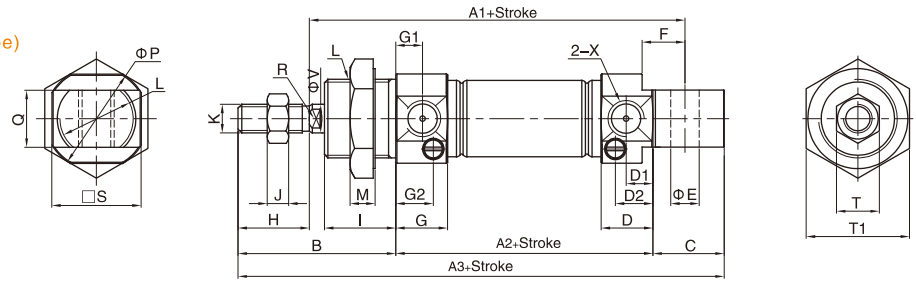
Bore\Sign	A	A1	A2	B	B1	J	K
8	104	48	103.5	16	15.5	3	M4X0.7
10	104	48	103.5	16	15.5	3	M4X0.7
12	128	52	128	21	21	5	M6X1.0
16	134	58	134	21	21	5	M6X1.0
20	150	62	151	24	25	6	M8X1.25
25	165	65	164	28	27	6	M10X1.25
32	184	68	183	28	27	6	M10X1.25
40	227	89	221	34	28	7	M12X1.25

Note: Unlabeled the same size as standard type.

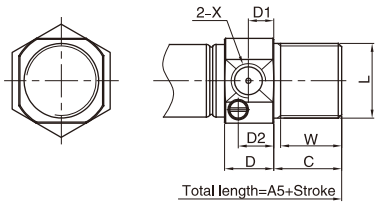
◎ Main Dimension

IAC Φ16–Φ40

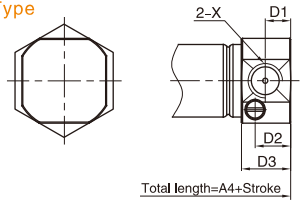
Swiveling tail （CA Type)



CM Type



U Type



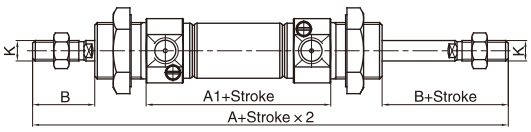
Bore\Sign	A1	A2	A3	A4	A5	B	C	D	D1	D2	D3	E	F	G	G1	G2	H	I	J	K	L	M	P	Q	R
16	82	56	111	94	111	38	17	12	6	9	12	6	9	12.5	7	9.5	16	17	5	M6X1.0	M16X1.5	6	22	12	5
20	95	62	126	106	126	44	20	14.5	7.5	11	14.5	8	12	14.5	7.5	11	20	20	6	M8X1.25	M22X1.5	7	29	16	6
25	104	65	137	115	137	50	22	16	8	12.5	16	8	12	16	8	12.5	22	22	6	M10X1.25	M22X1.5	7	33.5	16	8
32	–	68	–	126	140	58	14	17	9	13	17	–	–	17	9	13	20	30	6	M10X1.25	M30X1.5	7	37.2	–	10
40	–	89	–	158	174	69	16	22.5	12	18.5	22.5	–	–	22.5	12	18.5	24	35	7	M12X1.25	M38X1.5	8	46.2	–	14

Bore\Sign	S	T	T1	X	V	W
16	20	10	22	M5X0.8	6	15
20	25	12	29	1/8″	8	18
25	30	17	29	1/8"	10	20
32	34.5	17	36	1/8"	12	11.5
40	42.5	17	46	1/4"	16	13.5

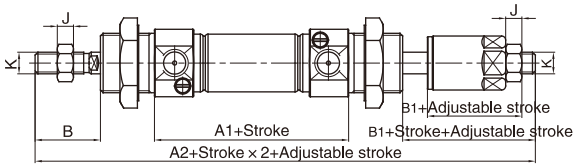
(mm)

Note: With magnet and no magnet, the dimensions are same.

IACD Φ16–Φ40



IACJ Φ16–Φ40

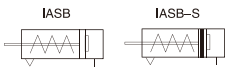


Bore\Sign	A	A1	A2	B	B1	J	K
16	132.5	56.5	132.5	21	21	5	M6X1.0
20	150	62	151	24	25	6	M8X1.25
25	165	65	164	28	27	6	M10X1.25
32	184	68	183	28	27	6	M10X1.25
40	227	69	221	34	28	7	M12X1.25

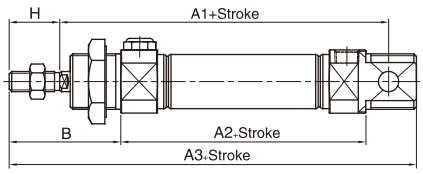
Note: Unlabeled the same size as standard type.

Main Dimension

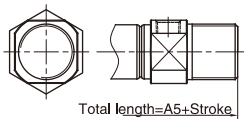
IASB Φ8–Φ40



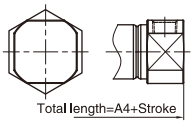
Swiveling tail （CA Type)



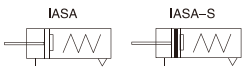
CM Type



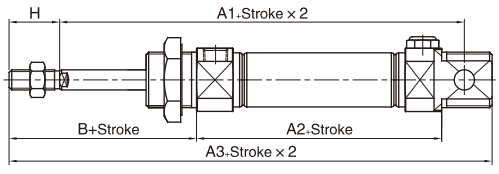
U Type



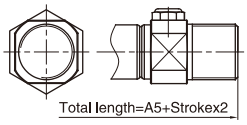
IASA Φ8–Φ40



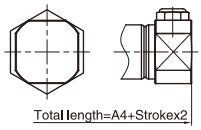
Swiveling tail （CA Type)



CM Type



U Type

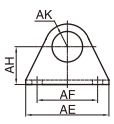


Bore\Sign	A1			A2			A3			A4			A5			B	H
	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150		
8	99	–	–	71	–	–	111	–	–	99	–	–	130	–	–	28	12
10	99	–	–	71	–	–	111	–	–	99	–	–	130	–	–	28	12
12	100	–	–	75	–	–	130	–	–	113	–	–	130	–	–	38	16
16	107	132	–	81	106	–	136	161	–	119	144	–	136	161	–	38	16
20	120	145	170	87	112	137	151	176	201	131	156	181	151	176	201	44	20
25	129	154	179	90	115	140	162	187	212	140	165	190	162	187	212	50	22
32	–	–	–	93	118	143	–	–	–	151	176	201	165	190	215	58	20
40	–	–	–	114	139	164	–	–	–	183	208	233	199	224	249	69	24

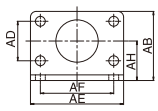
Note: Unlabeled the same size as standard type.

Accessory Dimensions

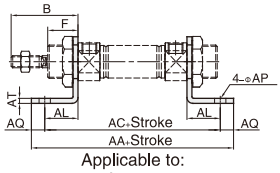
LB Accessory



Applicable to:
IA12–25



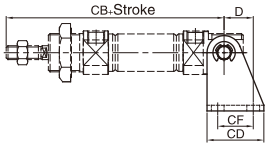
Applicable to:
IA32/40

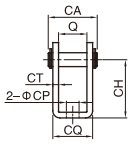


Applicable to:
IA12–40

Bore	Model\Sign	AA	AB	AC	AD	AE	AF	AH	AK	AL	AP	AQ	AT	B	F
8	FJ–IA8LB	78	–	68	–	35	25	16	10	11	4.5	5	2	28	12
10	FJ–IA8LB	78	–	68	–	35	25	16	10	11	4.5	5	2	28	12
12	FJ–IA12LB	90	–	78	–	42	32	20	13	14	5.5	6	2.5	38	17
16	FJ–IA12LB	96	–	84	–	42	32	20	13	14	5.5	6	2.5	38	17
20	FJ–IA20LB	112	–	96	–	54	40	25	20	17	7	8	3	44	20
25	FJ–IA20LB	115	–	99	–	54	40	25	20	17	7	8	3	50	22
32	FJ–IA32LB	110	49	96	28	66	52	28	–	14	7	7	3.5	58	30
40	FJ–IA40LB	149	58	129	30	80	60	33	–	20	9	10	3.5	69	35

SDB Accessory

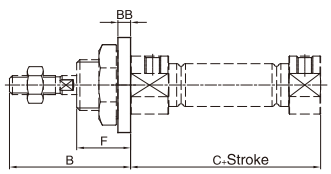


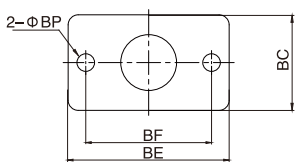


Bore	Model\Sign	D	Q	CA	CB	CD	CF	CH	CP	CQ	CT
12	FJ-IA12SDB	13	12.1	21.5	91	25	15	27	5.5	17.1	2.5
16	FJ-IA12SDB	13	12.1	21.5	98	25	15	27	5.5	17.1	2.5
20	FJ-IA20SDB	16	16.1	29	115	32	20	30	6.6	24.1	4
25	FJ-IA20SDB	16	16.1	29	126	32	20	30	6.6	24.1	4

Note: Φ12、Φ16 use same mounting accessories
Φ20、Φ25 use same mounting accessories

FA Accessory





Bore	Model\Sign	B	C	BB	BC	BE	BF	F
12	FJ-RA16FA	38	50	3	26	52	40	17
16	FJ-RA16FA	38	56	3	26	52	40	17
20	FJ-RA20FA	44	62	3.5	38	64	50	20
25	FJ-RA20FA	50	65	3.5	38	64	50	22

Note: Φ12、Φ16 use same mounting accessories
Φ20、Φ25 use same mounting accessories