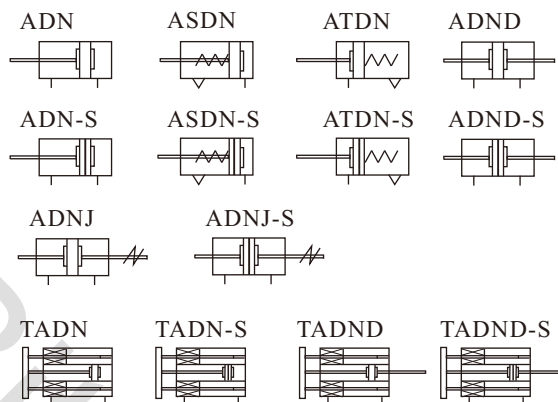




Product feature

- In accordance with ISO21287 standard, the mounting size is vogue.
- The cylinder body connects with the threads of the front and back cover, forming high strength and convenient maintenance.
- The internal diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability.
- The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of oil reservation.
- Compact structure can effectively save fifty percent installation space with ISO15552 standard cylinder.
- There are magnetic switch slots around the cylinder body, which is convenient to install inducting switch.
- Bumper is available and it can availably absorb excrement energy.
- Installing accessorirs with various specifications are optional.

Symbol



Specification

Bore size(mm)		12	16	20	25	32	40	50	63	80	100	125	
Acting type		Double acting											
		Single acting_Push type, Single acting_Pull type										-	
Fluid		Air(to be filtered by 40μm filter element)											
Operating pressure	Double acting	0.15~1.0MPa(22~145psi)											
	Single acting	0.2~1.0MPa(28~145psi)											
Proof pressure		1.5MPa(215psi)											
Temperature °C		-20~70											
Speed range mm/s		Double acting: 30~500						Single acting: 50~500					
Stroke tolerance		Stroke≤100 ^{+1.0}						Stroke>100 ^{+1.5}					
Cushion type		Bumper											
Port size [Note1]		M5×0.8					G1/8					G1/4	

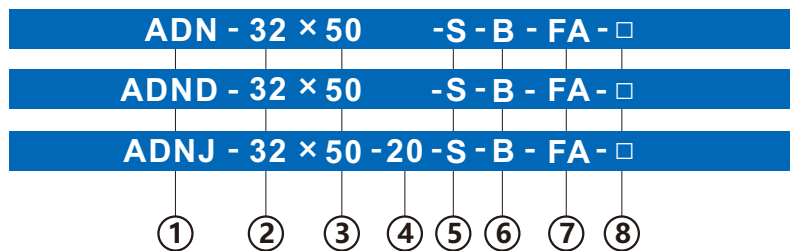
[Note1] The standard thread type is G thread, Please control us for other thread type.

Standard Stroke

Bore size (mm)		Standard stroke (mm)											Max.stroke	
Common type	Double acting	12	5 10 15 20 25 30 35 40 45 50											50
		16	5 10 15 20 25 30 35 40 45 50 55 60 70 75											75
		20	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100											100
		25	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100 110 120 125 150											150
	Single acting	32 40	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100 110 120 125 150 160 175 200											200
		50 63	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100 110 120 125 150 160 175 200 225 250											250
		80 100 125	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100 110 120 125 150 160 175 200 225 250 275 300											300
		12	5 10											10
Non-rotating with yoke	16~100	5 10 15 20 25											25	
	12	5 10 15 20 25 30 35 40 45 50											50	
	16	5 10 15 20 25 30 35 40 45 50 55 60 70 75											75	
	20 25 32 40	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100											100	
50 63 80 100	5 10 15 20 25 30 35 40 45 50 55 60 70 75 80 90 100											100		

[Note] Consult us for non-standard stroke.

Ordering code



① Model

- AND: Compact cylinder(Double acting)
- ASDN: Compact cylinder(Single acting-push)
- ATDN: Compact cylinder(Single acting-pull)
- ADND: Compact cylinder(Double rod)
- ADNJ: Compact cylinder(Adjustable stroke)
- TADN: Compact cylinder
(Double acting non-rotating with yoke)
- TADND: Compact cylinder
(Double rod non-rotating with yoke)

⑦ Mounting type [Note1]

Mounting type	Series
Blank: No accessories FA: FA type FB: FB type CA: CA type CB: CB type	AND ASDN ATDN
CR: CR type FTC: FTC type LB: LB type SDB: SDB type	
Blank: No accessories FB: FB type CA: CA type	TADN
CB: CB type CR: CR type FTC: FTC type	
Blank: No accessories FB: FB type	TADND
Blank: No accessories FA: FA type FTC: FTC type LB: LB type	ADND ADNJ

⑥ Rod type

Rod type	Series
Blank: Female thread	AND ASDN ATDN
B: Male thread	ADND ADNJ
No this code	TADN TADND

② Bore size

Bore size	Series
12 16 20 25 32 40 50 63 80 100 125	ADN ADND ADNJ
12 16 20 25 32 40 50 63 80 100	ASDN ATDN TADN TADND

⑧ Thread type

Blank: G thread
PT: PT thread

③ Stroke

Refer to stroke table for details

⑤ Magnet

- Blank: Without magnet
- S: With magnet

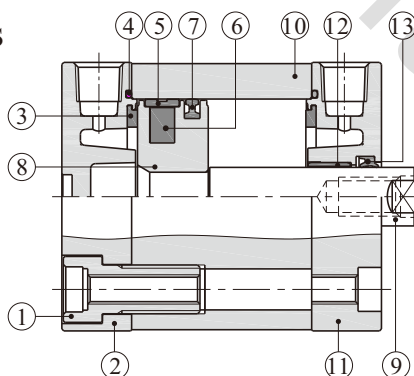
④ Adjustable stroke

Series	Adjustable stroke
ADNJ series	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
	100: 100mm
Others series	No this code

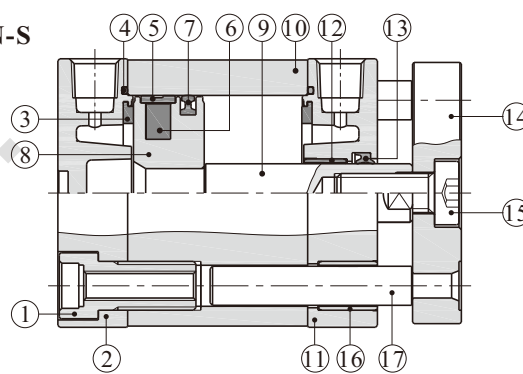
[Note1] CR must be used with CB, SDB must be used with CA, FTC must be used with TCM2.

Inner structure and material of major parts

ADN-S



TADN-S

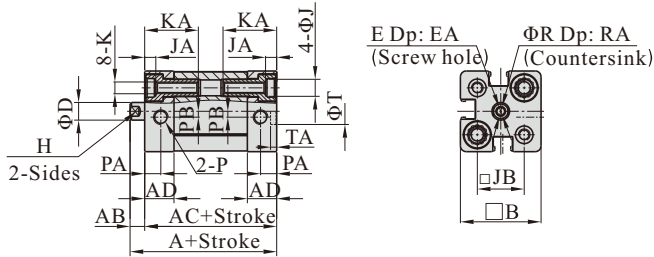


NO.	Item	Material	NO.	Item	Material
1	Screw	Carbon steel	10	Body	Aluminum alloy
2	Back cover	Aluminum alloy	11	Front cover	Aluminum alloy
3	Bumper	TPU	12	Bushing	Wear resistant material
4	O-ring	NBR	13	Front cover packing	NBR
5	Wear ring	Wear resistant material	14	Panel	Aluminum alloy
6	Magnet	Sintered metal or Plastic	15	Screw	Carbon steel
7	Piston seal	NBR	16	Bushing	Wear resistant material
8	Piston	Aluminum alloy	17	Guide rod	Stainless steel or S45C
9	Piston rod	S45C			

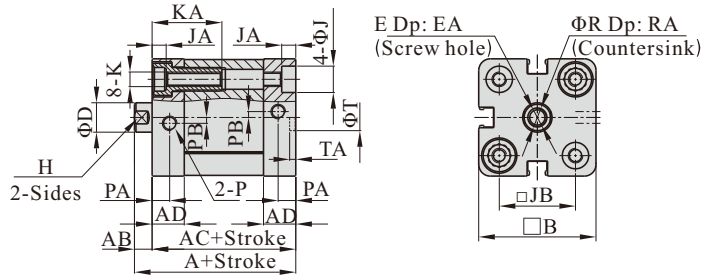
Dimensions

ADN series

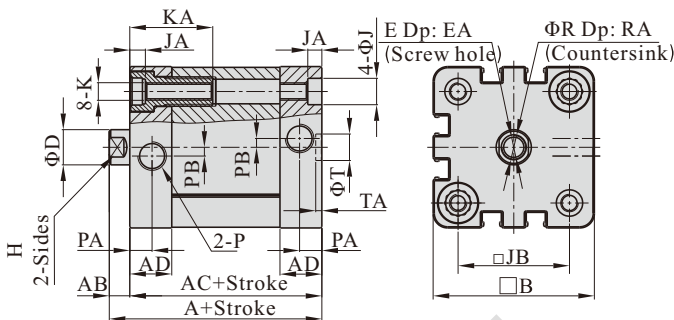
Φ12



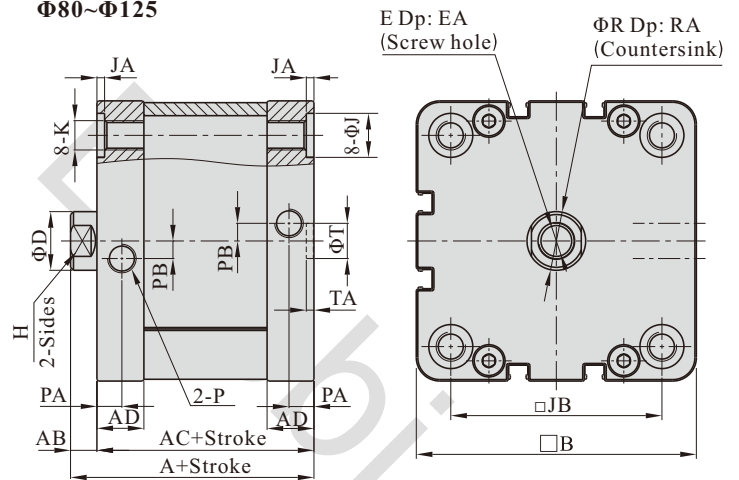
Φ16~Φ25



Φ32~Φ63



Φ80~Φ125



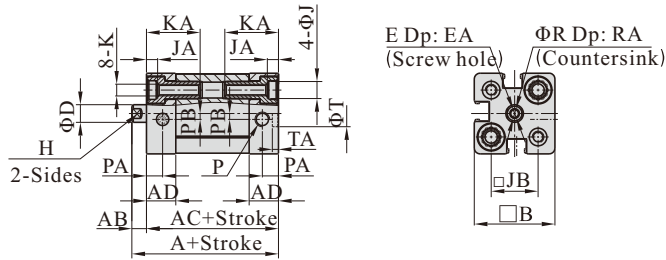
Bore size/Item	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P
12	40	5	35	10	27.5	6	M3×0.5	8	5	6	3.5	16	M4×0.7	18.5	M5×0.8
16	40	5	35	10	30	8	M4×0.7	10	7	6	3.5	18	M4×0.7	18.5	M5×0.8
20	43	6	37	10.5	35.5	10	M6×1.0	14	9	9	4.5	22	M5×0.8	23.5	M5×0.8
25	45	6	39	11	40	10	M6×1.0	14	9	9	4.5	26	M5×0.8	23.5	M5×0.8
32	51	7	44	14	49.5	12	M8×1.25	16	10	9	4.5	32.5	M6×1.0	28.5	G1/8
40	52.5	7	45.5	14.5	55	12	M8×1.25	16	10	9	4.5	38	M6×1.0	28.5	G1/8
50	53.5	8	45.5	14.5	65.5	16	M10×1.5	20	13	11	4.5	46.5	M8×1.25	30.5	G1/8
63	57	8	49	15	75.5	16	M10×1.5	20	13	11	4.5	56.5	M8×1.25	30.5	G1/8
80	63	9	54	16	95.5	20	M12×1.75	20	17	15	2.5	72	M10×1.5	—	G1/8
100	76	9	67	19	113.5	20	M12×1.75	20	17	15	2.5	89	M10×1.5	—	G1/8
125	92	11	81	20	134.5	25	M16×2.0	25	21	—	—	110	M12×1.75	—	G1/4

Bore size/Item	PA	PB	R	RA	T	TA
12	5.5	2	3.5	1.5	9	2.1
16	5.5	2	4.5	1.5	9	2.1
20	6	2	6.5	2.5	9	2.1
25	6	2	6.5	2.5	9	2.1
32	7.5	3	8.5	3.5	9	2.1
40	7.5	3	8.5	3.5	9	2.1
50	7.5	3	10.5	4.5	12	2.6
63	7.5	4	10.5	4.5	12	2.6
80	8.5	6	12.5	6	12	2.6
100	10.5	7	12.5	6	12	2.6
125	10.5	8	16.5	7	12	2.6

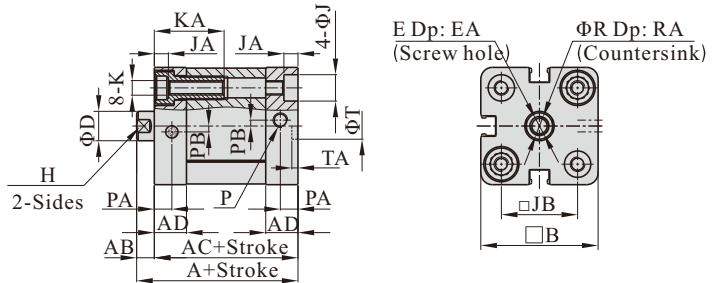
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
Please refer to page 112 for male thread dimensions.

ASDN series

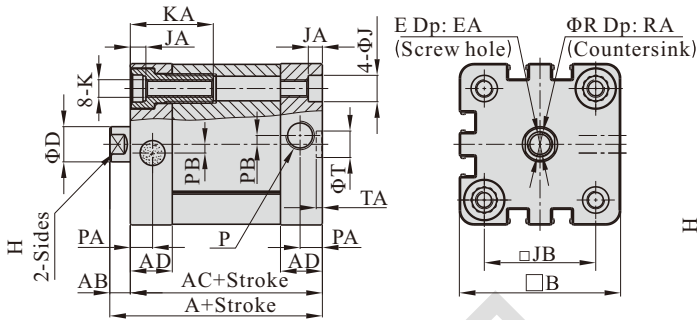
Φ12



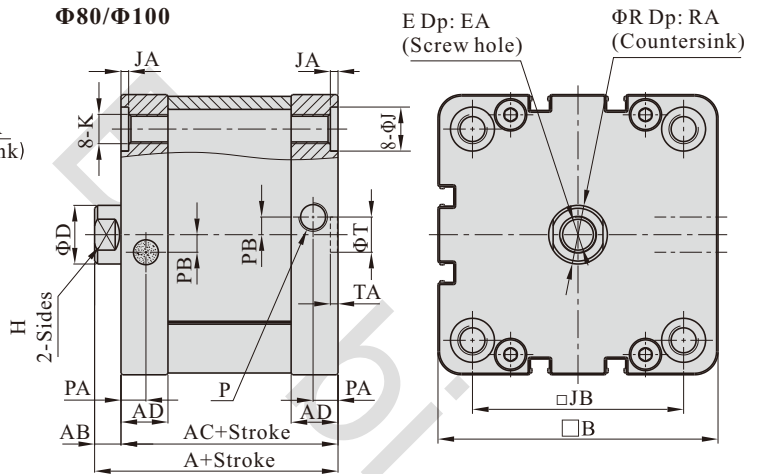
Φ16~Φ25



Φ32~Φ63



Φ80/Φ100



Bore size\Item	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P
12	40	5	35	10	27.5	6	M3×0.5	8	5	6	3.5	16	M4×0.7	18.5	M5×0.8
16	40	5	35	10	30	8	M4×0.7	10	7	6	3.5	18	M4×0.7	18.5	M5×0.8
20	43	6	37	10.5	35.5	10	M6×1.0	14	9	9	4.5	22	M5×0.8	23.5	M5×0.8
25	45	6	39	11	40	10	M6×1.0	14	9	9	4.5	26	M5×0.8	23.5	M5×0.8
32	51	7	44	14	49.5	12	M8×1.25	16	10	9	4.5	32.5	M6×1.0	28.5	G1/8
40	52.5	7	45.5	14.5	55	12	M8×1.25	16	10	9	4.5	38	M6×1.0	28.5	G1/8
50	53.5	8	45.5	14.5	65.5	16	M10×1.5	20	13	11	4.5	46.5	M8×1.25	30.5	G1/8
63	57	8	49	15	75.5	16	M10×1.5	20	13	11	4.5	56.5	M8×1.25	30.5	G1/8
80	63	9	54	16	95.5	20	M12×1.75	20	17	15	2.5	72	M10×1.5	—	G1/8
100	76	9	67	19	113.5	20	M12×1.75	20	17	15	2.5	89	M10×1.5	—	G1/8

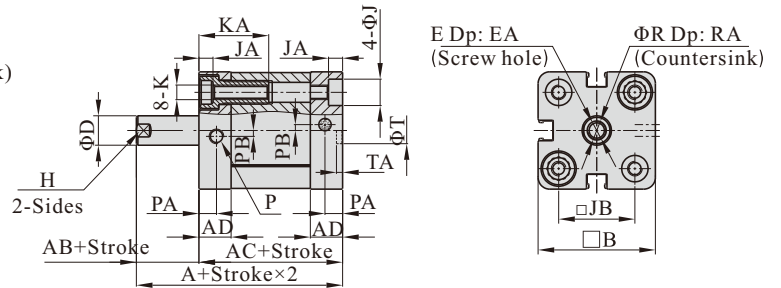
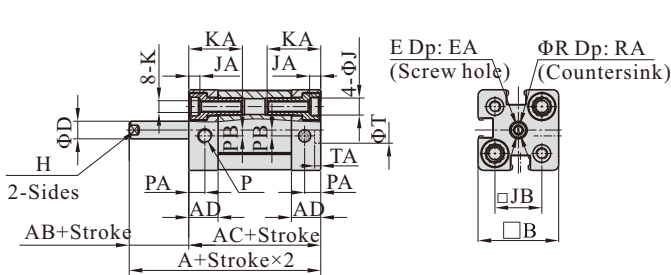
Bore size\Item	PA	PB	R	RA	T	TA
12	5.5	2	3.5	1.5	9	2.1
16	5.5	2	4.5	1.5	9	2.1
20	6	2	6.5	2.5	9	2.1
25	6	2	6.5	2.5	9	2.1
32	7.5	3	8.5	3.5	9	2.1
40	7.5	3	8.5	3.5	9	2.1
50	7.5	3	10.5	4.5	12	2.6
63	7.5	4	10.5	4.5	12	2.6
80	8.5	6	12.5	6	12	2.6
100	10.5	7	12.5	6	12	2.6

Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
Please refer to page 112 for male thread dimensions.

ATDN series

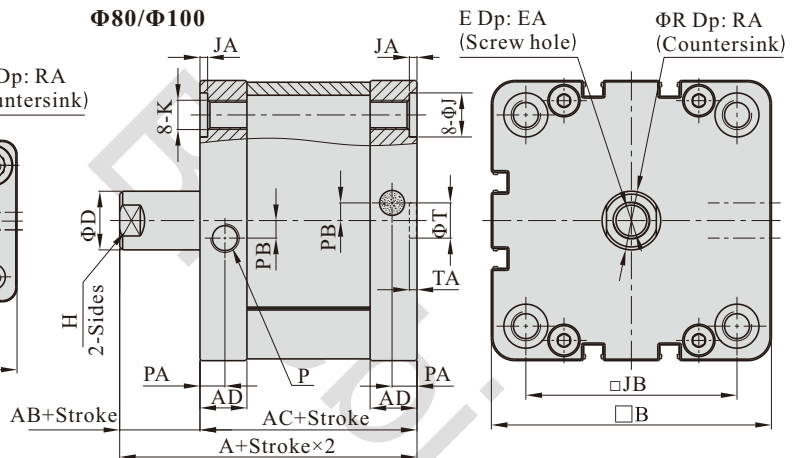
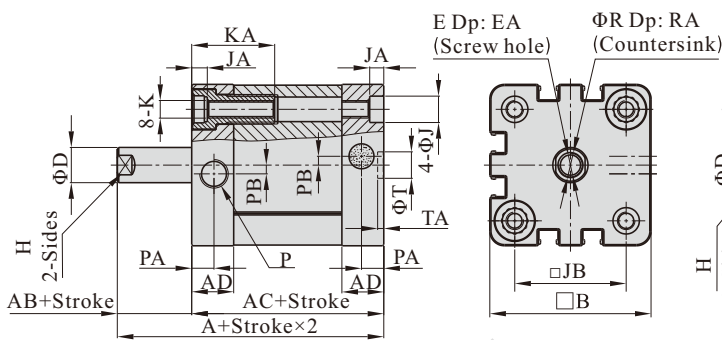
Φ12

Φ16~Φ25



Φ32~Φ63

Φ80/Φ100

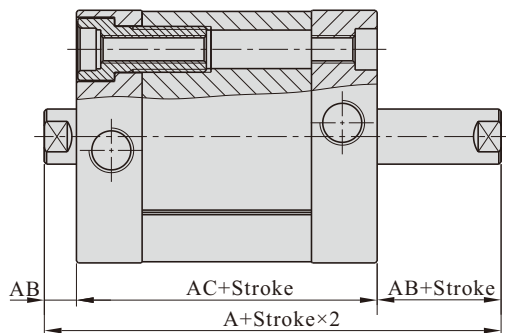


Bore size\Item	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P
12	40	5	35	10	27.5	6	M3×0.5	8	5	6	3.5	16	M4×0.7	18.5	M5×0.8
16	40	5	35	10	30	8	M4×0.7	10	7	6	3.5	18	M4×0.7	18.5	M5×0.8
20	43	6	37	10.5	35.5	10	M6×1.0	14	9	9	4.5	22	M5×0.8	23.5	M5×0.8
25	45	6	39	11	40	10	M6×1.0	14	9	9	4.5	26	M5×0.8	23.5	M5×0.8
32	51	7	44	14	49.5	12	M8×1.25	16	10	9	4.5	32.5	M6×1.0	28.5	G1/8
40	52.5	7	45.5	14.5	55	12	M8×1.25	16	10	9	4.5	38	M6×1.0	28.5	G1/8
50	53.5	8	45.5	14.5	65.5	16	M10×1.5	20	13	11	4.5	46.5	M8×1.25	30.5	G1/8
63	57	8	49	15	75.5	16	M10×1.5	20	13	11	4.5	56.5	M8×1.25	30.5	G1/8
80	63	9	54	16	95.5	20	M12×1.75	20	17	15	2.5	72	M10×1.5	—	G1/8
100	76	9	67	19	113.5	20	M12×1.75	20	17	15	2.5	89	M10×1.5	—	G1/8

Bore size\Item	PA	PB	R	RA	T	TA
12	5.5	2	3.5	1.5	9	2.1
16	5.5	2	4.5	1.5	9	2.1
20	6	2	6.5	2.5	9	2.1
25	6	2	6.5	2.5	9	2.1
32	7.5	3	8.5	3.5	9	2.1
40	7.5	3	8.5	3.5	9	2.1
50	7.5	3	10.5	4.5	12	2.6
63	7.5	4	10.5	4.5	12	2.6
80	8.5	6	12.5	6	12	2.6
100	10.5	7	12.5	6	12	2.6

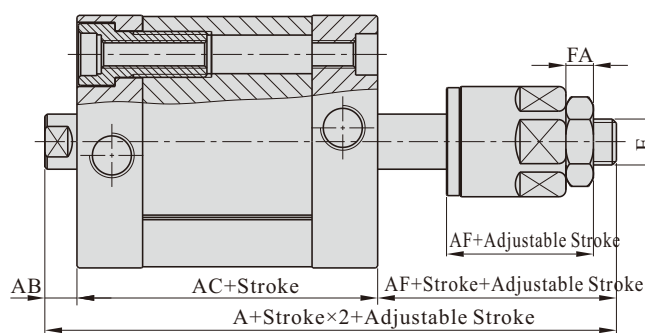
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
Please refer to page 112 for male thread dimensions.

ADND series



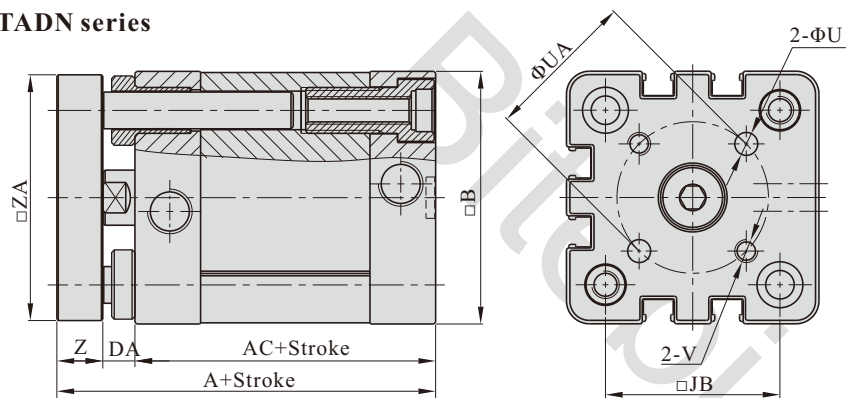
Bore size\Item	A(ADND)	A(ADNJ)	AB
12	45	57	5
16	45	61	5
20	49	68	6
25	51	70	6
32	58	78	7
40	59.5	79.5	7
50	61.5	81.5	8
63	65	85	8
80	72	92	9
100	85	105	9
125	103	127.5	11

ADNJ series



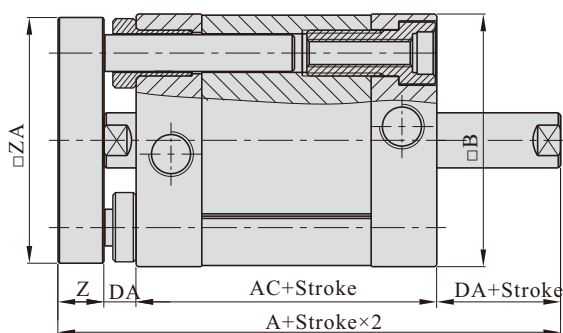
Bore size\Item	AC	AF	FA	E
12	35	17	4	M5×0.8
16	35	21	5	M6×1.0
20	37	25	6	M8×1.25
25	39	25	6	M8×1.25
32	44	27	6	M10×1.25
40	45.5	27	6	M10×1.25
50	45.5	28	7	M12×1.25
63	49	28	7	M12×1.25
80	54	29	8	M16×1.5
100	67	29	8	M16×1.5
125	81	35.5	10	M20×1.5

TADN series



Bore size\Item	A(TADN)	A(TADND)
12	46	51
16	46	51
20	51	57
25	53	59
32	61	68
40	62.5	69.5
50	65.5	73.5
63	69	77
80	77	86
100	90	99

TADND series

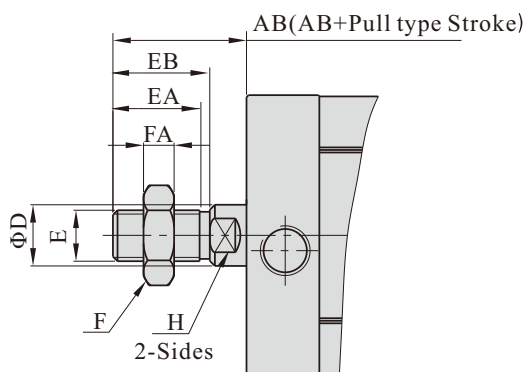


Bore size\Item	AC	B	DA	JB	U	UA	V	Z	ZA
12	35	27.5	5	16	3	12	M3×0.5	6	26.5
16	35	30	5	18	3	14	M3×0.5	6	29
20	37	35.5	6	22	4	17	M4×0.7	8	34.5
25	39	40	6	26	5	22	M5×0.8	8	39
32	44	49.5	7	32.5	5	28	M5×0.8	10	48
40	45.5	55	7	38	5	33	M5×0.8	10	53.5
50	45.5	65.5	8	46.5	6	42	M6×1.0	12	64
63	49	75.5	8	56.5	6	50	M6×1.0	12	74
80	54	95.5	9	72	8	65	M8×1.25	14	94
100	67	113.5	9	89	10	80	M10×1.5	14	112

Remark:

1. The unmarked dimension is the same as ADN standard type
2. The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

Male thread



Bore size\Item	AB	D	E	EA	EB	F	FA	H
12	15	6	M5×0.8	9	10	8	4	5
16	17	8	M6×1.0	11	12	10	5	7
20	22	10	M8×1.25	15	16	12	6	9
25	22	10	M8×1.25	15	16	12	6	9
32	26	12	M10×1.25	17	19	17	6	10
40	26	12	M10×1.25	17	19	17	6	10
50	30	16	M12×1.25	20	22	17	7	13
63	30	16	M12×1.25	20	22	17	7	13
80	37	20	M16×1.5	26	28	23	8	17
100	37	20	M16×1.5	26	28	23	8	17
125	51	25	M20×1.5	38	40	26	10	21

List for ordering code of accessories

Accessories Bore size	Mounting accessories							
	LB	FA/FB	CA	CB	CR	SDB	FTC	TCM2
12	F-ACE12LB	F-ACE12FA	F-ACE12CA	-	-	F-MI12SDB	-	-
16	F-ACP12LB	F-ACE16FA	F-ACE16CA	-	-	F-MI12SDB	-	-
20	F-ACP20LB	F-ACE20FA	F-ACE20CA	-	-	F-MI20SDB	-	-
25	F-ACP25LB	F-ACE25FA	F-ACE25CA	-	-	F-MI20SDB	-	-
32	F-ACE32LB	F-SI32FA	F-SE32CA	F-SE32CB	F-SI32CR	-	F-SI32FTC	F-SI32TCM2
40	F-ACE40LB	F-SI40FA	F-SE40CA	F-SE40CB	F-SI40CR	-	F-SI40FTC	F-SI40TCM2
50	F-ACE50LB	F-SI50FA	F-SE50CA	F-SE50CB	F-SI50CR	-	F-SI50FTC	F-SI40TCM2
63	F-ACE63LB	F-SI63FA	F-SE63CA	F-SE63CB	F-SI63CR	-	F-SI63FTC	F-SI63TCM2
80	F-ACE80LB	F-SI80FA	F-SE80CA	F-SE80CB	F-SI80CR	-	F-SI80FTC	F-SI63TCM2
100	F-ACE100LB	F-SI100FA	F-SE100CA	F-SE100CB	F-SI100CR	-	F-SI100FTC	F-SI125TCM2
125	-	F-SI125FA	F-SE125CA	F-SE125CB	F-SI125CR	-	F-SI125FTC	F-SI125TCM2

Accessories Bore size	Knuckle				Sensor switch	
	I	Y	F	U	CS1-E	DS1-E
12	F-ACQ12I	F-ACQ12Y	F-M5X080F	F-M5X080U	CS1-E	DS1-E
16	F-M6X100I	F-M6X100Y	F-M6X100F	F-M6X100U		
20	F-M8X125I	F-M8X125Y	F-M8X125F	F-M8X125U		
25						
32	F-M10X125I	F-M10X125Y	F-M10X125F	F-M10X125U		
40						
50	F-M12X125I	F-M12X125Y	F-M12X125F	F-M12X125U		
63						
80	F-M16X150I	F-M16X150Y	F-M16X150F	F-M16X150U		
100						
125	F-M20X150I	F-M20X150Y	F-M20X150F	F-M20X150U		

Accessory selection

Cylinder model\Accessories			Mounting accessories							Knuckle				Sensor switch			
			LB	FA	FB	CA	CB	CR	SDB	FTC	TCM2	I	Y	U	F	CS1-E	DS1-E
ADN	Female thread	Without magnet													×	×	
		With magnet	●	●	●	●	●	●	●	●	●	×	×	×	×	●	●
	Male thread	Without magnet										●	●	●	●	×	×
		With magnet										●	●	●	●	●	●
ASDN ATDN	Female thread	Without magnet													×	×	
		With magnet	●	●	●	●	●	●	●	●	●	×	×	×	×	●	●
	Male thread	Without magnet										●	●	●	●	×	×
		With magnet										●	●	●	●	●	●
ADND ADNJ	Female thread	Without magnet													×	×	
		With magnet	●	●	×	×	×	×	×	●	●	×	×	×	×	●	●
	Male thread	Without magnet										●	●	●	●	×	×
		With magnet										●	●	●	●	●	●
TADN	Female thread	Without magnet	×	×	●	●	●	●	●	●	×	×	×	×	×	×	
		With magnet	×	×	●	●	●	●	●	●	×	×	×	×	●	●	
TADND	Female thread	Without magnet	×	×	●	×	×	×	×	×	×	×	×	×	×	×	
		With magnet	×	×	●	×	×	×	×	×	×	×	×	×	●	●	

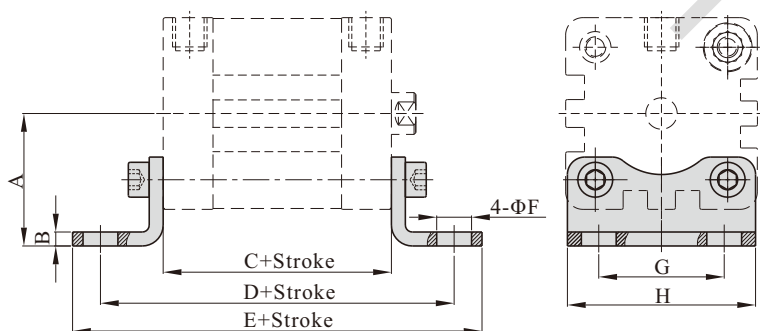
Material of accessories

Accessories Bore size	Mounting accessories									Knuckle			
	LB	FA	FB	CA	CB	CR	SDB	FTC	TCM2	I	Y	F	U
12~25	△	●	●	●	-	-	△	■	●	□	□	□	□
32~100	△	●	●	◇	◇	◇	-	■	●	□	□	□	□
125	-	◇	◇	◇	◇	◇	-	■	●	□	□	□	□

●—Aluminum alloy; ■—Cast iron; ◇—Ductile Iron; △—SPCC; □—Carbon Steel

Dimensions

LB type

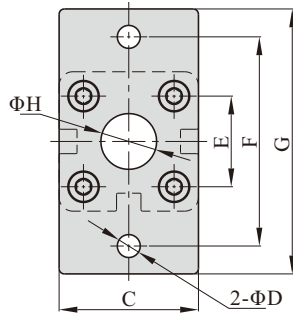
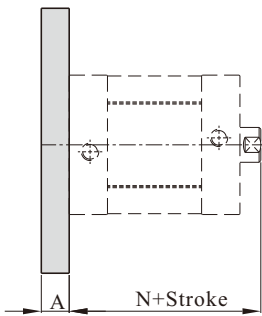


Bore size\Item	A	B	C	D	E	F	G	H
12	21	3	35	61	71	5.5	16	25
16	22	3	35	61	70.6	5.5	18	27
20	27	3.8	37	69	81.6	6.5	22	34
25	29	3.8	39	71	83.6	6.5	26	38
32	33.5	4	44	76	89	7	32	48
40	38	4	45.5	81.5	97.5	10	36	54
50	45	5	45.5	87.5	103	10	45	65
63	50	5	49	91	107	10	50	75
80	63	6	54	106	127	12	63	95
100	74	6	67	121	146	14.5	75	112

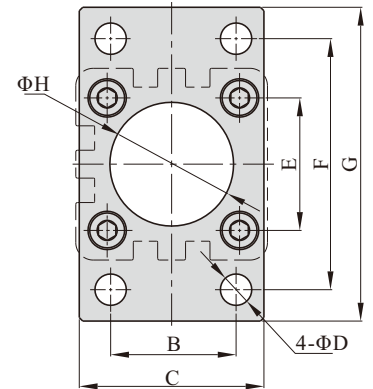
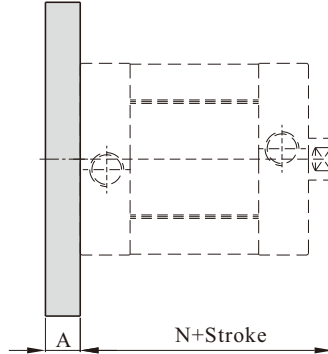
[Note] Valve C in the above table is only for ACE series.
Please refer to relevant content for valve C of other series.

FA/FB type

Φ12~Φ25



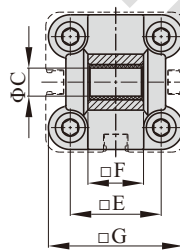
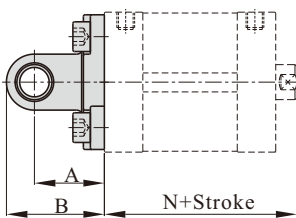
Φ32~Φ125



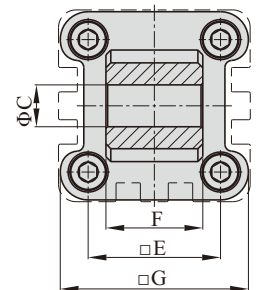
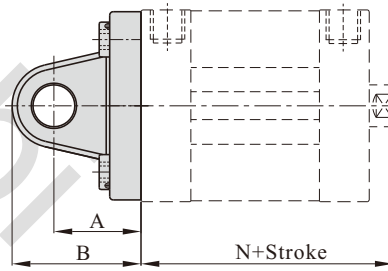
Bore size\Item	A	B	C	D	E	F	G	H	N
12	8	-	25	5.5	16	40	55	10	40
16	8	-	30	5.5	18	43	55	10	40
20	8	-	35	6.6	22	55	68	16	43
25	8	-	39.5	6.6	26	60	76	16	45
32	10	32	47	7	32.5	64	80	30.5	51
40	10	36	53	9	38	72	90	35.5	52.5
50	12	45	65	9	46.5	90	108	40.5	53.5
63	12	50	75	9	56.5	100	118	45.5	57
80	16	63	95	12.5	72	126	150	45.5	63
100	16	75	115	14.5	89	150	176	55.5	76
125	20	90	139	16.5	110	180	218	60.5	92

CA type

Φ12~Φ25



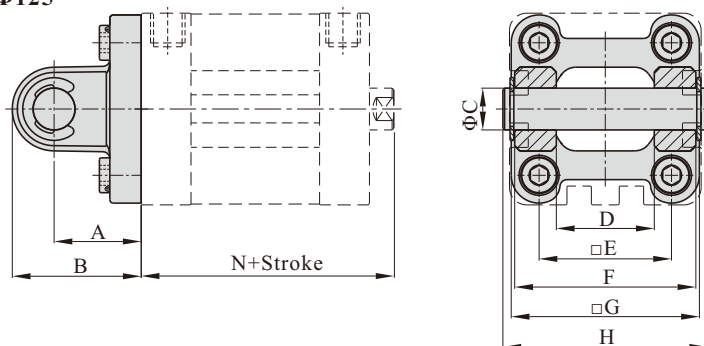
Φ32~Φ125



Bore size\Item	A	B	C	E	F	G	N
12	16	22	6	16	11.9	24	40
16	16	22	6	18	11.9	28.5	40
20	20	28	8	22	15.9	34.5	43
25	20	28	8	26	15.9	38.5	45
32	22	32.5	10	32.5	25.8	46.5	51
40	25	37	12	38	27.8	54	52.5
50	27	39	12	46.5	31.7	64	53.5
63	32	47	16	56.5	39.7	75	57
80	36	51.5	16	72	49.7	93	63
100	41	61	20	89	59.7	110	76
125	50	74	25	110	69.7	134	92

CB type

Φ32~Φ125

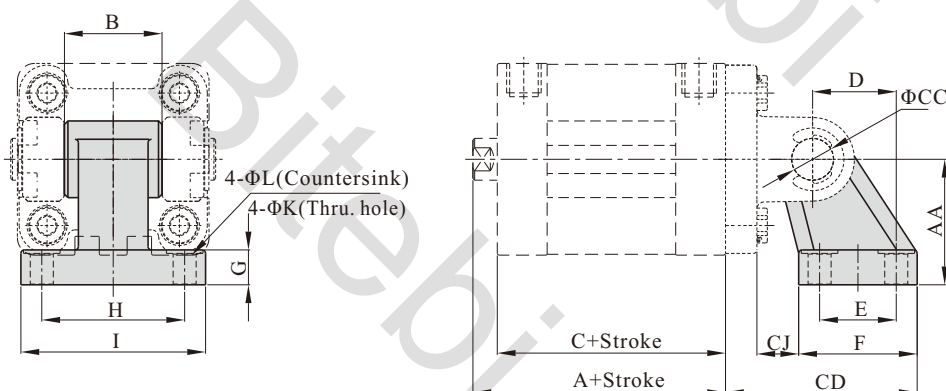


Bore size\Item	A	B	C	D	E	F	G	H	N
32	22	32.5	10	26	32.5	45	46.5	51	51
40	25	37	12	28	38	52	54	59	52.5
50	27	39	12	32	46.5	60	64	67	53.5
63	32	47	16	40	56.5	70	75	77	57
80	36	51.5	16	50	72	90	93	97	63
100	41	61	20	60	89	110	110	119	76
125	50	74	25	70	110	130	134	139	92

[Note] CB is attached with relevant PIN.

CR type

Φ32~Φ125

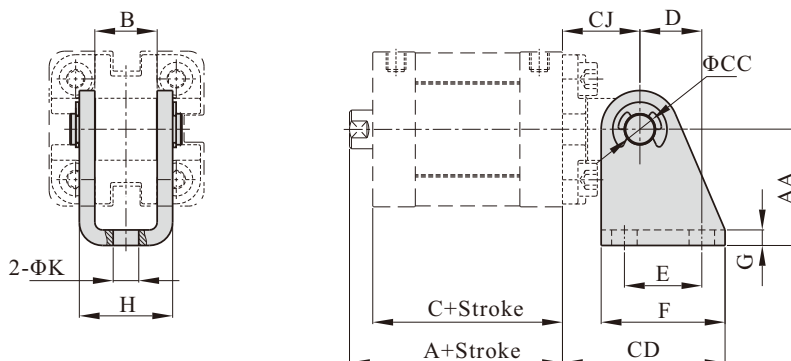


Bore size\Item	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	I	K	L
32	51	32	26	44	10	50	10	21	18	31	8	38	51	6.6	11
40	52.5	36	28	45.5	12	56	12	24	22	35	10	41	54	6.6	11
50	53.5	45	32	45.5	12	68	13	33	30	45	12	50	65	9	14
63	57	50	40	49	16	77	17	37	35	50	12	52	67	9	14
80	63	63	50	54	16	93	19	47	40	60	14	66	86	11	17
100	76	71	60	67	20	106	22	55	50	70	15	76	96	11	17
125	92	90	70	81	25	135	26	70	60	90	20	94	124	14	20

[Note] CR can't be used alone, it must be used with CB.

SDB type

Φ12~Φ25

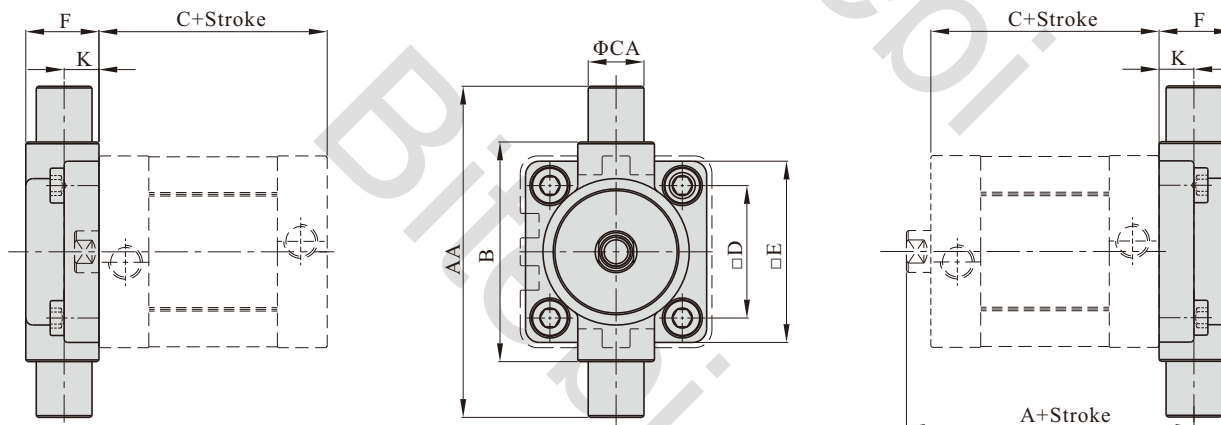


Bore size\Item	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	K
12	40	27	12.1	35	6	34	16	13	15	25	2	18.1	5.5
16	40	27	12.1	35	6	34	16	13	15	25	2	18.1	5.5
20	43	30	16.1	37	8	42	20	16	20	32	2.5	24.1	6.6
25	45	30	16.1	39	8	42	20	16	20	32	2.5	24.1	6.6

[Note] SDB can't be used alone, it must be used with CA.

FTC type

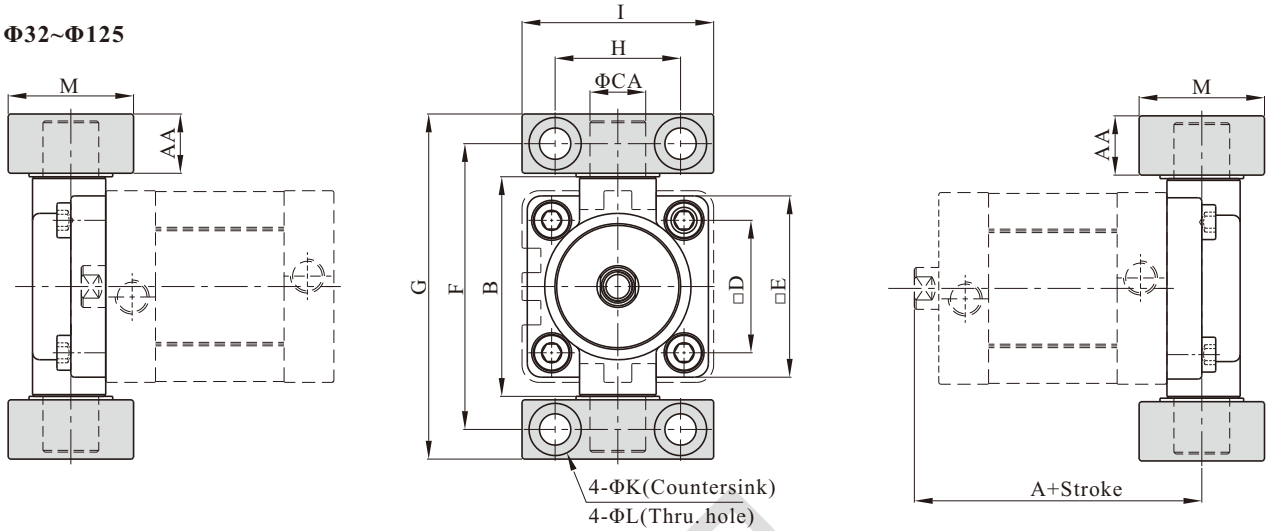
Φ32~Φ125



Bore size\Item	A	AA	B	C	CA	D	E	F	K
32	63	74	50	44	12	32.5	46	19	10
40	66.5	95	63	45.5	16	38	52	21	10
50	71.5	107	75	45.5	16	46.5	64	26	12
63	77	130	90	49	20	56.5	74	28	12
80	85	150	110	54	20	72	94	31	16
100	102	185	132	67	25	89	114	35	16
125	124	210	160	81	25	110	139	43	20

TCM2 type

Φ32~Φ125

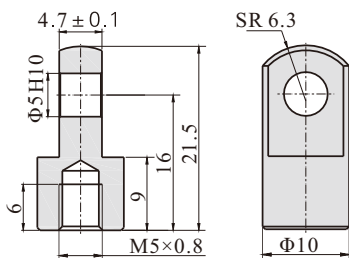


Bore size\Item	A	AA	B	CA	D	E	F	G	H	I	K	L	M
32	63	14	52	12	32.5	46	66	80	32	46	11	7	30
40	66.5	17	65	16	38	52	82	99	36	55	15	9	36
50	71.5	17	75	16	46.5	64	94	111	36	55	15	9	36
63	77	20.5	90	20	56.5	74	113.5	134	42	65	18	11	40
80	85	20.5	112	20	72	94	133.5	154	42	65	18	11	40
100	102	24.5	135	25	89	114	159.5	184	50	75	20	14	50
125	124	24.5	170	25	110	139	187.5	212	50	75	20	14	50

[Note] TCM2 can't be used alone, it must be used with FTC.
The installation position of the accessories can not be adjusted arbitrarily.

I Knuckle

F-ACQ12I



Y Knuckle

F-ACQ12Y

