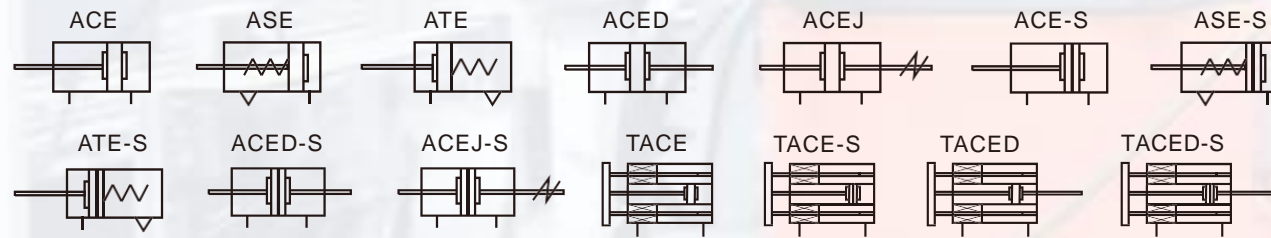
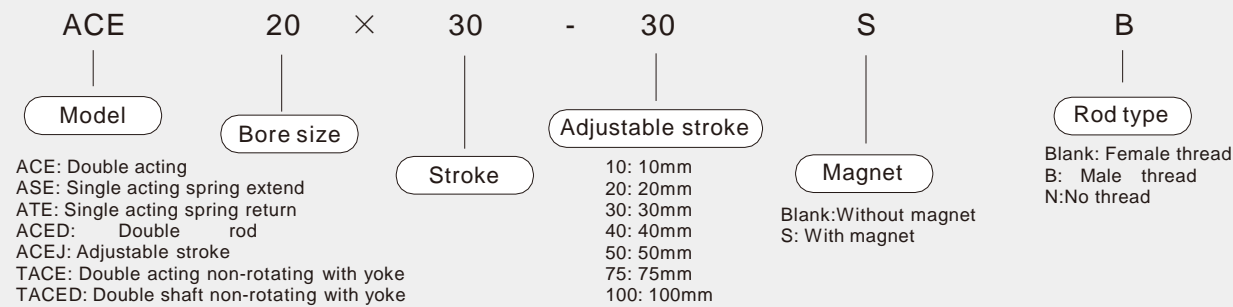


ACE Series Compact Cylinder



Ordering Code ACE Series Compact Cylinder



* Standard thread is blank here.

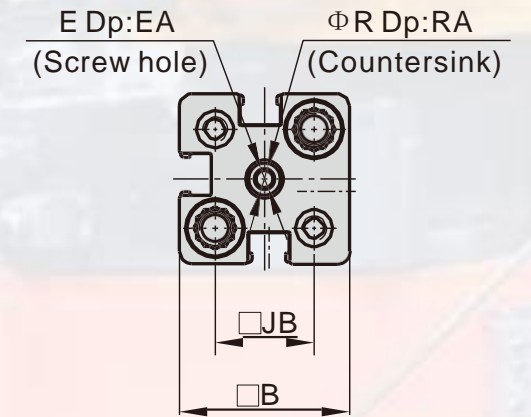
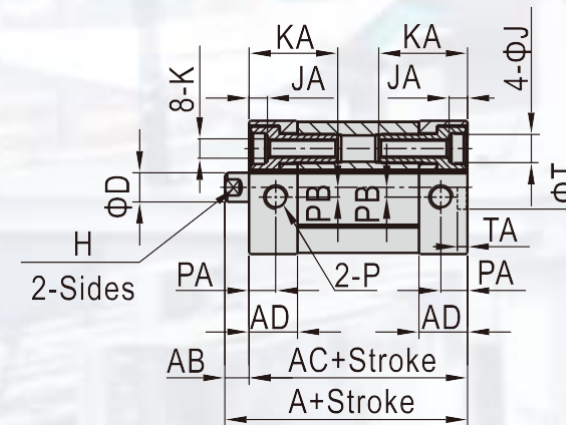
Specifications

Bore(mm)	12	16	20	25	32	40	50	63	80	100	125
Acting type	Double acting Single acting-Push type, Single acting-Pull type										
Working medium	Clean air (40µm filtration)										
Operating pressure	Double acting: 0.1~1.0MPa (14~145psi)										
	Single acting: 0.2~1.0MPa (28~145psi)										
Proof pressure	1.5MPa (215psi)										
Working Temperature	-20 to 70°C										
Speed range	Double acting: 30~500mm/s Single acting: 50~500mm/s										
Stroke tolerance	Stroke ≤ 100 +1.0 / 0 Stroke > 100 +1.5 / 0										
Cushion type	Bumper										
Port size	M5×0.8					G1/8					G1/4

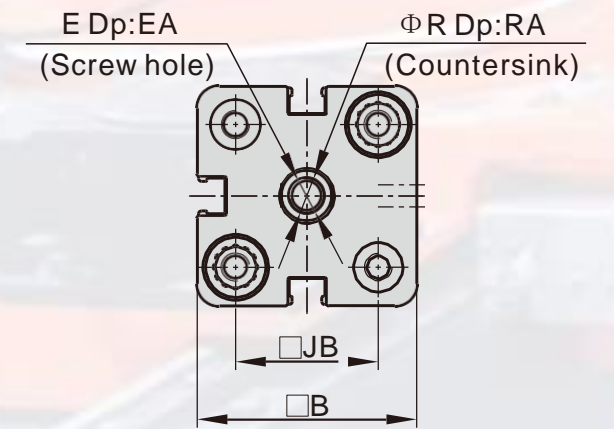
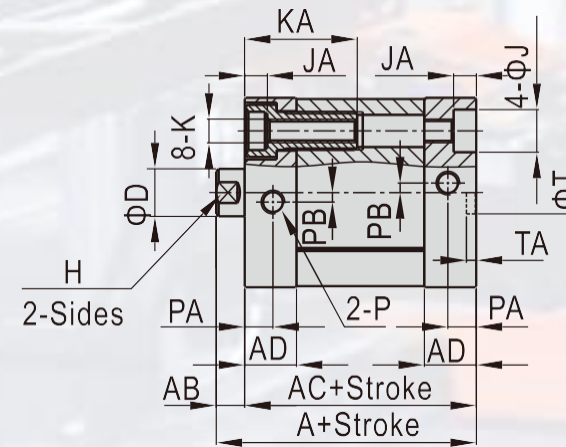
* PT thread, G thread and NPT thread are available.

Main Dimensions ACE (Double Acting Type)

Φ12



Φ16~Φ25



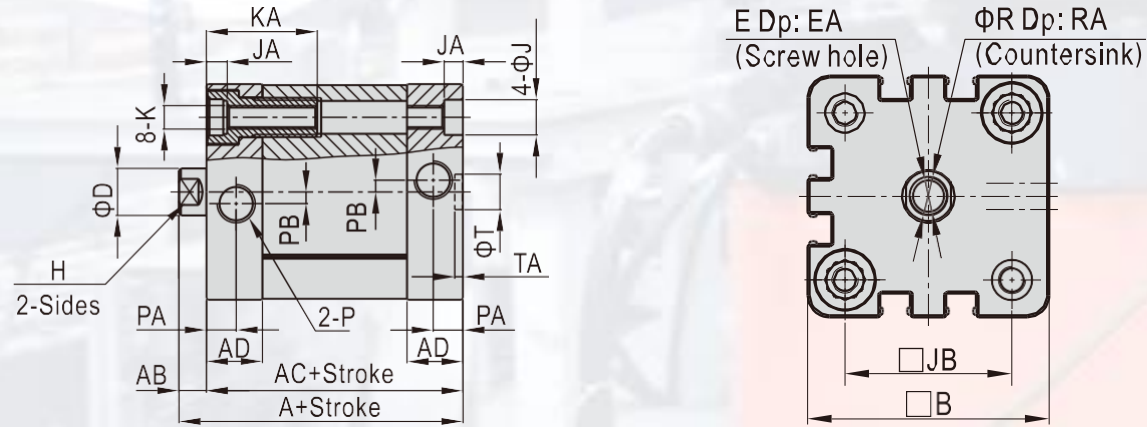
Sign Bore	Sign																				
	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P	PA	PB	R	RA	T	TA
12	40	5	35	10	27.5	6	M3×0.5	8	5	6	3.5	16	M4×0.7	18.5	M5×0.8	5.5	2	3.5	1.5	9	2.1
16	40	5	35	10	30	8	M4×0.7	10	7	6	3.5	18	M4×0.7	18.5	M5×0.8	5.5	2	4.5	1.5	9	2.1
20	43	6	37	10.5	35.5	10	M6×1.0	14	9	9	4.5	22	M5×0.8	23.5	M5×0.8	6	2	6.5	2.5	9	2.1
25	45	6	39	11	40	10	M6×1.0	14	9	9	4.5	26	M5×0.8	23.5	M5×0.8	6	2	6.5	2.5	9	2.1

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

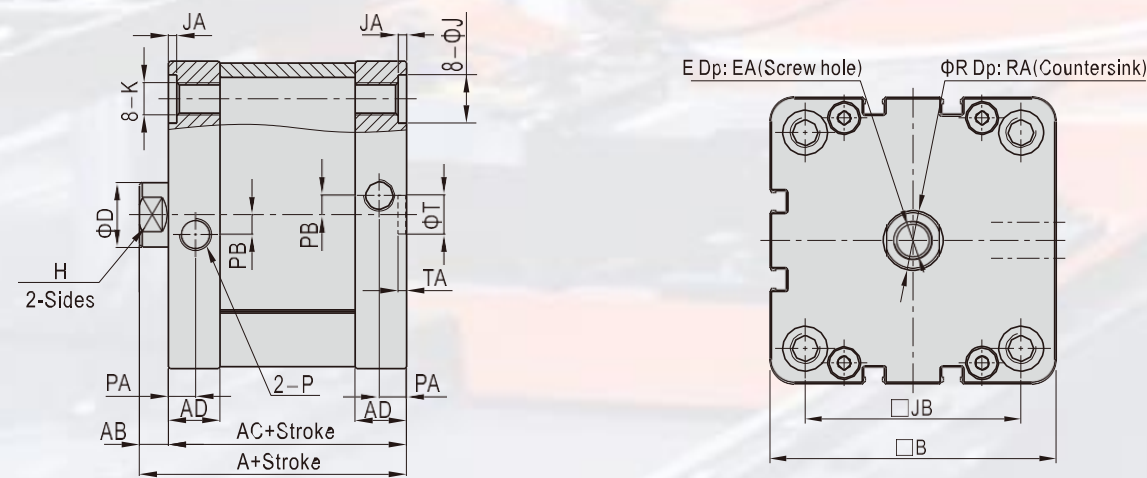
ACE Series Compact Cylinder

■ Main Dimensions ACE (Double Acting Type)

Φ 32~Φ 63



Φ 80~Φ 125



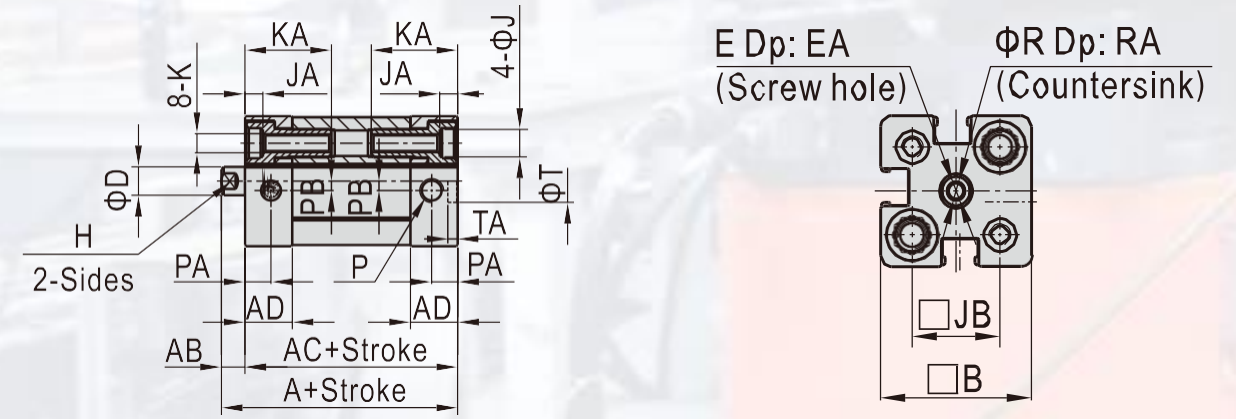
Sign Bore	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P	PA	PB	R	RA	T	TA
32	51	7	44	14	49.5	12	M8×1.25	16	10	9	4.5	32.5	M6×1.0	28.5	G1/8	7.5	3	8.5	3.5	9	2.1
40	52.5	7	45.5	14.5	55	12	M8×1.25	16	10	9	4.5	38	M6×1.0	28.5	G1/8	7.5	3	8.5	3.5	9	2.1
50	53.5	8	45.5	14.5	65.5	16	M10×1.5	20	13	11	4.5	46.5	M8×1.25	30.5	G1/8	7.5	3	10.5	4.5	12	2.6
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	7.5	4	10.5	4.5	12	2.6
80	63	9	54	16	95.5	20	M12×1.75	20	17	15	2.5	72	M10×1.5	-	G1/8	8.5	6	12.5	6	12	2.6
100	76	9	67	19	113.5	20	M12×1.75	20	17	15	2.5	89	M10×1.5	-	G1/8	10.5	7	12.5	6	12	2.6
125	92	11	81	20	134.5	25	M16×2.0	25	21	-	-	110	M12×1.75	-	G1/4	10.5	8	16.5	7	12	2.6

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

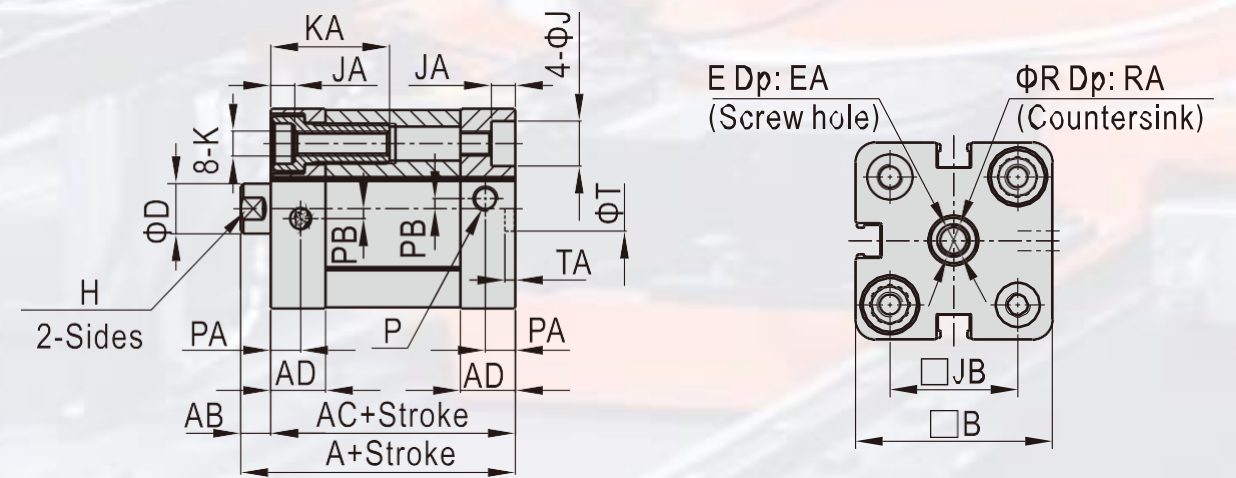
ACE Series Compact Cylinder

■ Main Dimensions ASE (Single Acting Spring Extend Type)

Φ 12



Φ 16~Φ 25



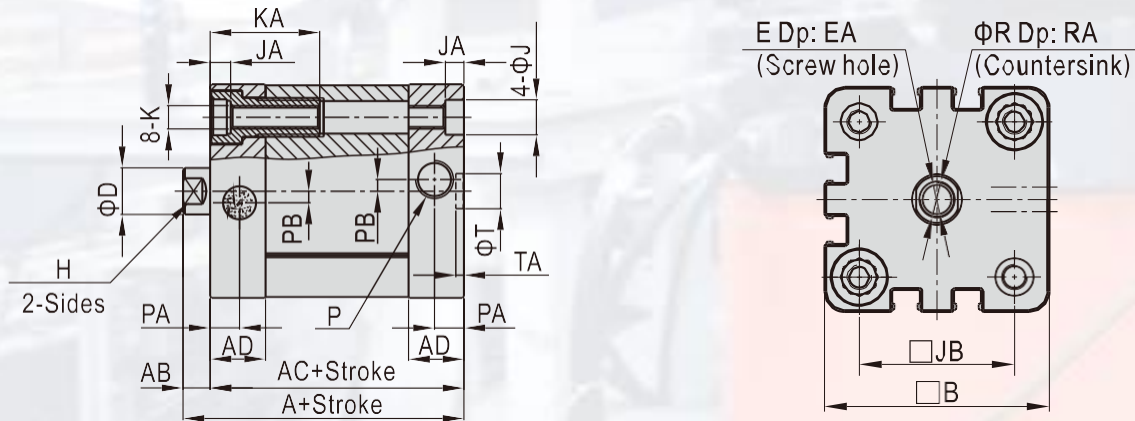
Sign Bore	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P	PA	PB	R	RA	T	TA
12	40	5	35	10	27.5	6	M3×0.5	8	5	6	3.5	16	M4×0.7	18.5	M5×0.8	5.5	2	3.5	1.5	9	2.1
16	40	5	35	10	30	8	M4×0.7	10	7	6	3.5	18	M4×0.7	18.5	M5×0.8	5.5	2	4.5	1.5	9	2.1
20	43	6	37	10.5	35.5	10	M6×1.0	14	9	9	4.5	22	M5×0.8	23.5	M5×0.8	6	2	6.5	2.5	9	2.1
25	45	6	39	11	40	10	M6×1.0	14	9	9	4.5	26	M5×0.8	23.5	M5×0.8	6	2	6.5	2.5	9	2.1

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

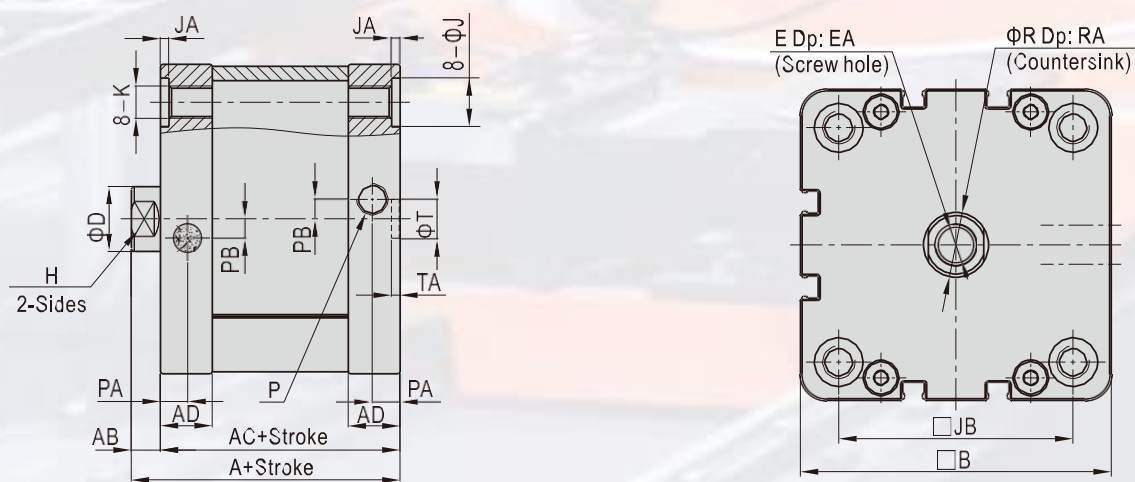
ACE Series Compact Cylinder

Main Dimensions ASE (Single Acting Spring Extend Type)

Φ 32~Φ 63



Φ 80~Φ 100



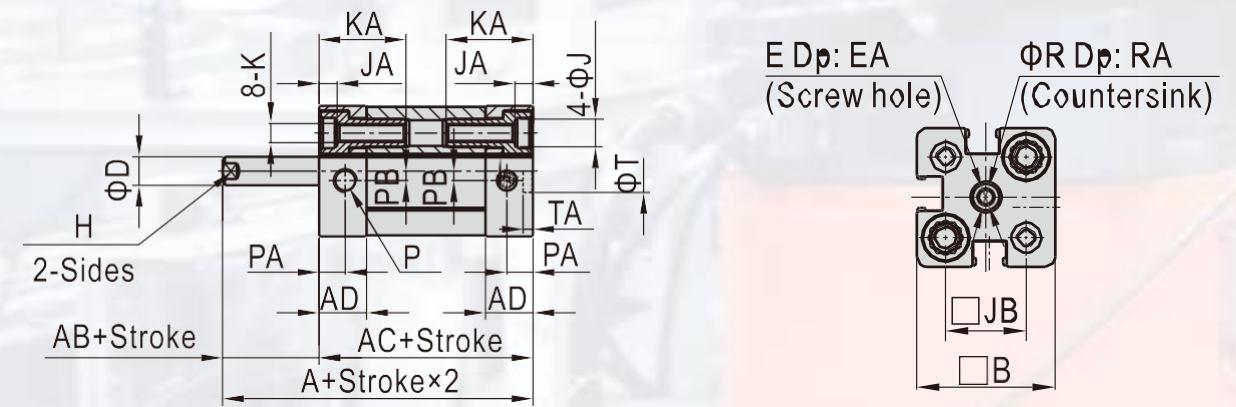
Sign Bore	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P	PA	PB	R	RA	T	TA
32	51	7	44	14	49.5	12	M8×1.25	16	10	9	4.5	32.5	M6×1.0	28.5	G1/8	7.5	3	8.5	3.5	9	2.1
40	52.5	7	45.5	14.5	55	12	M8×1.25	16	10	9	4.5	38	M6×1.0	28.5	G1/8	7.5	3	8.5	3.5	9	2.1
50	53.5	8	45.5	14.5	65.5	16	M10×1.5	20	13	11	4.5	46.5	M8×1.25	30.5	G1/8	7.5	3	10.5	4.5	12	2.6
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	7.5	4	10.5	4.5	12	2.6
80	63	9	54	16	95.5	20	M12×1.75	20	17	15	2.5	72	M10×1.5	-	G1/8	8.5	6	12.5	6	12	2.6
100	76	9	67	19	113.5	20	M12×1.75	20	17	15	2.5	89	M10×1.5	-	G1/8	10.5	7	12.5	6	12	2.6

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

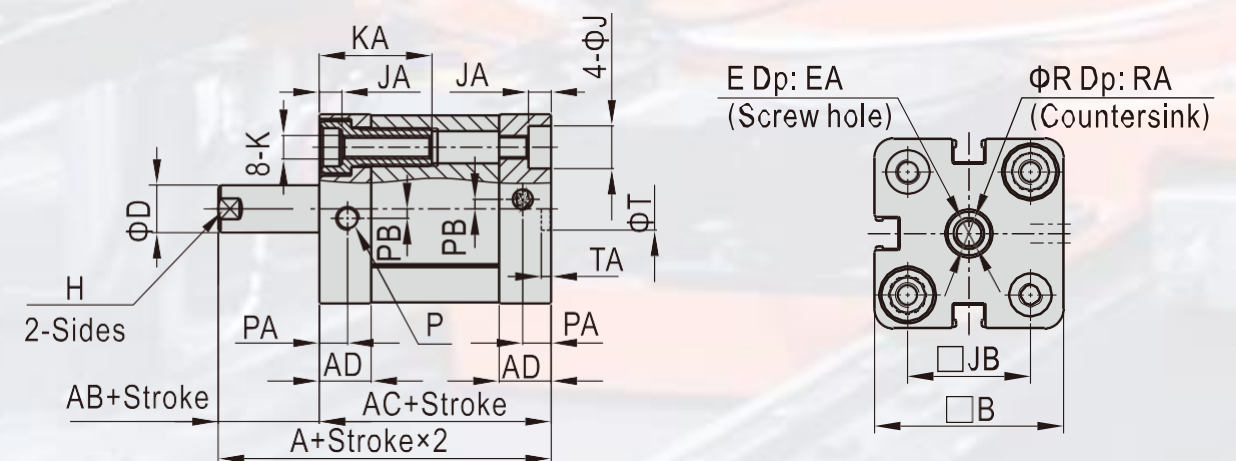
ACE Series Compact Cylinder

Main Dimensions ATE (Single Acting Spring Return Type)

Φ 12



Φ 16~Φ 25



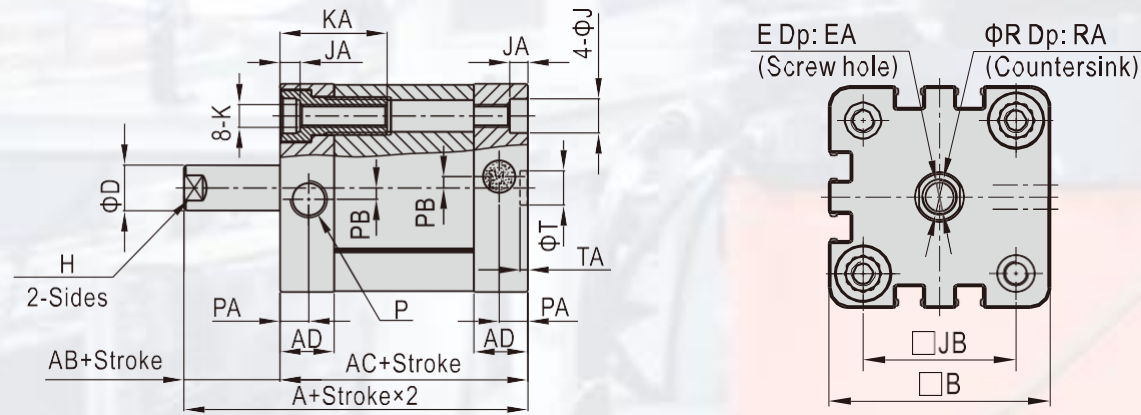
Sign Bore	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P	PA	PB	R	RA	T	TA
12	40	5	35	10	27.5	6	M3×0.5	8	5	6	3.5	16	M4×0.7	18.5	M5×0.8	5.5	2	3.5	1.5	9	2.1
16	40	5	35	10	30	8	M4×0.7	10	7	6	3.5	18	M4×0.7	18.5	M5×0.8	5.5	2	4.5	1.5	9	2.1
20	43	6	37	10.5	35.5	10	M6×1.0	14	9	9	4.5	22	M5×0.8	23.5	M5×0.8	6	2	6.5	2.5	9	2.1
25	45	6	39	11	40	10	M6×1.0	14	9	9	4.5	26	M5×0.8	23.5	M5×0.8	6	2	6.5	2.5	9	2.1

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

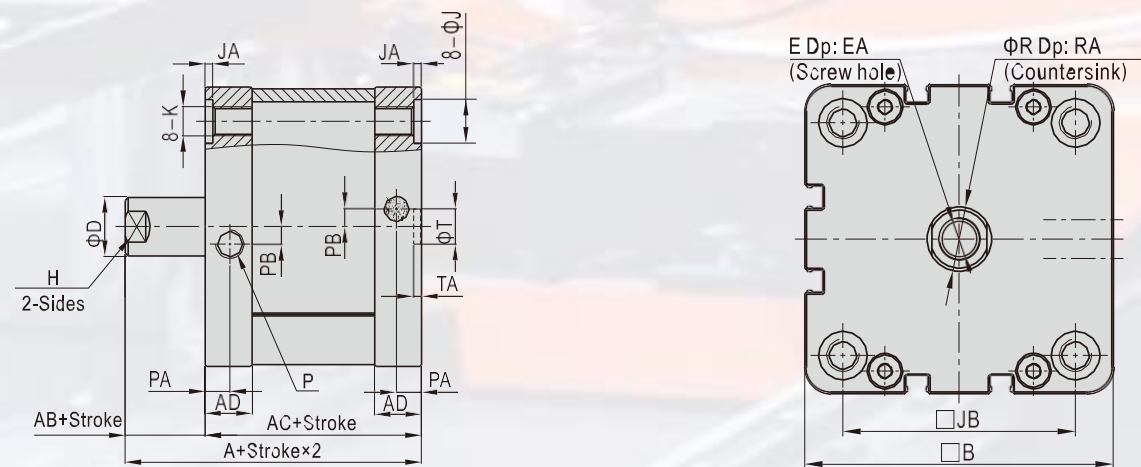
ACE Series Compact Cylinder

■ Main Dimensions ATE (Single Acting Spring Return Type)

Φ 32~Φ 63



Φ 80~Φ 100



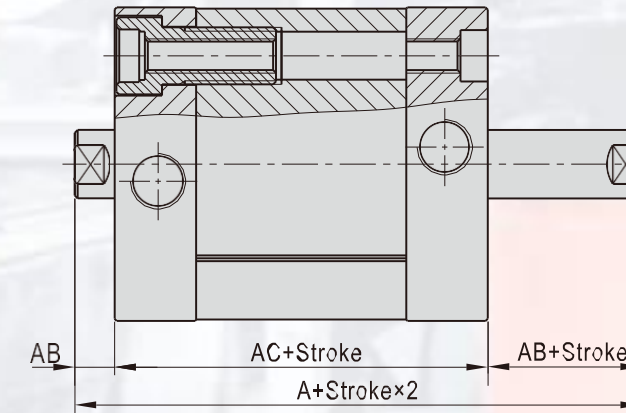
Sign Bore	A	AB	AC	AD	B	D	E	EA	H	J	JA	JB	K	KA	P	PA	PB	R	RA	T	TA
32	51	7	44	14	49.5	12	M8×1.25	16	10	9	4.5	32.5	M6×1.0	28.5	G1/8	7.5	3	8.5	3.5	9	2.1
40	52.5	7	45.5	14.5	55	12	M8×1.25	16	10	9	4.5	38	M6×1.0	28.5	G1/8	7.5	3	8.5	3.5	9	2.1
50	53.5	8	45.5	14.5	65.5	16	M10×1.5	20	13	11	4.5	46.5	M8×1.25	30.5	G1/8	7.5	3	10.5	4.5	12	2.6
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	7.5	4	10.5	4.5	12	2.6
80	63	9	54	16	95.5	20	M12×1.75	20	17	15	2.5	72	M10×1.5	-	G1/8	8.5	6	12.5	6	12	2.6
100	76	9	67	19	113.5	20	M12×1.75	20	17	15	2.5	89	M10×1.5	-	G1/8	10.5	7	12.5	6	12	2.6

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

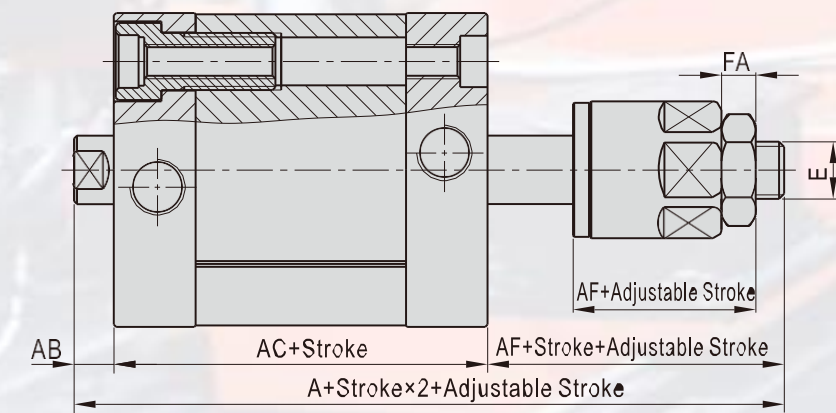
ACE Series Compact Cylinder

■ Main Dimensions

ACED (Double Shaft Double Acting Type)



ACEJ (Double Shaft Adjustable Stroke Type)



Bore	Sign	A(ACED)	A(ACEJ)	AB	AC	AF	FA	E
12		45	57	5	35	17	4	M5×0.8
16		45	61	5	35	21	5	M6×1.0
20		49	68	6	37	25	6	M8×1.25
25		51	70	6	39	25	6	M8×1.25
32		58	78	7	44	27	6	M10×1.25
40		59.5	79.5	7	45.5	27	6	M10×1.25
50		61.5	81.5	8	45.5	28	7	M12×1.25
63		65	85	8	49	28	7	M12×1.25
80		72	92	9	54	29	8	M16×1.5
100		85	105	9	67	29	8	M16×1.5
125		103	127.5	11	81	35.5	10	M20×1.5

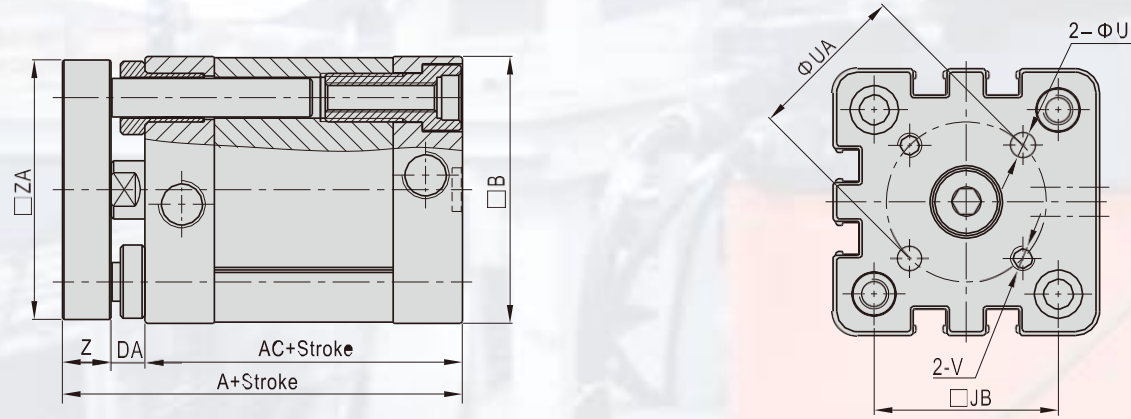
* The unmarked dimension is the same as ACE standard type.

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

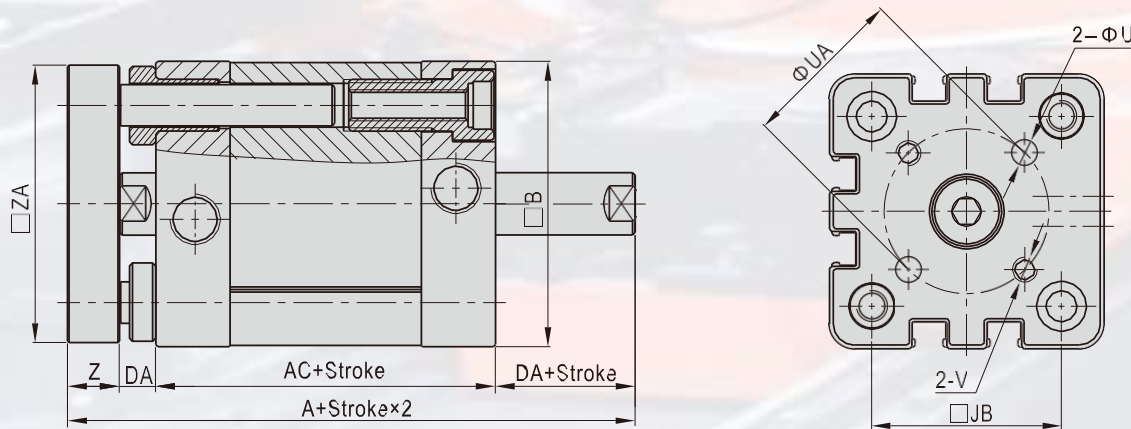
ACE Series Compact Cylinder

Main Dimensions

TACE (Double Acting Non-rotating with Yoke Type)



TACED (Double Shaft Non-rotating with Yoke Type)



Bore	Sign	A(TACE)	A(TACED)	AC	B	DA	JB	U	UA	V	Z	ZA
12		46	51	35	27.5	5	16	3	12	M3×0.5	6	26.5
16		46	51	35	30	5	18	3	14	M3×0.5	6	29
20		51	57	37	35.5	6	22	4	17	M4×0.7	8	34.5
25		53	59	39	40	6	26	5	22	M5×0.8	8	39
32		61	68	44	49.5	7	32.5	5	28	M5×0.8	10	48
40		62.5	69.5	45.5	55	7	38	5	33	M5×0.8	10	53.5
50		62.5	73.5	45.5	65.5	8	46.5	6	42	M6×1.0	12	64
63		69	77	49	75.5	8	56.5	6	50	M6×1.0	12	74
80		77	86	54	95.5	9	72	8	65	M8×1.25	14	94
100		90	99	67	113.5	9	89	10	80	M10×1.5	14	112

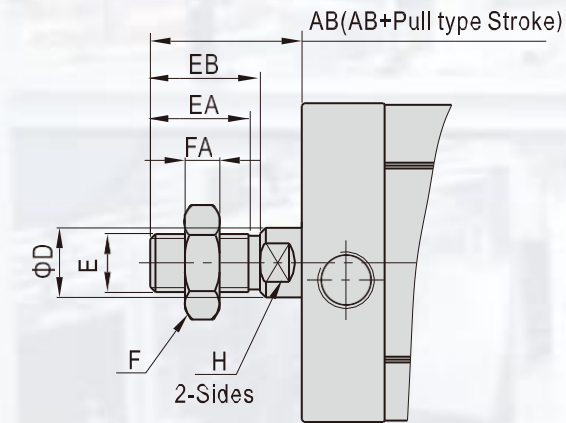
* The unmarked dimension is the same as ACE standard type.

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

ACE Series Compact Cylinder

Main Dimensions

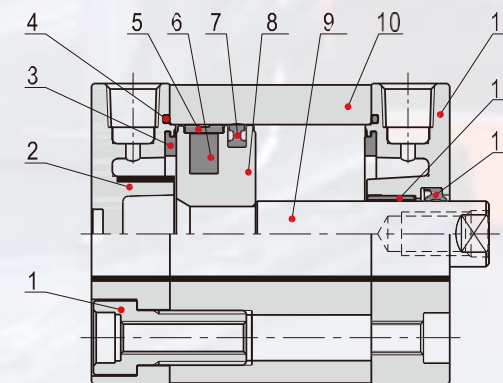
Male Thread



Bore	Sign	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

Inner structure and material of major parts

ACE-S



NO.	Item	Material
1	Screw	Carbon steel
2	Back cover	Aluminum alloy
3	Bumper	TPU
4	O-ring	NBR
5	Wear ring	No(Φ 12 to 20) Wear resistant material (Others)
6	Magnet	Sintered metal (Neodymium-iron-boron)(Φ 12 to 20) Plastic(Others)
7	Piston seal	NBR
8	Piston	Aluminum alloy
9	Piston rod	S45C
10	Body	Aluminum alloy
11	Front cover	Aluminum alloy
12	Bushing	No(Φ 12 to 25) Wear resistant material (Others)
13	Front cover packing	NBR
14	Panel	Aluminum alloy
15	Screw	Carbon steel
16	Bushing	Wear resistant material
17	Guide rod	Stainless steel (Φ 12 to 40) S45C (Others)

TACE-S

