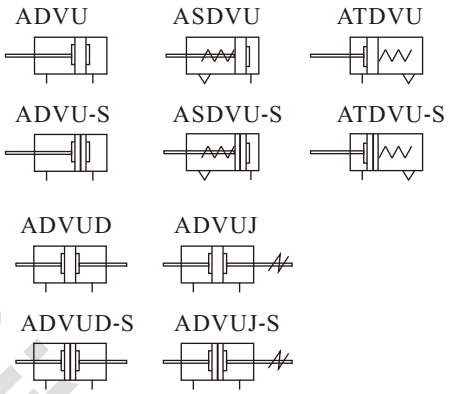
Product feature

1. DIN standard cylinder.
2. The cylinder body connects with the threads of the front and back cover, forming high strength and convenient maintenance.
3. The internal diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability
4. The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of oil reservation.
5. Compact structure can effectively save installation space.
6. There are magnetic switch slots around the cylinder body, which is convenient to install inducting switch.
7. Installing accessories with various specifications are optional.

Symbol



Specification

Bore size(mm)		12	16	20	25	32	40	50	63	80	100
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	0.1~1.0MPa(15~145psi)(1.0~10.0bar)									
	Single acting	0.2~1.0MPa(28~145psi)(2.0~10.0bar)									
Proof pressure		1.5MPa(215psi)(15bar)									
Temperature ℃		-20~80									
Speed range mm/s		Double acting: 30~500 Single acting: 50~500									
Stroke tolerance		$0\sim150\ ^{+1.0}_{0}$ $>150^{+1.4}_{0}$									
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. std stroke	Max. stroke
12 16	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200	200	200
	Single acting	5 10	10	-
20 25	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200	200	200
	Single acting	5 10 15 20 25	25	-
32 40 50 63	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200 225 250 275 300	300	300
	Single acting	5 10 15 20 25	25	-
80 100	Double acting	5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 110 120 125 150 160 175 200 225 250 275 300 325 350 375 400	400	400
	Single acting	5 10 15 20 25	25	-

[Note] Consult us for non-standard stroke.

Ordering code

ADVU - 32 × 50 -S - B - FA - □

ADVUD - 32 × 50 -S - B - FA - □

ADVUJ - 32 × 50 - 20 - S - B - FA - □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Model
ADVU: Tight cylinder(Double acting)
ASDVU: Tight cylinder(Single acting-push)
ATDVU: Tight cylinder(Single acting-pull)
ADVUD: Tight cylinder(Double rod)
ADVUJ: Tight cylinder(Adjustable stroke)

②Bore size
12 16 20 25 32 40 50 63 80 100

⑦Mounting typ	
Mounting type	Series
Blank: No accessories FA: FA type FB: FB type CA: CA type CB: CB type LB: LB type	ADVU ASDVU ATDVU
Blank: No accessories FA: FA type LB: LB type	ADVUD ADVUJ

⑥Rod type
Blank: Female thread
B: Male thread

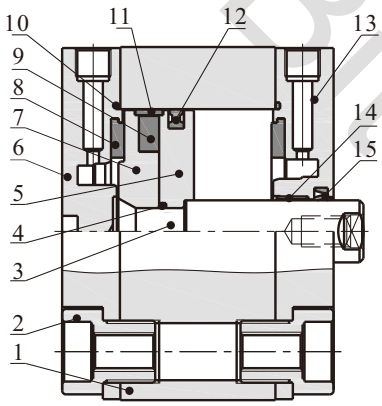
⑧ Thread type
Blank： G thread
PT： PT thread

③ Stroke
Refer to stroke table for details

⑤ Magnet
Blank: Without magnet
S: With magnet

④ Adjustable stroke	
Series	Adjustable stroke
ADVUJ series	10： 10mm
	20： 20mm
	30： 30mm
	40： 40mm
	50： 50mm
	75： 75mm
	100： 100mm
Others series	No this code

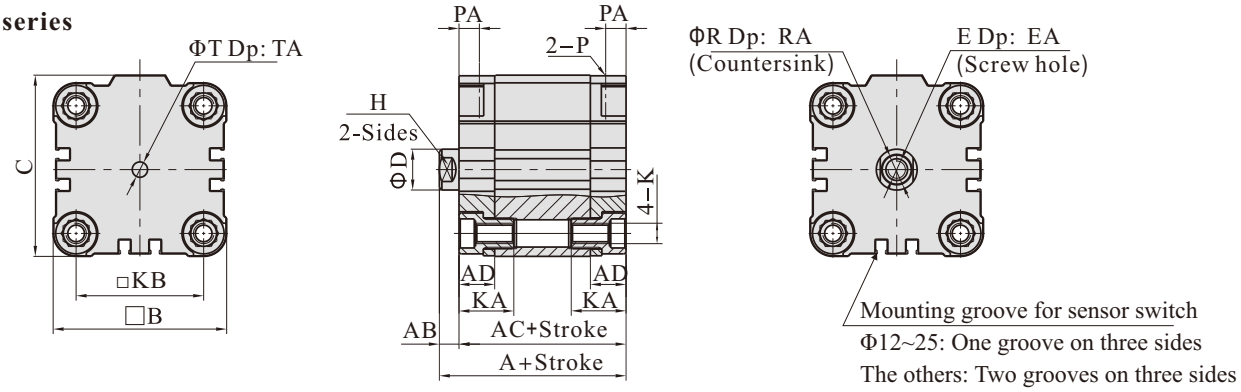
Inner structure and material of major parts



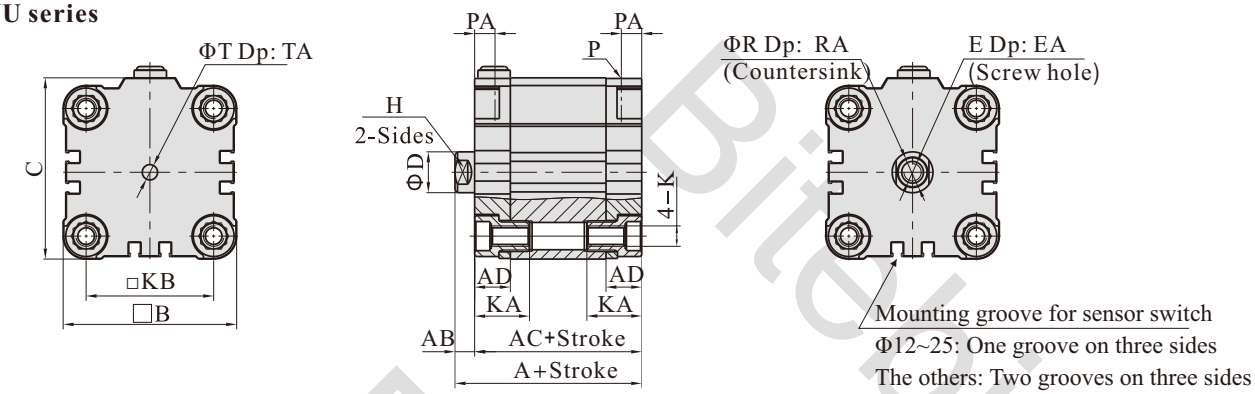
NO.	Item		Material
1	Body		Aluminum alloy
2	Screw		Carbon steel
3	Piston rod	Φ12~25	Stainless steel
		Others	S45C
4	O-ring		NBR
5	Piston		Aluminum alloy
6	Back cover		Aluminum alloy
7	Magnet holder		Aluminum alloy
8	Bumper		TPU
9	Magnet	Φ12~32	Sintered metal
		Others	Plastic
10	O-ring		NBR
11	Wear ring	Φ12~32	No
		Others	Wear resistant material
12	Piston seal		NBR
13	Front cover		Aluminum alloy
14	Bushing	Φ12~20	No
		Others	Wear resistant material
15	Front cover packing		NBR

Dimensions

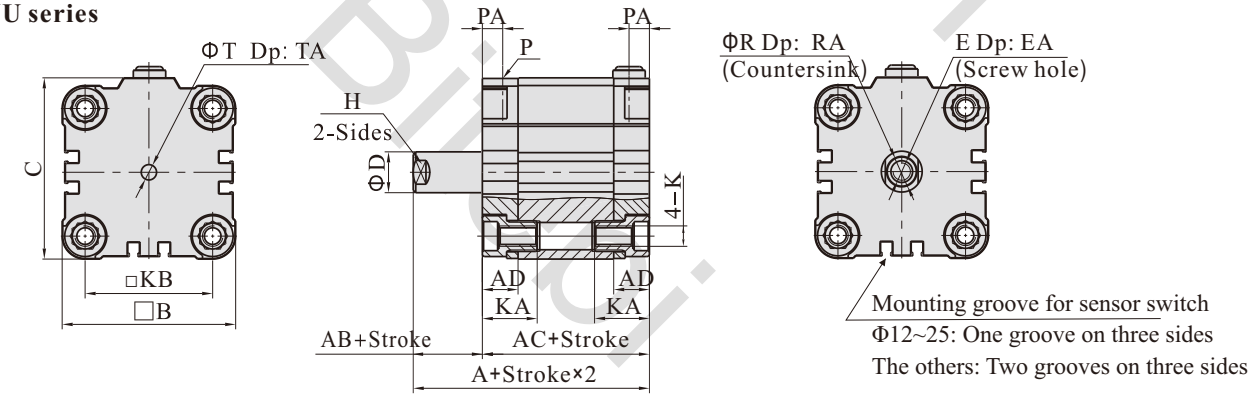
ADVU series



ASDVU series



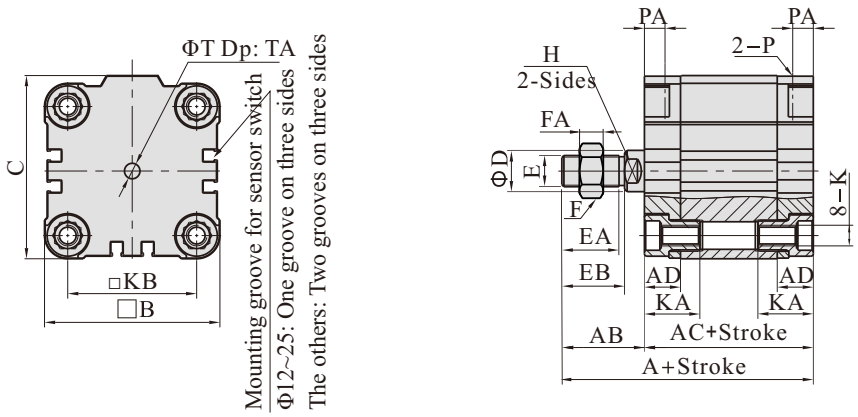
ATDVU series



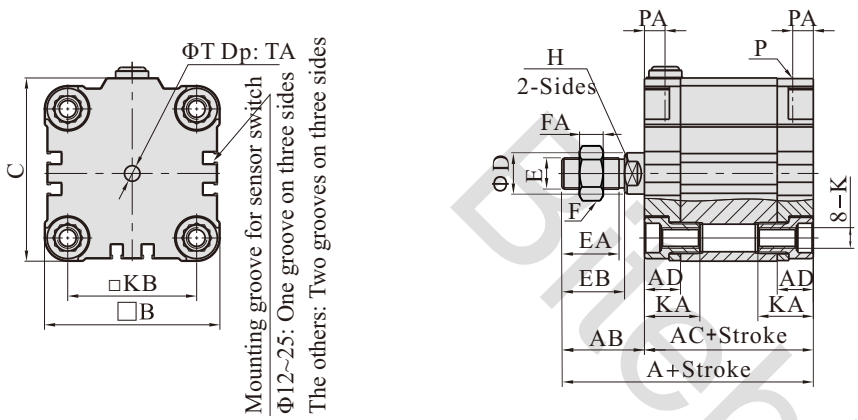
Bore size\Item	A	AB	AC	AD	B	C	D	E	EA	H	K	KA	KB	P	PA	R	RA	T	TA
12	42.5	4.5	38	11.5	29	30	6	M3×0.5	8	5	M4×0.7	18	18	M5×0.8	7	3.5	1.5	6	4
16	42.5	4.5	38	11.5	29	30	8	M4×0.7	10	6	M4×0.7	18	18	M5×0.8	7	4.5	1.5	6	4
20	42.5	4.5	38	11.5	36	37.5	10	M5×0.8	12	8	M5×0.8	18	22	M5×0.8	7	5.5	2	6	4
25	45	5.5	39.5	11.5	40	41.5	10	M5×0.8	12	8	M5×0.8	18	26	M5×0.8	7	5.5	2	6.1	4
32	50.5	6	44.5	14	50	52	12	M6×1.0	14	10	M6×1.0	21	32	G1/8	8	6.5	2.5	6.1	4
40	52	6.5	45.5	14	60	62.5	12	M6×1.0	14	10	M6×1.0	21	42	G1/8	8	6.5	2.5	6.1	4
50	53	7.5	45.5	14	68	71	16	M8×1.25	16	13	M8×1.25	21.5	50	G1/8	8	8.5	3.5	6.1	4
63	57.5	7.5	50	15	87	91	16	M8×1.25	16	13	M10×1.5	24	62	G1/8	8	8.5	3.5	8.1	4
80	64	8	56	16	107	111	20	M10×1.5	20	17	M10×1.5	27	82	G1/8	8.5	10.5	4.5	8.1	4
100	76.5	10	66.5	19	128	133	25	M12×1.75	24	22	M10×1.5	32	103	G1/4	10.5	12.5	6	8.1	4

Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

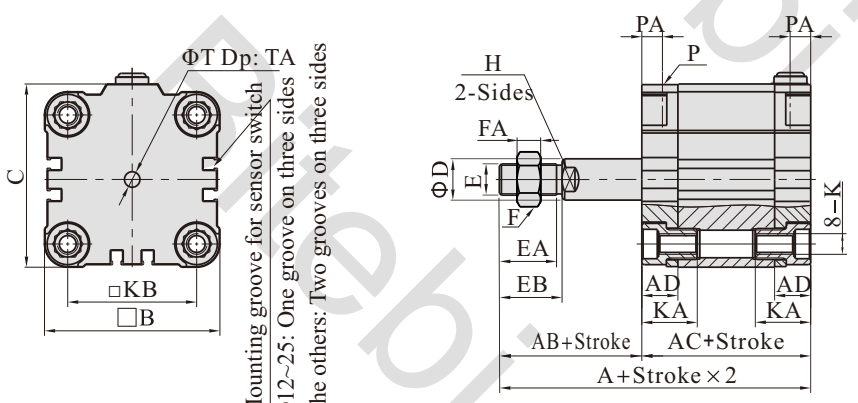
ADVU-B series



ASDVU-B series



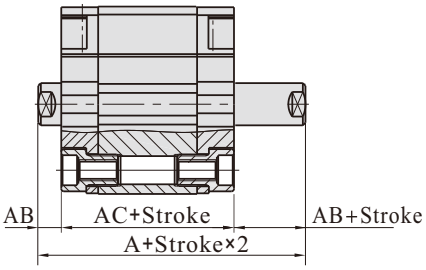
ATDVU-B series



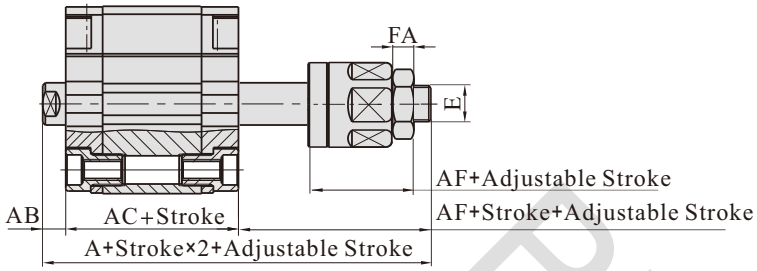
Bore size\Item	A	AB	AC	AD	B	C	D	E	EA	EB	F	FA	H	K	KA	KB	P	PA	T	TA
12	58.5	20.5	38	11.5	29	30	6	M6×1.0	15	16	10	5	5	M4×0.7	18	18	M5×0.8	7	6	4
16	62.5	24.5	38	11.5	29	30	8	M8×1.25	19	20	12	6	6	M4×0.7	18	18	M5×0.8	7	6	4
20	64.5	26.5	38	11.5	36	37.5	10	M10×1.25	20	22	17	6	8	M5×0.8	18	22	M5×0.8	7	6	4
25	67	27.5	39.5	11.5	40	41.5	10	M10×1.25	20	22	17	6	8	M5×0.8	18	26	M5×0.8	7	6.1	4
32	72.5	28	44.5	14	50	52	12	M10×1.25	20	22	17	6	10	M6×1.0	21	32	G1/8	8	6.1	4
40	74	28.5	45.5	14	60	62.5	12	M10×1.25	20	22	17	6	10	M6×1.0	21	42	G1/8	8	6.1	4
50	77	31.5	45.5	14	68	71	16	M12×1.25	22	24	17	7	13	M8×1.25	21.5	50	G1/8	8	6.1	4
63	81.5	31.5	50	15	87	91	16	M12×1.25	22	24	17	7	13	M10×1.5	24	62	G1/8	8	8.1	4
80	96	40	56	16	107	111	20	M16×1.5	30	32	23	8	17	M10×1.5	27	82	G1/8	8.5	8.1	4
100	116.5	50	66.5	19	128	133	25	M20×1.5	38	40	26	10	22	M10×1.5	32	103	G1/4	10.5	8.1	4

Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

ADVUD series



ADVUJ series



Bore size\Item	A(ACPD)	A(ACPJ)	AB	AC	AF	E	FA
12	47	63.5	4.5	38	21	M6×1.0	5
16	47	67.5	4.5	38	25	M8×1.25	6
20	47	69.5	4.5	38	27	M10×1.25	6
25	50.5	72	5.5	39.5	27	M10×1.25	6
32	56.5	77.5	6	44.5	27	M10×1.25	6
40	58.5	79	6.5	45.5	27	M10×1.25	6
50	60.5	81	7.5	45.5	28	M12×1.25	7
63	65	85.5	7.5	50	28	M12×1.25	7
80	72	93	8	56	29	M16×1.5	8
100	86.5	112	10	66.5	35.5	M20×1.5	10

Remark)
1. The dimensions of magnet type cylinder are the same as non-magnet type cylinder.
2. Please refer to this page for male thread dimensions.
3. The unmarked dimension is the same as ADVU standard type.

List for ordering code of accessories

Accessories / Bore size	Mounting accessory				Knuckle		Sensor switch
	LB	FA/FB	CA	CB	F: F Knuckle	U: U Knuckle	
12	F-ADVU12LB	F-ADVU12FA	F-ADVU12CA	-	-	F-M6X100U	CS1-G DS1-G
16	F-ADVU12LB	F-ADVU12FA	F-ADVU12CA	-	F-M8X125F	F-M8X125U	
20	F-ADVU20LB	F-ADVU20FA	F-ADVU20CA	-	F-M10X125F	F-M10X125U	
25	F-ADVU25LB	F-ADVU25FA	F-ADVU25CA	-			
32	F-ADVU32LB	F-ADVU32FA	-	F-ADVU32CB			
40	F-ADVU40LB	F-ADVU40FA	-	F-ADVU40CB			
50	F-ADVU50LB	F-ADVU50FA	-	F-ADVU50CB	F-M12X125F	F-M12X125U	
63	F-ADVU63LB	F-ADVU63FA	-	F-ADVU63CB			
80	F-ADVU80LB	F-ADVU80FA	-	F-ADVU80CB	F-M16X150F	F-M16X150U	
100	F-ADVU100LB	F-ADVU100FA	-	F-ADVU100CB	F-M20X150F	F-M20X150U	

Accessory selection

Cylinder model	Accessories		Mounting accessory					Knuckle		Sensor switch	
			LB	FA	FB	CA	CB	F	U	CS1-G	DS1-G
ADVU	Female thread	Standard	●	●	●	●	●	×	×	×	×
		With magnet						×	×	●	●
	Male thread	Standard						●	●	×	×
		With magnet						●	●	●	●
ASDVU ATDVU	Female thread	Standard	●	●	●	●	●	×	×	×	×
		With magnet						×	×	●	●
	Male thread	Standard						●	●	×	×
		With magnet						●	●	●	●
ADVUD ADVUJ	Female thread	Standard	●	●	×	×	×	×	×	×	×
		With magnet						×	×	●	●
	Male thread	Standard						●	●	×	×
		With magnet						●	●	●	●

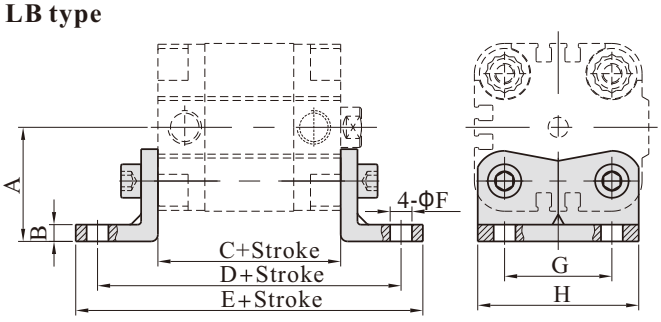
Material of accessories

Accessories / Bore size	Mounting accessories					Knuckle	
	LB	FA	FB	CA	CB	F	U
12~25	○	●	●	●	-	□	□
32~100	○	●	●	-	●	□	□

●——Aluminum alloy；○——SPCC；□——Carbon Steel

Dimensions

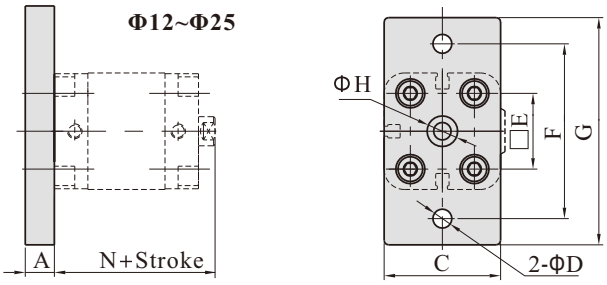
LB type



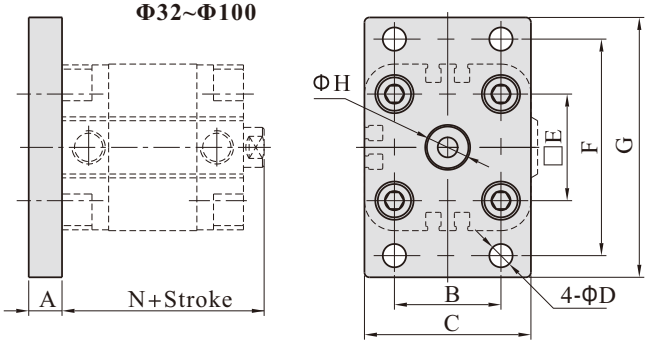
Bore size\Item	A	B	C	D	E	F	G	H
12	22	3	38	64	73.6	5.5	18	27
16	22	3	38	64	73.6	5.5	18	27
20	27	3.8	38	70	82.6	6.5	22	34
25	29	3.8	39.5	71.5	84	6.5	26	38
32	34	4.8	44.5	80.5	97.1	6.5	32	48
40	40.5	4.8	45.5	85.5	102.1	9	42	58
50	47	5.8	45.5	93.5	110.1	9	50	66
63	56.5	5.8	50	104	127.6	11	62	85
80	68.5	7.5	56	116	139.6	11	82	105
100	81	7.5	66.5	132.5	156.1	13.5	103	126

FA/FB type

Φ12~Φ25



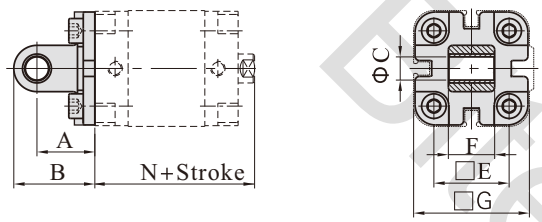
Φ32~Φ100



Bore size\Item	A	B	C	D	E	F	G	H	N
12	10	-	30	5.5	18	43	55	14	42.5
16	10	-	30	5.5	18	43	55	14	42.5
20	10	-	36	6.5	22	55	68	16	42.5
25	10	-	40	6.5	26	60	78	16	45
32	10	32	50	7	32	65	78	18	50.5
40	10	36	60	9	42	82	102	18	52
50	12	45	68	9	50	90	110	22	53
63	15	50	87	9	62	110	128	22	57.5
80	15	63	107	12	82	135	160	28	64
100	15	75	128	14	103	163	190	34	76.5

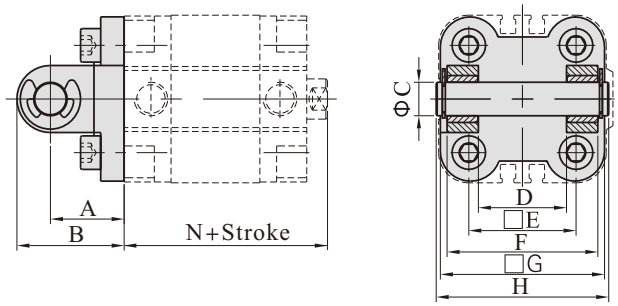
CA type

Φ12~Φ25



CB type

Φ32~Φ100



Bore size\Item	A	B	C	D	E	F	G	H	N
12	16	22	6	-	18	12	27.5	-	42.5
16	16	22	6	-	18	12	27.5	-	42.5
20	20	28	8	-	22	16	34.5	-	42.5
25	20	28	8	-	26	16	38.5	-	45
32	22	32	10	26	32	45	48	51.5	50.5
40	25	37	12	28	42	52	58	59	52
50	27	39	12	32	50	60	66	67	53
63	32	48	16	40	62	70	85	77	57.5
80	36	52	16	50	82	90	105	97	64
100	41	61	20	60	103	110	126	119	76.5