

Pneumatics is changing air that is wherever and infinitely available in the world to power energy. You might seldom see its actual applications, but currently pneumatic equipment are used in production and conveyer lines in almost all industries.

VPC company, which was founded in 1985, as a leading manufacturer, is dedicated to serve the automation and labor saving requirements with our pneumatic product range.

Above, coupled with close connection with customers' requirements, enables us to manufacture and make good valve, high quality products and to operate successfully around the world. As natural result of such policy VPC has been recognized to be in compliance with the requirements as provided for the quality system standard ISO9001:2000, as well as the CE Certificate, which is the first pneumatic enterprise who get both certificates in Ningbo, China.

VPC built an excellent sales team is taking advantage of a widespread net of local and foreign distributor constant expansion in the main worldwide strategic areas. We believe the diversity of our product line, and the sincere work of our staff will make VPC to be world class performance leaders of pneumatic products.

Sincere Service
Good Quality



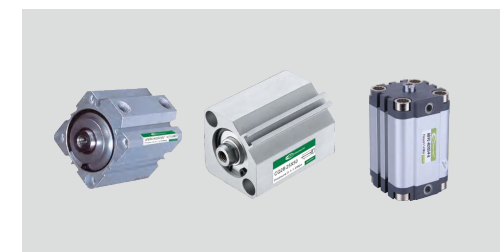
Pneumatic Cylinder



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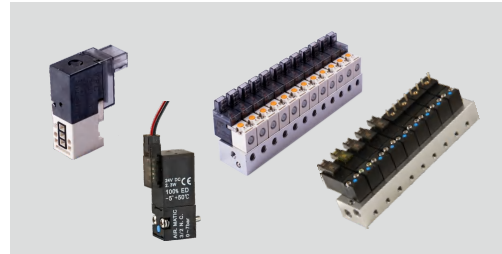


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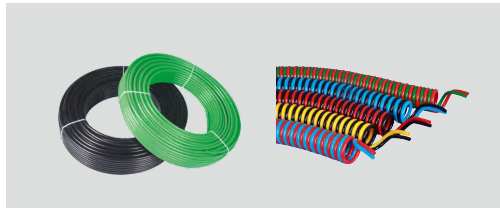
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Measure Conversion Table

Linear Measure

1 in	=25. 4	mm
1 ft	=0. 3048	m
1 mile	=1609. 3	m

Weight Measure

1 lb	=453. 6	g
1 cwt	=50. 8	Kg
1 UK ton	=1016	Kg
1 US ton	=907. 2	Kg
1 ton	=1000	Kg

Torsion Measure

1 in lb	=0. 113	Nm
1 ft lb	=1. 356	Nm
1 kgm	=9. 807	Nm

Temperature Measure

(°F-32) X5/9	=	°C
K-273. 15	=	°C

Capacity Measure

1 Litre	=0. 001	m ³
1 cu ft	=0. 0283	m ³
1 cu in	=16. 39	cm ³
1 US gal	=4. 546	L
1 UK gal	=3. 79	L

Equivalent Exchange

1 psi	=6. 895Kpa=0. 07Kg/cm	=0. 06895bar=0. 0703atm
1sta atm=14. 7psi=101. 3Kpa	=1. 01325bar	
1Kg/cm ² =98. 07Kpa=14. 22psi	=28. 96ins mercury	
1ft lb	=0. 13826kgm	=1. 356Nm
1L	=1000cm ³	=1. 7598pint =10 ⁶ mm ³
1tonne	=1000kg	=0. 984ton =2205lb
1m ³	=10 ⁶ cm ³	
1Pa	=1N/m ²	
1cu ft/min.	=0. 0283m ³ /min	=28. 3l/min

Area Measure

1 in ²	=6. 45	cm ²
1 ft ²	=0. 0929	m ²

Pressure Measure

1 psi	=6. 89	Kpa
1 Kg/cm ²	=98.07	Kpa
1 bar	=100	Kpa
1 bar	=14.5	psi
1 atm	=101.3	Kpa
1 cm water	=97.89	pa
1 in water	=248.64	pa
1 mm mercury	=133.3	pa
1 in mercury	=3.39	Kpa
1 torr	=133.3	pa
1 ft water	=0.0298	bar
1 bar	=33.3	ft water

Energy&Heat Measure

1 lb ft	=1. 356	J
1 N m	=1	J
1 Kg f m	=9. 807	J
1 Kw h	=3. 6	MJ

Force Measure

1 lbf	=4. 45	N
1 Kg f	=9. 81	N
1Kilopond (K P)	=9. 81	N
1 ton force	=9. 81	KN

Power Measure

1 lb ft/sec	=4. 358	W
1 Kg f m/sec	=9. 807	W
1 N m/sec	=1	W
1 Joule/sec	=1	W
1 H. P. (IMP)	=745. 7	W

Cylinder

UserManual

1. Before screwing the correct fitting in, make sure the thread ports and fittings are clean. Be aware of dust or fitting tap falling into the cylinder;
2. It is suggested to use the medium lubricated by 40um filter element;
3. Under the high-temperature environment, use the high-temperature type cylinder. Under the low-temperature environment, take measure to avoid frozen;
4. In order to prevent damaging the cylinder, test the cylinder with loading first and adjust the cushion tightly.
5. In order for the cylinder to achieve long service life, do not side-load cylinder,
6. If the fittings were removed from the cylinder for a period of time, be sure to block the thread port with protecting cap to keep the dust away.

Caution

1. To remove the rust, external impurity and water, please install a filter near to the directional valve.
2. Please use galvanized pipe, nylon tube, rubber pipe etc corrosion resistant pipe materials.
3. For the piping between the cylinder and the directional control valve, please confirm section have effective cross-sectional area of the provisions of the velocity of the piston must be.
4. Piping before the removal of external impurity in the tube, chip etc. Please use compressed air to clean.
5. When connected with the component products, please do not mix with the sealing belt and other foreign bodies.
6. And in poor rod load please keep in axial state.

Maintenance

1. The most suitable temperature for the use of the cylinder is 5-60°C, when the temperature exceeds 60°C, please consider to change the material of the seal ;if the temperature is below 5°C, due to the freezing of water in the loop, there may become an accident, please consider to prevent freezing.
2. Please don't use cylinder corrosion environment , otherwise they will be damaged or dysfunctional if must be used in such an environment, please consult with VPC for solution.
3. Compressed air used must be clean and less water.
4. The purpose of the buffer is to use the energy of the air to absorb the kinetic energy of the moving parts, so that the piston and the end cover are not impacted at the end of the stroke.
5. Pneumatic buffer at the factory has been adjusted. Due to the variation of load to adjust the buffer can slowly rotate to the right needle, counterclockwise is weakened.
6. Please do not use the cylinder directly to the cutting fluid, cooling environment, please add the dust cover on the cylinder.

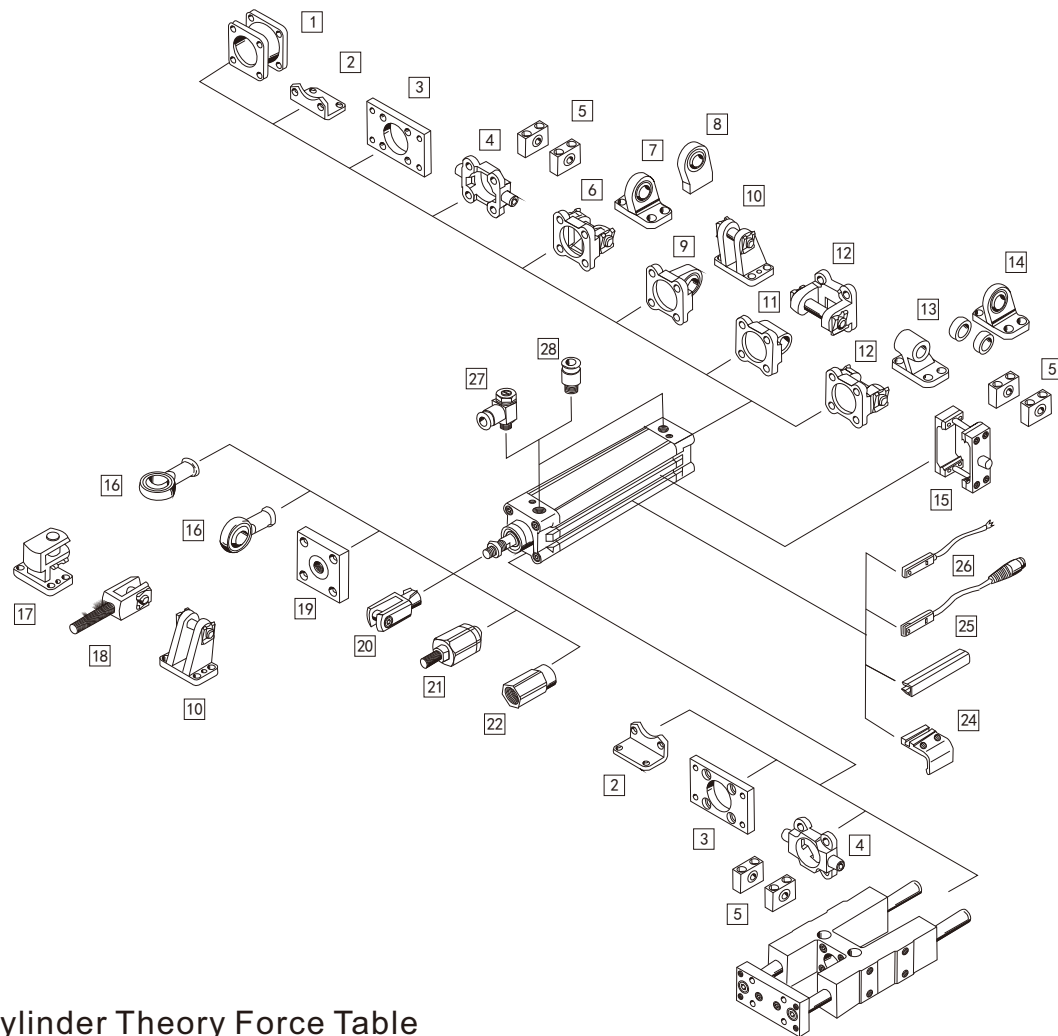
Tips

1. Cylinder can be caused by using the cylinder in the large inertia of the super-permitted range.
2. Please do not beat the cylinder, resulting in injuries, which well cause the cause of bad action.
3. Please install in the horizontal plane, if the installation surface is nueven, may cause the cylinder is damaged.
4. Attention to the inertia force due to external forces, and sometimes lead to negative pressure in the cylinder, so that the cylinder seal off, causing the external leakage.



Technical Data 1

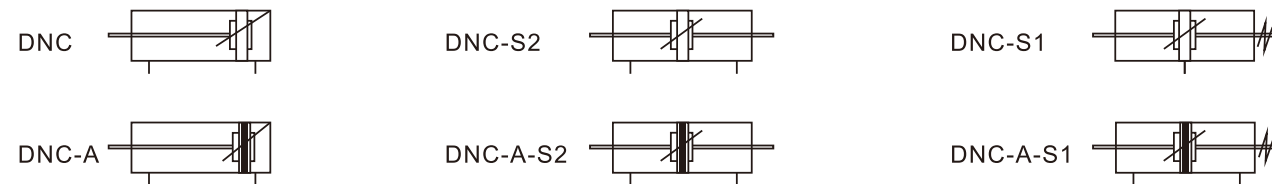
Cylinder Peripheral Component



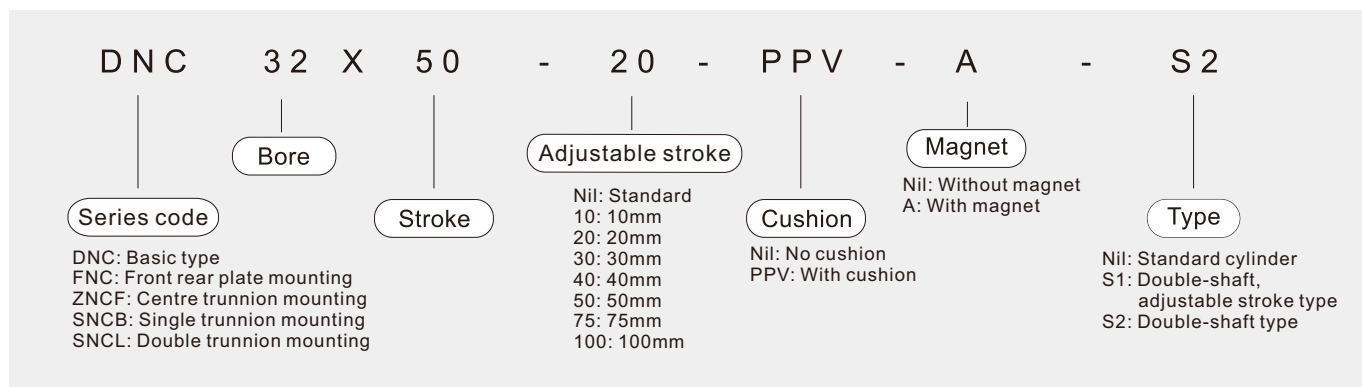
Air Cylinder Theory Force Table

Bore (mm)	OD of rod (mm)	Acting type		Actual working area(mm ²)	Working pressure(MPa)								
					0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
32	12	Double acting	Push force	804	80.4	160.8	241.2	321.6	402.0	482.4	562.8	643.2	723.6
			Pull force	690	69.0	138.0	207.0	276.0	345.0	414.0	483.0	552.0	621.0
40	16	Double acting	Push force	1256	125.6	251.2	376.8	502.4	628.0	753.6	879.2	1002.4	1130.4
			Pull force	1055	105.5	211.0	316.5	422.0	527.5	633.0	738.5	844.0	949.5
50	20	Double acting	Push force	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1	1570.4	1766.7
			Pull force	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3	1399.2	1484.1
63	20	Double acting	Push force	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2	2181.9	2493.6	2805.3
			Pull force	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8	1962.1	2242.4	2522.7
80	25	Double acting	Push force	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2	4020.8	4523.4
			Pull force	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2	3628.8	4082.4
100	25	Double acting	Push force	7853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8	5497.1	6282.4	7067.7
			Pull force	7362	736.2	1472.4	2208.6	2948.6	3681.0	4417.2	5153.4	5889.6	6625.8
125	32	Double acting	Push force	12272	1227.2	2454.4	3681.6	4908.8	6136.0	7363.2	8590.4	9817.6	11044.8
			Pull force	11468	1146.8	2293.6	3440.4	4587.2	5734.0	6880.8	8027.6	9174.4	10321.2
160	40	Double acting	Push force	20106	2010.6	4021.2	6031.8	8042.4	10053.0	12063.6	14074.2	16084.8	18095.4
			Pull force	18849	1884.9	3769.8	5654.7	7539.6	9424.5	11309.4	13194.3	15079.2	16964.1
200	40	Double acting	Push force	31416	3141.6	6283.2	9424.8	12566.4	15708.0	18849.6	21991.2	25132.8	28274.4
			Pull force	30157	3015.7	6031.4	9047.1	12062.8	15078.5	18094.2	21109.9	24125.6	27141.3

DNC Series ISO6431 Standard Cylinder



Ordering Code DNC Series ISO6431 Standard Cylinder



Note: Adjustable stroke type only available as a double-shaft cylinder.

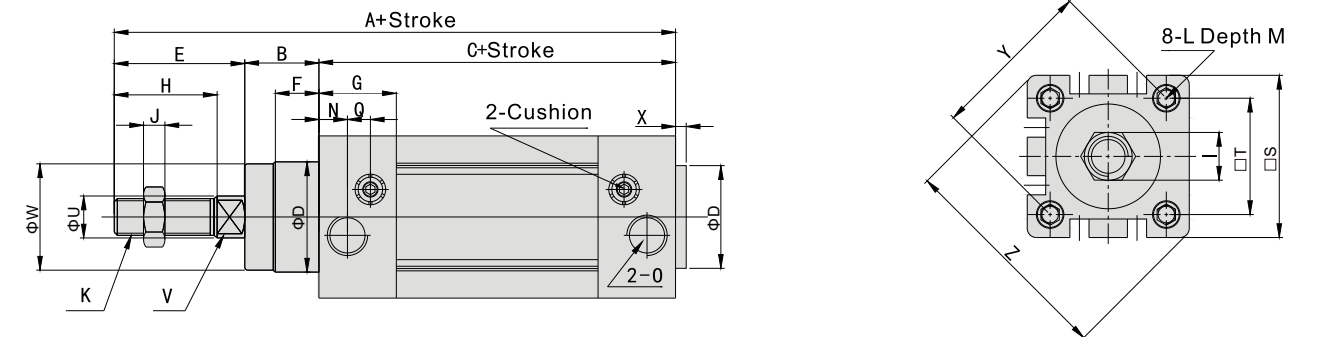
Specifications

Bore (mm)		32	40	50	63	80	100	125
Acting type		Double acting						
Working medium		Clean air (40μm filtration)						
Mounting type	DNC Series	Basic type FA FB CA CB CR LB TC TC-M						
	DNC-S2 Series	Basic type FA LB TC TC-M						
Working pressure range		0.1 to 1.0MPa						
Max. working pressure		1.35MPa						
Working temperature		-5 to 70℃						
Speed range		50 to 800mm/s						
Cushion type		Adjustable cushion						
Cushion stroke		24mm			32mm			
Working life		≥ 4000Km						
Port size		G1/8	G1/4		G3/8		G1/2	

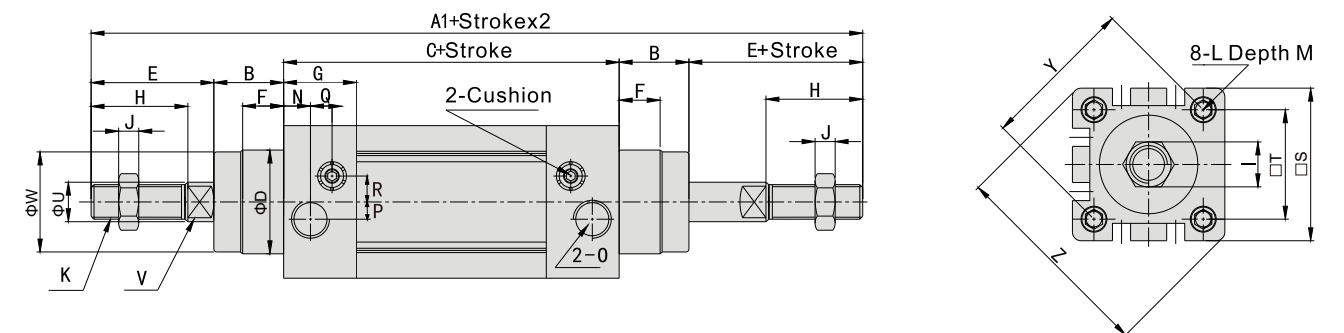
DNC Series ISO6431 Standard Cylinder

Main Dimensions

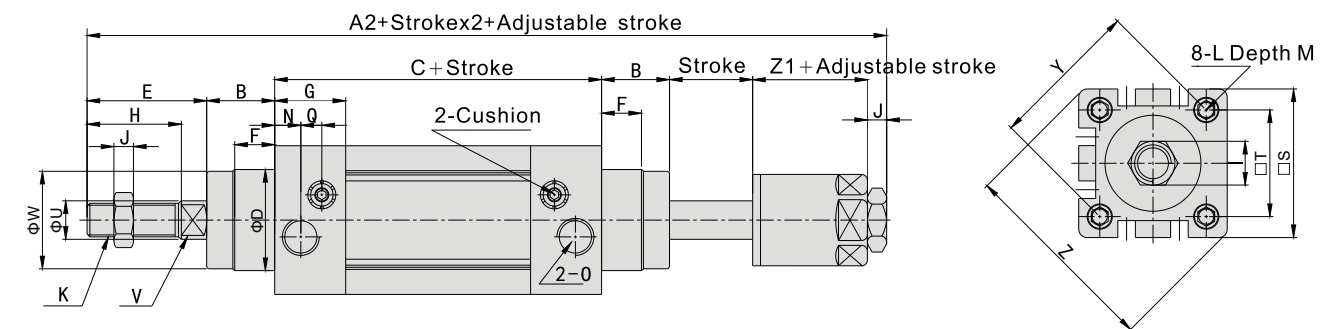
DNC Basic type



DNC-S2 Double shaft type



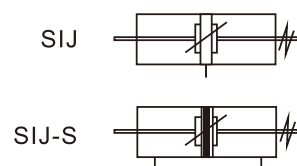
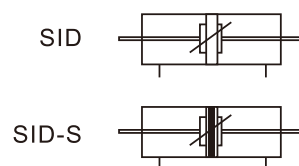
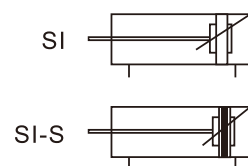
DNC-S1 Double shaft adjustable stroke type



Bore	Sign	A	A1	A2	B	C	ΦD	E	F	G	H	I	J	K
32		142	190	185	16	94	30	32	10	25	22	17	6	M10X1.25
40		159	213	207	20	105	35	34	10	29.5	24	17	7	M12X1.25
50		175	244	233	27	106	40	42	10	32	32	23	8	M16X1.5
63		190	258	247	26	122	45	42	10	36	32	23	8	M16X1.5
80		214	301	288	35	127	45	52	10	37	40	26	10	M20X1.5
100		229	321	308	40	137	55	52	10	39	40	26	10	M20X1.5
125		279	352	-	46	160	60	73	20.5	44.7	54	41	13.5	M27X2

Bore	Sign	M	N	O	P	Q	R	S	T	ΦU	V	ΦW	X	L	Z1
32		12	15	G1/8	5	3	6.5	45	32.5	12	10	28	4	M6	21
40		12	17.5	G1/4	7	3	7	52	38	16	13	33	4	M6	21
50		12	21	G1/4	7	3	9	65	46.5	20	17	38	4	M8	23
63		12	23	G3/8	8	5	9	76	56.5	20	17	40	4	M8	23
80		12	24	G3/8	10	5	12	94	72	25	22	43	5	M10	29
100		12	26	G1/2	10	5	14	112	89	25	22	47	6	M10	29
125		-	22.3	G1/2	13	8	16	134	110	32	27	58	6	M12	-

SI Series ISO6431 Standard Cylinder



Ordering Code SI Series ISO6431 Standard Cylinder

SI	50	X	50	-	S	-	20	-	LB
Series code	Bore		Stroke		Magnet		Adjustable stroke		Mounting type
SI: Standard cylinder SID: Double-shaft type SIJ: Double-shaft adjustable stroke type									
Nil: Without magnet S: With magnet									
Nil: Standard 10: 10mm 20: 20mm 30: 30mm 40: 40mm 50: 50mm 75: 75mm 100: 100mm									
Nil: Standard cylinder LB: Leg mounting FA: Front plate mounting FB: Rear plate mounting CA: Single trunnion mounting CB: Double trunnion mounting CR: Clevis foot TC: Centre trunnion mounting									

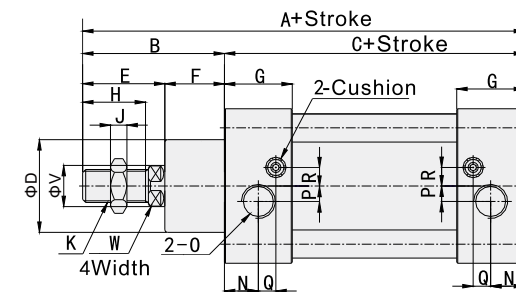
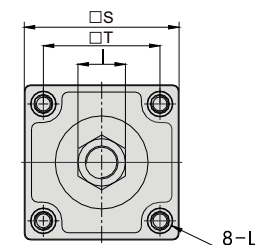
Note: Adjustable stroke type only available as a double-shaft cylinder.

Specifications

Bore (mm)		32	40	50	63	80	100	125	160	200
Acting type		Double acting								
Working medium		Clean air (40µm filtration)								
Mounting type	SI Series	Basic type FA FB CA CB LB TC TC-M1 TC-M2								
	SID Series	Basic type FA LB TC TC-M1 TC-M2								
	SIJ Series	Basic type FA LB TC TC-M1 TC-M2								
Working pressure range		0.1 to 1.0MPa								
Max. working pressure		1.5MPa								
Working temperature		5 to 70°C								
Speed range		SI Series: 50 to 800mm/s Other Series: 30 to 800mm/s								
Cushion type		Adjustable cushion								
Cushion stroke		27mm	30mm	36mm	40mm	50mm				
Port size		G1/8	G1/4	G3/8	G1/2	G3/4				

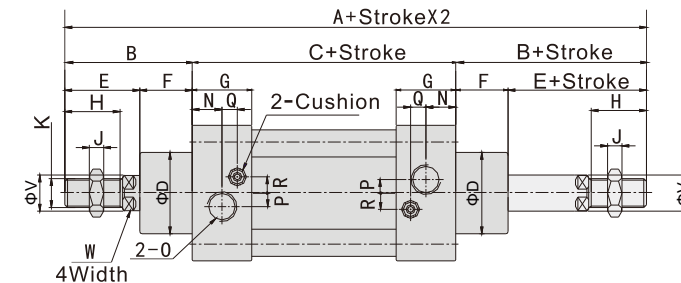
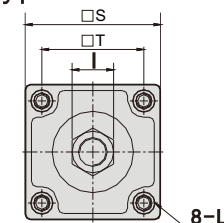
Main Dimensions

Basic type



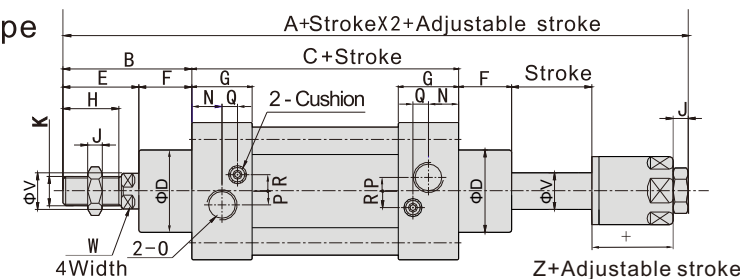
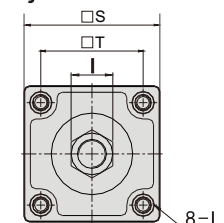
Bore	Sign	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W
32		142	48	94	30	32	16	28	22	17	6	M10X1.25	M6	13.5	G1/8	4	7.5	7	47	32.5	12	10
40		159	54	105	35	36	18	29	24	19	7	M12X1.25	M6	16	G1/4	6	9.5	9	53	38	16	13
50		175	69	106	40	44	25	31	32	24	8	M16X1.5	M8	18.5	G1/4	8.5	6.7	9	65	46.5	20	17
63		190	69	121	45	44	25	32	32	24	8	M16X1.5	M8	19	G3/8	6	7.7	9	75	56.5	20	17
80		214	86	128	45	56	30	35	40	30	10	M20X1.5	M10	19	G3/8	10	5	13.5	95	72	25	22
100		229	91	138	55	59	32	36	40	30	10	M20X1.5	M10	18	G1/2	12.5	10	14.5	115	89	25	22
125		279	119	160	60	74	45	46	54	41	13.5	M27X2	M12	23	G1/2	14	12	14	140	110	32	27
160		332	152	180	65	94	58	50	72	55	18	M36X2	M16	25	G3/4	15	12	20	180	140	40	36
200		347	167	180	75	107	60	50	72	55	18	M36X2	M16	25	G3/4	15	12	20	220	175	40	36

Double shaft type



Bore	Sign	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W
32		190	48	94	30	32	16	28	22	17	6	M10X1.25	M6	13.5	G1/8	4	7.5	7	47	32.5	12	10
40		213	54	105	35	36	18	29	24	19	7	M12X1.25	M6	16	G1/4	6	9.5	9	53	38	16	13
50		244	69	106	40	44	25	31	32	24	8	M16X1.5	M8	18.5	G1/4	8.5	6.7	9	65	46.5	20	17
63		259	69	121	45	44	25	32	32	24	8	M16X1.5	M8	19	G3/8	6	7.7	9	75	56.5	20	17
80		300	86	128	45	56	30	35	40	30	10	M20X1.5	M10	19	G3/8	10	5	13.5	95	72	25	22
100		320	91	138	55	59	32	36	40	30	10	M20X1.5	M10	18	G1/2	12.5	10	14.5	115	89	25	22
125		398	119	160	60	74	45	46	54	41	13.5	M27X2	M12	23	G1/2	14	12	14	140	110	32	27
160		484	152	180	65	94	58	50	72	55	18	M36X2	M16	25	G3/4	15	12	20	180	140	40	36
200		514	167	180	75	107	60	50	72	55	18	M36X2	M16	25	G3/4	15	12	20	220	175	40	36

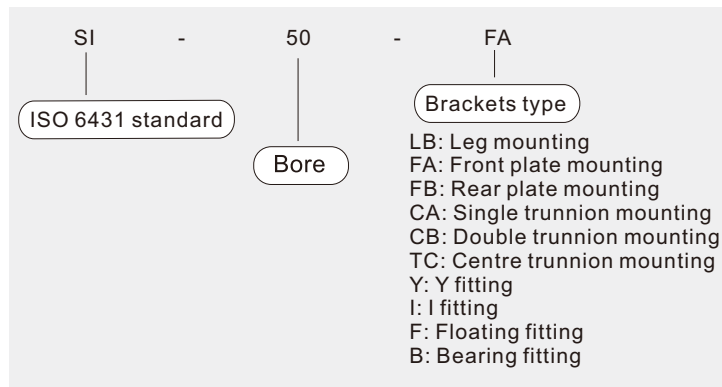
Double shaft adjustable stroke type



Bore	Sign	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	Z
32		187	48	94	30	32	16	28	22	17	6	M10X1.25	M6	13.5	G1/8	4	7.5	6.5	47	32.5	12	10	21
40		207	54	105	35	36	18	29	24	19	7	M12X1.25	M6	16	G1/4	6	9.5	9	53	38	16	13	21
50		233	69	106	40	44	25	31	32	24	8	M16X1.5	M8	18.5	G1/4	8.5	6.7	7.5	65	46.5	20	17	23
63		250	69	121	45	44	25	32	32	24	8	M16X1.5	M8	19	G3/8	6	7.7	9	75	56.5	20	17	23
80		286	86	128	45	56	30	35	40	30	10	M20X1.5	M10	19	G3/8	10	5	13.5	95	72	25	22	29
100		308	91	138	55	59	32	36	40	30	10	M20X1.5	M10	18	G1/2	12.5	10	14.5	115	89	25	22	29
125		373	119	160	60	74	45	46	54	41	13.5	M27X2	M12	23	G1/2	14	12	14	140	110	32	27	35
160		448	152	180	65	94	58	50	72	55	18	M36X2	M16	25	G3/4	15	12	20	180	140	40	36	40
200		472	167	180	75	107	60	50	72	55	18	M36X2	M16	25	G3/4	15	12	20	220	175	40	36	40

DNC/SI ISO6431 Standard Cylinder Brackets

Ordering Code



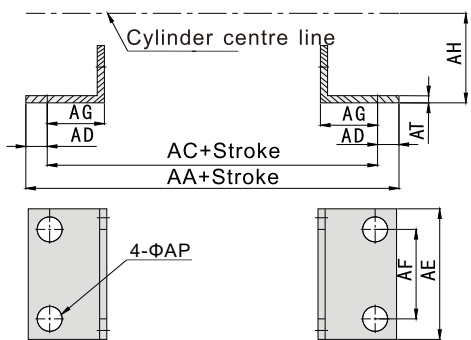
Note: ISO standard accessories, only suitable for DNC, SI ect ISO6431 series standard cylinder.

Accessories

Cylinder		Brackets			
Mounting type	LB	●	●	●	●
	FA	●	●	●	●
	FB	●	X	X	X
	CA	●	X	X	X
	CB	●	X	X	X
	CR	●	X	X	X
	TC	●	●	●	●
	TC-M1	●	●	●	●
	TC-M2	●	●	●	●
	TC-M3	●	●	●	●
Rod end fitting type	I	●	●	●	●
	Y	●	●	●	●
	F	●	●	●	●
	B	●	●	●	●

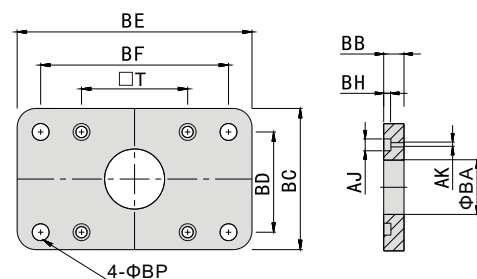
Main Dimensions

LB



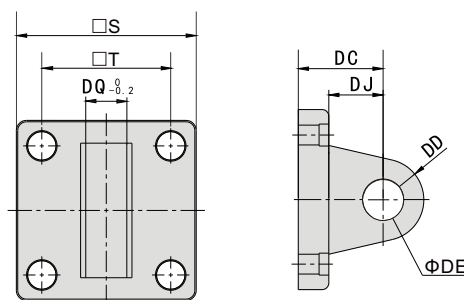
Sign	Bore	32	40	50	63	80	100	125	160	200
AA		158	179	190	209	248	258	290	340	380
AC		142	161	170	185	210	220	250	300	320
AD		8	9	10	12	19	19	20	20	30
AE		48	53	63	73	98	115	140	180	220
AF		32	36	45	50	63	75	90	115	135
AG		24	28	32	32	41	41	45	60	70
AH		32	36	45	50	63	71	90	115	135
ΦAP		7	9	9	9	12	14	16	18	22
AT		4	4	4	4	5	5	8	8	9

FA/FB



Sign	Bore	32	40	50	63	80	100	125	160	200
AJ		10.5	10.5	14	14	17	17	19	25	25
AK		7	7	9	9	11	11	13	17	17
ΦBA		30.3	35.3	40.3	45.3	45.3	55.3	60.3	65.3	75.3
BB		10	10	12	12	16	16	20	20	25
BC		50	55	65	75	100	120	140	180	220
BD		32	36	45	50	63	75	90	115	135
BE		80	90	110	125	154	186	224	280	320
BF		64	72	90	100	126	150	180	230	270
BH		6.5	6.5	6.5	8.5	10.5	10.5	8	8	12
ΦBP		7	9	9	9	12	14	16	18	22
T		32.5	38	46.5	56.5	72	89	110	140	175

CA

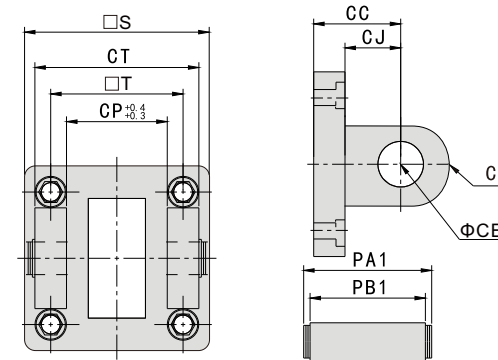


Sign	Bore	32	40	50	63	80	100	125	160	200
S		47	53	65	75	95	115	140	180	220
T		32.5	38	46.5	56.5	72	89	110	140	175
DC		22	25	27	32	36	41	50	55	60
DD		9	12	12	15	15	20	25	30	30
ΦDE		10	12	12	16	16	20	25	30	30
DJ		13	16	17	22	22	27	33	35.5	37
DQ		25.8	27.8	31.7	39.7	49.7	59.7	69.7	89.7	89.7

DNC/SI ISO6431 Standard Cylinder Brackets

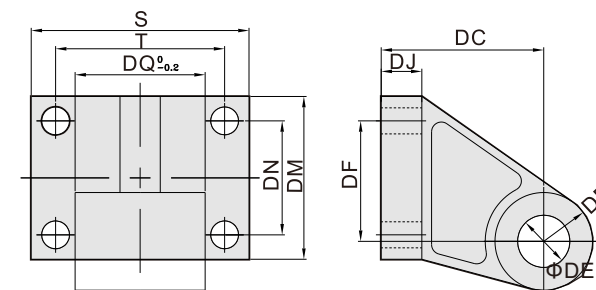
Main Dimensions

CB



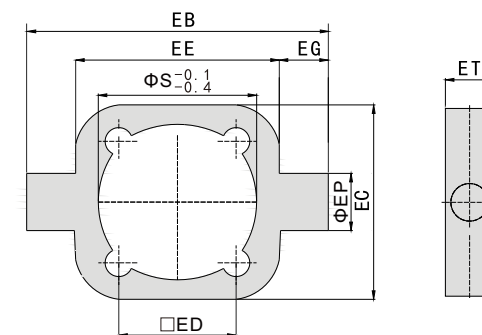
Sign	Bore	32	40	50	63	80	100	125	160	200
CC		22	25	27	32	36	41	50	55	60
CD		9	12	12	15	15	20	25	30	30
ΦCE		10	12	12	16	16	20	25	30	30
CJ		13	16	17	22	22	27	31	35.5	36
CP		26	28	32	40	50	60	70	90	90
CT		45	52	60	70	90	110	130	170	170
PA1		51	59	67	77	97	119	139	181	181
PB1		45.5	52.5	60.5	70.5	90.5	110.5	130.5	170.5	170.5
S		47	53	65	75	95	115	140	180	220
T		32.5	38	46.5	56.5	72	89	110	140	175

CR



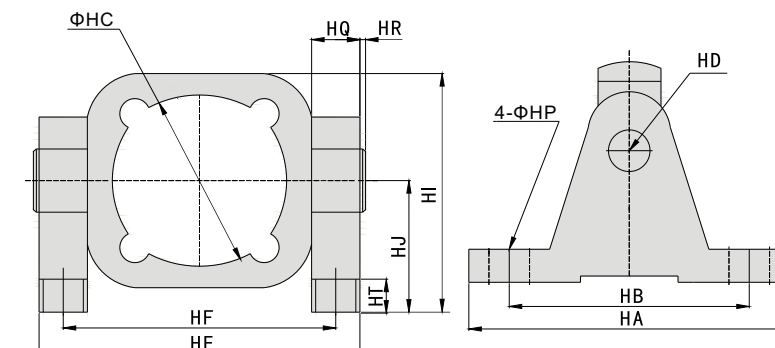
Bore	Sign	S	T	DC	DD	ΦDE	DF	DJ	DQ	DM	DN
32		51	38	32	10	10	21	8	26	31	18
40		54	41	36	11	12	24	9	28	35	22
50		65	50	57	13	12	33	12	31.5	45	30
63		67	52	50	15	16	37	12.5	40	50	35
80		86	66	63	15	16	41.5	14	50	60	40
100		96	76.5	71.5	18.5	20	55	15	60	70	51

TC



Sign	Bore	32	40	50	63	80	100	125	160	200
EB		100	113	125	140	160	182	210	264	314
EC		50	58	70	80	100	126	154	196	240
ED		32.5	38	46.5	56.5	72	89	110	140	175
EE		50	63	75	90	110	132	160	200	250
EG		25	25	25	25	25	25	25	32	32
ΦEP		12	16	16	20	20	25	30	32	32
ET		20	24	28	28	28	28	36	40	40
ΦS		36	45	55	68	86	106	132	170	40

TC-M

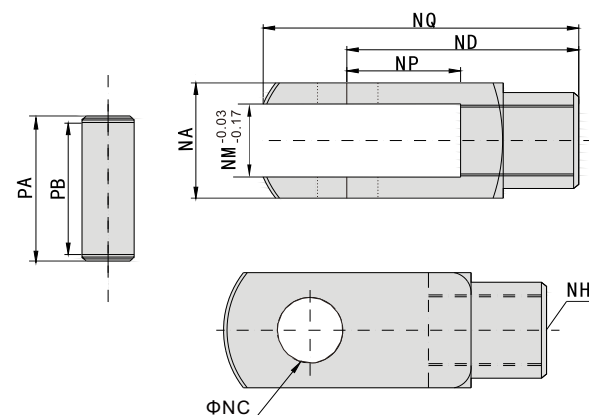


Sign	Bore	32	40	50	63	80	100
HA		110	110	110	120	120	120
HB		80	80	80	80	80	80
ΦHC		36	45	55	58	86	106
HD		22	22	22	22	22	22
HE		96	109	121	136	156	178
HF		73	86	98	113	133	155
HI		68.5	76.5	82	86	113	130
HJ		43.5	47.5	47	46	63	67
HQ		23	23	23	23	23	23
ΦHR		2	2	2	2	2	2
HT		12	12	12	12	14	14
HP		12	12	12	12	14	14

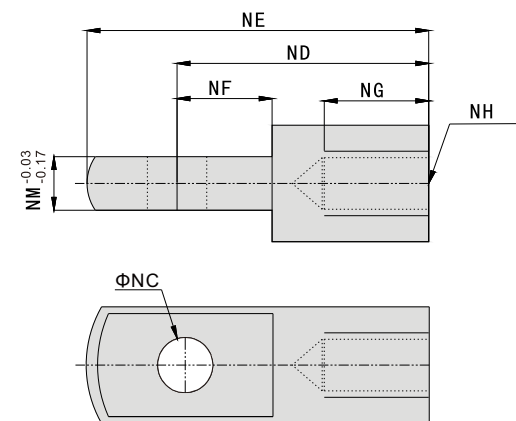
DNC/SI ISO6431 Standard Cylinder Brackets

Main Dimensions

Y Fitting

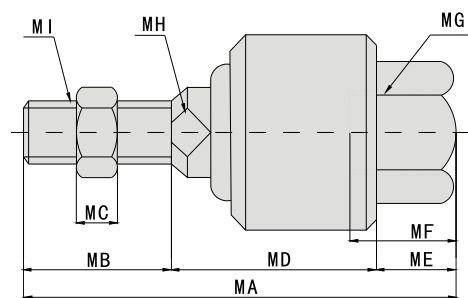


I Fitting



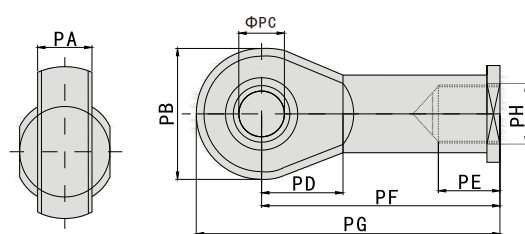
Bore	Sign	NA	ΦNC	ND	NE	NG	NF	NH	NM	NP	NQ	PA	PB
32		19	10	40	52	20	15	M10X1.25	10	20	52	26.2	20
40		25.4	12	48	67	20	24	M12X1.25	12	24	62	32.8	26.5
50		32	16	64	89	23	32	M16X1.5	16	32	83	39.3	33
63		32	16	64	89	23	32	M16X1.5	16	32	83	39.3	33
80		44.4	20	80	112	30	40	M20X1.5	20	40	105	53.3	45
100		44.4	20	80	112	30	40	M20X1.5	20	40	105	53.3	45
125		55	30	110	155	56	50	M27X2.0	30	54	148	64	55.6
160		70	35	144	201	72	50	M36X2.0	35	72	191	80	70.6
200		70	35	144	201	72	55	M36X2.0	35	72	191	80	70.6

Floating Fitting



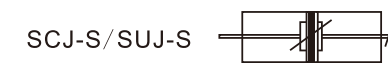
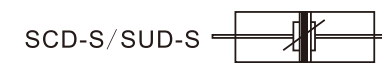
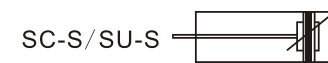
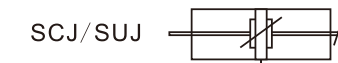
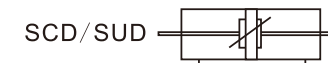
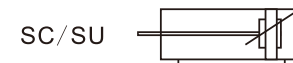
Bore	Sign	MA	MB	MC	MD	ME	MF	MG	MH	MI
32		73	20	6	45	8	26	M10X1.25	12	M10X1.25
40		77	24	7	46	7	26	M12X1.25	12	M12X1.25
50		106	32	8	62	12	34	M16X1.5	19	M16X1.5
63		106	32	8	62	12	34	M16X1.5	19	M16X1.5
80		122	40	10	68	14	42	M20X1.5	19	M20X1.5
100		122	40	10	68	14	42	M20X1.5	19	M20X1.5
125		147	54	13.5	77	16	40	M27X2.0	24	M27X2.0
160		251	72	18	161	18	78	M36X2.0	36	M36X2.0
200		251	72	18	161	18	78	M36X2.0	36	M36X2.0

B Fitting



Bore	Sign	PA	PB	ΦPC	PD	PE	PF	PG	PH
32		14	28	10	15	20	43	57	M10X1.25
40		16	32	12	17	22	50	66	M12X1.25
50		21	42	16	22	28	64	85	M16X1.5
63		21	42	16	22	28	64	85	M16X1.5
80		25	50	20	26	33	77	102	M20X1.5
100		25	50	20	26	33	77	102	M20X1.5
125		37	70	30	36	51	110	145	M27X2.0
160		43	80	35	41	56	125	165	M36X2.0
200		43	80	35	41	56	125	165	M36X2.0

SC/SU Series Standard Cylinder



Ordering Code SC/SU Series Standard Cylinder

SC	50	X	50	-	S	-	20	-	LB
Series code	Bore		Stroke		Magnet		Adjustable stroke		Mounting type
SC: Standard cylinder SCD: Double-shaft type SCJ: Double-shaft, adjustable stroke type SU: Standard cylinder SUD: Double-shaft type SUJ: Double-shaft, adjustable stroke type					Nil: Without magnet S: With magnet		Nil: Standard 10: 10mm 20: 20mm 30: 30mm 40: 40mm 50: 50mm 75: 75mm 100: 100mm		Nil: Standard cylinder LB: Leg mounting FA: Front rear plate mounting FB: Front rear plate mounting CA: Single trunnion mounting CB: Double trunnion mounting CR: Double trunnion with hinge, mounting TC: Centre trunnion mounting

Note: Adjustable stroke type only available as a double-shaft cylinder.

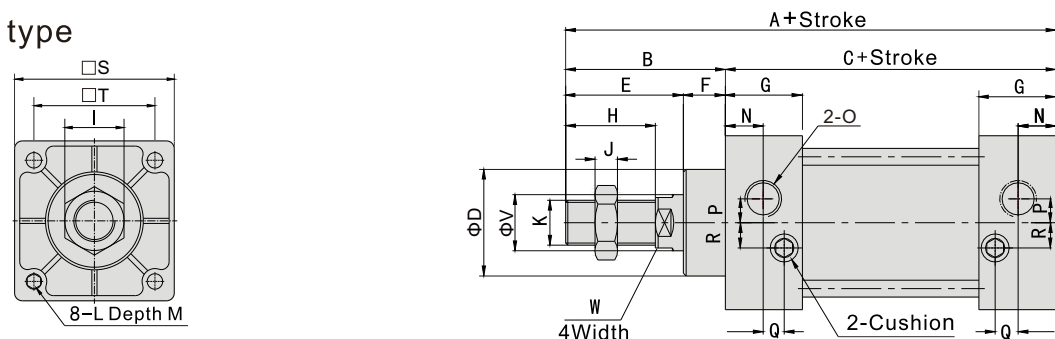
Specifications

Bore (mm)	32	40	50	63	80	100	125	160	200
Acting type	Double acting								
Working medium	Clean air(40μm filtration)								
Mounting type	SC/SU Series Basic type FA FB CA CB CR LB TC TC-M								
	SCD/SUD Series Basic type FA LB TC TC-M								
	SCJ/SUJ Series Basic type FA LB TC TC-M								
Working pressure range	0.1 to 0.9MPa								
Max. working pressure	1.5MPa								
Working temperature	-5 to 70°C								
Speed range	50 to 800mm/s								
Cushion type	Adjustable cushion								
Cushion stroke	20mm			32mm			45mm		
Port size	G1/8	G1/4		G3/8		G1/2		G3/4	

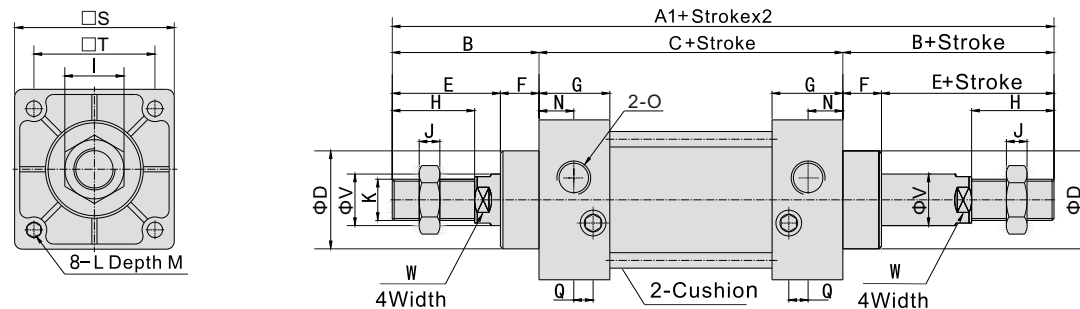
SC/SU Series Standard Cylinder

Main Dimensions

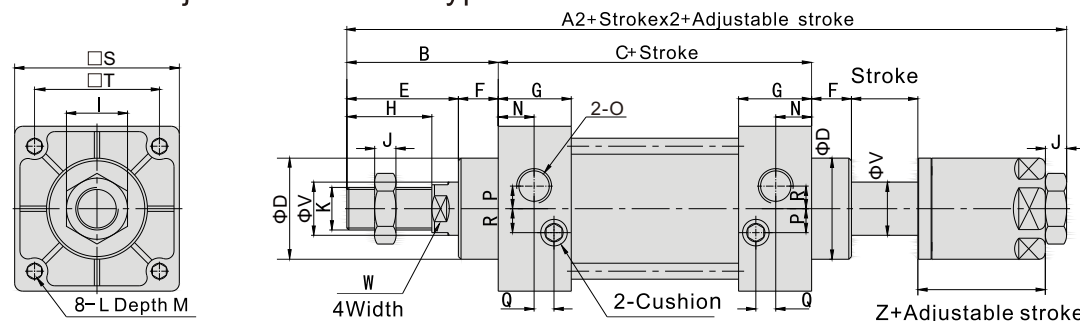
SC Basic type



SCD Double shaft type



SCJ Double shaft adjustable stroke type



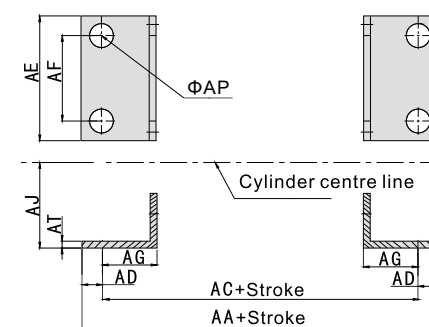
Bore	Sign	A	A1	A2	B	C	ΦD	E	F	G	H	I	J	K
32		140	187	182	47	93	28	32	15	27.5	22	17	6	M10×1.25
40		142	191	185	48	93	32	34	15	27.5	24	17	7	M12×1.25
50		150	207	195	57	93	38	42	15	27.5	32	23	8	M16×1.5
63		153	210	198	57	96	38	42	15	27.5	32	23	8	M16×1.5
80		183	258	243	75	108	47	54	21	33	40	26	10	M20×1.5
100		188	263	244.5	75	113	47	54	21	33	40	26	10	M20×1.5
125		246	347	315	101	145	60	70	31	40	54	41	13.5	M27×2
160		309	/	/	129	180	63	91	38	50	72	50	15	M36×2
200		347	/	/	167	180	75	100	67	50	72	55	18	M36×2

Bore	Sign	L	M	N	O	P	Q	R	S	T	ΦV	W
32		M6×1	13	13.5	G1/8	3.5	7.5	7	45	33	12	10
40		M6×1	13	15	G1/4	5	5	7.5	50	37	16	14
50		M6×1	13	13.75	G1/4	8.5	4.5	10	62	47	20	17
63		M8×1.25	14	14	G3/8	9	5	8.5	75	56	20	17
80		M10×1.5	15	16.5	G3/8	10	7	13	94	70	25	22
100		M10×1.5	18	16.5	G1/2	10	7	13	112	84	25	22
125		M12×1.75	20	21	G1/2	14.5	7	15	140	110	32	29
160		M16×2	22	25	G3/4	/	/	/	180	140	40	36
200		M16×2	22	23.5	G3/4	/	/	/	220	175	40	36

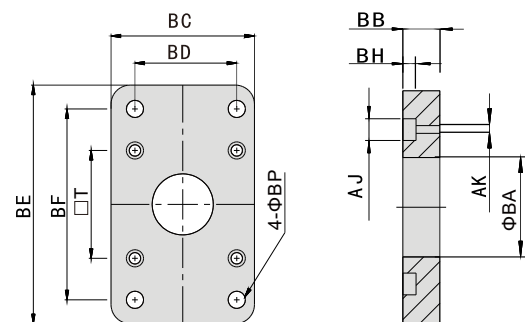
SC/SU Series Standard Cylinder Brackets

Main Dimensions

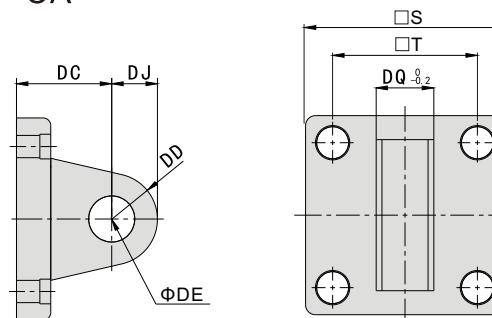
LB



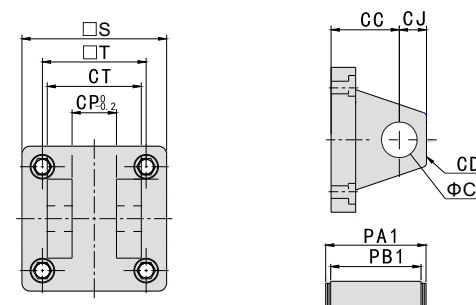
FA/FB



CA



CB



Sign	Bore	32	40	50	63	80	100	125	160	200
AA		153	169	173	184	200	210	249	328	380
AC		134	140	149	158	168	174	213	288	320
AD		9.5	14.5	12	12	16	18	18	20	20
AE		50	57	68	80	97	112	140	180	220
AF		33	36	47	56	70	84	90	115	135
AG		20.5	23.5	28	31	30	30	45	60	70
AJ		28	30	36.5	41	49	57	90	115	135
ΦAP		9	12	12	12	14	14	16	18	22
AT		3.2	3.2	3.2	3.2	4	4	8	8	10

Sign	Bore	32	40	50	63	80	100	125	160	200
ΦBA		28.3	32.3	38.3	38.3	47.3	47.3	56	63	81
BB		10	10	10	12	16	16	20	25	25
BC		47	52	65	76	95	115	140	180	220
BD		33	36	47	56	70	84	90	115	135
BE		72	84	104	116	143	162	224	280	320
BF		58	70	86	98	119	138	180	230	270
BH		6.5	6.5	6.5	8.5	10.5	10.5	15	20	20
AJ		10.5	10.5	13.5	13.5	16.6	16.6	19	25	25
AK		6.5	6.5	8.5	8.5	10.5	10.5	12.5	16.5	16.5
ΦBP		7	7	9	9	12	12	16	18	22
T		33	37	47	56	70	84	110	140	175

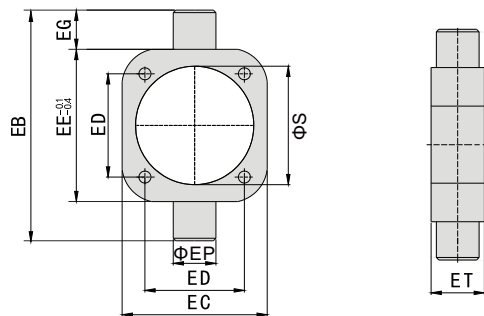
Sign	Bore	32	40	50	63	80	100	125	160	200
S		48	50	62	75	94	112	140	180	220
T		33	37	47	56	70	84	110	140	175
DC		34	34	34	34	48	48	50	55	60
DD		14	14	15	15	20	20	25	30	30
ΦDE		12	14	14	14	20	20	25	30	30
DJ		14	14	15	15	20	20	25	30	30
DQ		16	20	20	20	32	32	70	90	90

Sign	Bore	32	40	50	63	80	100	125	160	200
CC		19	19	19	19	32	32	50	55	60
CD		5	5	3	3	8	8	25	30	30
ΦCE		12	14	14	14	20	20	25	30	30
CJ		13	13	15	15	21	21	25	30	30
CP		16.3	20.5	20.3	20.3	32.3	32.3	70	90	90
CT		32	44	52	52	64	64	120	160	160
PA1		41	51.8	60.3	60.3	73.8	73.8	130	170	170
PB1		33.5	45.8	54	54	65.5	65.5	121.5	161.5	161.5
S		48	50	62	75	94	112	140	180	220
T		33	37	47	56	70	84	110	140	175

SC/SU Series Standard Cylinder Brackets

Main Dimensions

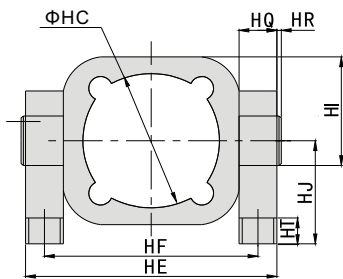
TC



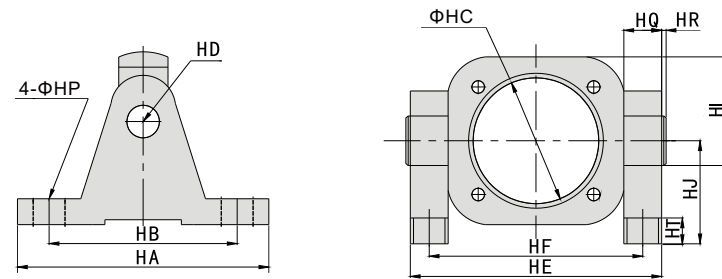
Sign Bore	40	50	63	80	100	125	160	200
EB	113	126	138	164	182	210	264	336
EC	63	76	88	114	132	160	200	240
ED	37	47	56	70	84	110	140	175
EE	63	76	88	114	132	160	200	240
EG	30	30	30	30	30	30	32	48
ΦEP	25	30	30	30	30	30	32	38
ET	30	30	30	30	30	30	38	44
ΦS	45.5	55.5	68.5	87.5	107.5	134.5	172.5	212.5

TC-M

For SU Series

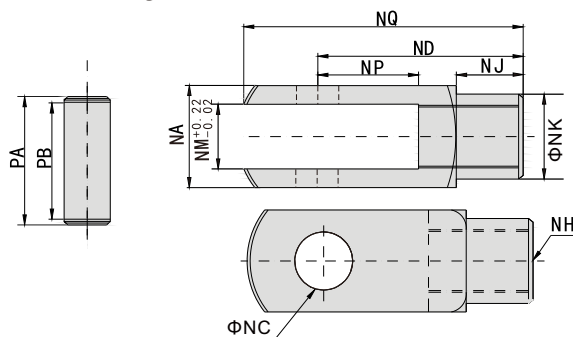


For SC Series

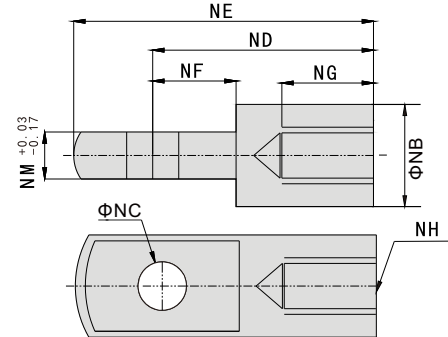


Sign Bore	HA	HB	ΦHC	HD	HE	HF	HI	HJ	HQ	HR	HT	ΦHP
40	110	80	45.5	22	109	86	81.5	50	23	2	12	12
50	110	80	55.5	22	122	99	88	50	23	2	12	12
63	110	80	68.5	22	134	111	94	50	23	2	12	12
80	120	85	87.5	22	160	137	127	70	23	2	14	14
100	120	85	107.5	22	178	155	136	70	23	2	14	14

Y Fitting



I Fitting



Sign Bore	NA	ΦNB	ΦNC	ND	NE	NF	NG	NH	NJ	ΦNK	NM	NP	NQ	PA	PB
32	19	20	10	40	52	15	20	M10X1.25	12	18	10	20	52	25	19.5
40	25.4	24	12	48	67	24	20	M12X1.25	20	23	12	24	62	32.8	26.5
50	32	32	16	64	89	32	23	M16X1.5	22	30	16	32	83	39.3	33
63	32	32	16	64	89	32	23	M16X1.5	22	30	16	32	83	39.3	33
80	44.4	40	20	80	112	40	30	M20X1.5	30	39	20	40	105	53.3	45
100	44.4	40	20	80	112	40	30	M20X1.5	30	39	20	40	105	53.3	45
125	55	45	25	110	155	40	56	M27X2	30	54	48	64	148	64	55
160	80	54	35	120	201	35	50	M36X2	40	54	40	35	150	91	81
200	80	54	35	120	201	35	50	M36X2	40	54	40	35	150	91	81

MB Series Standard Cylinder

Ordering Code MB Series Standard Cylinder

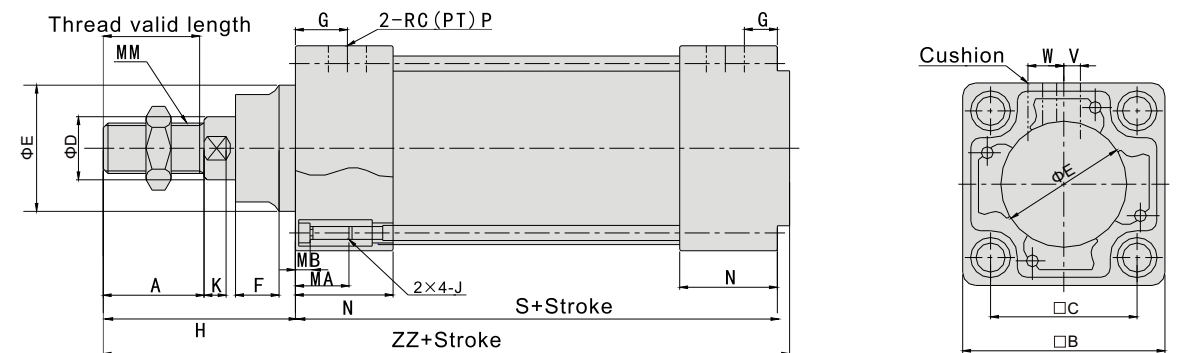
M	B	32	X	50
Mounting type B: Standard cylinder		Stroke		
Magnet Nil: Without magnet D: With magnet		Bore 32: 32mm 40: 40mm 50: 50mm 63: 63mm 80: 80mm 100: 100mm 125: 125mm		



Specifications

Bore (mm)	32	40	50	63	80	100	125
Working medium	Clean air (40μm filtration)						
Acting type	Double acting						
Max. working pressure	1.0MPa						
Min. working pressure	0.05MPa						
Speed range(mm/s)	50 to 1000						50 to 700
Cushion	Cushion both side						
Oil	No Need						
Port size	G1/8	G1/4	G3/8	G1/2			

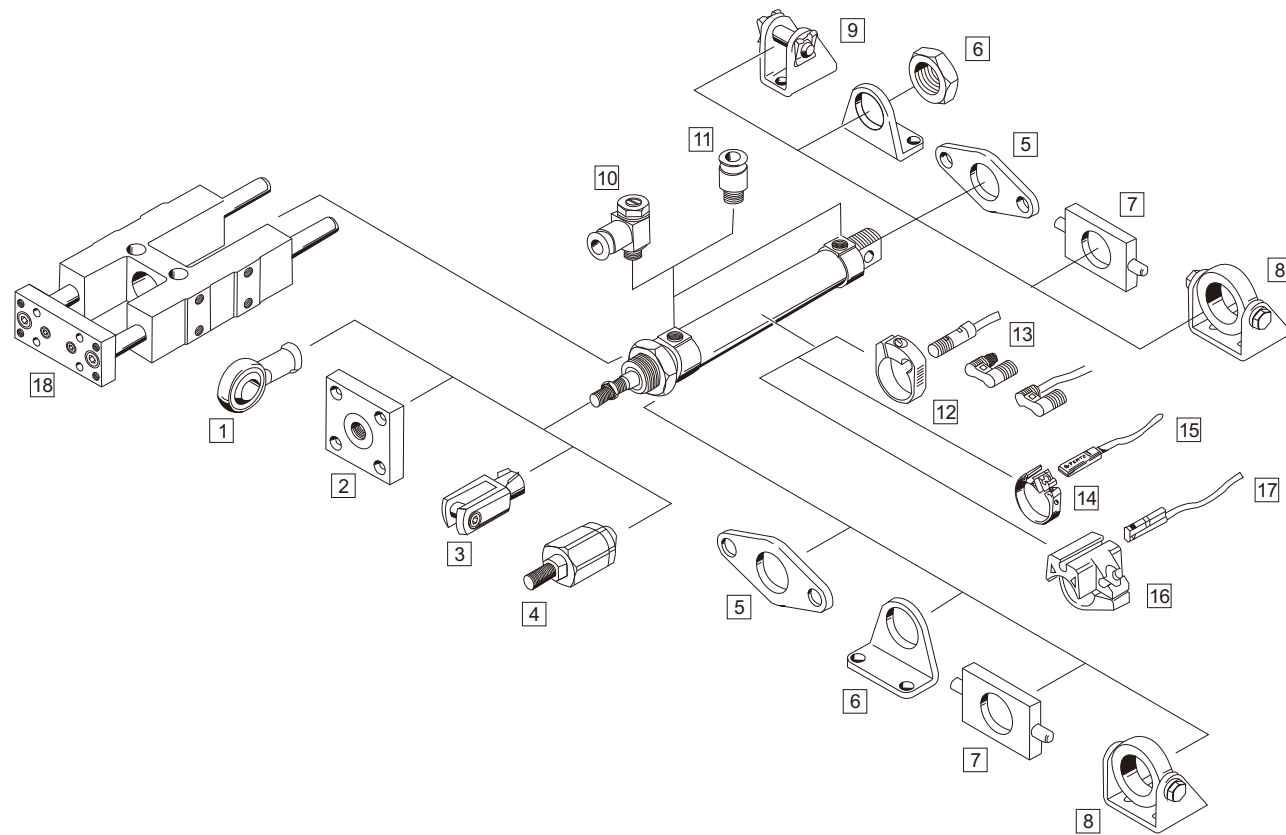
Main Dimensions



Bore	Stroke range	Thread length	A	ΦB	ΦC	ΦD	ΦE	F	G	MA	MB	J	K	MM	N	P	S	V	W	H	ZZ
32	~500	19.5	22	46	32.5	12	30	13	13	16	4	M6X1.0	6	M10X1.25	27	1/8	84	4	6.5	47	135
40	~500	27	30	52	38	16	35	13	14	16	4	M6X1.0	6	M14X1.5	27	1/4	84	4	9	51	139
50	~600	32	35	65	46.5	20	40	14	15.5	16	5	M8X1.25	7	M18X1.5	31.5	1/4	94	5	10.5	58	156
63	~600	32	35	75	56.5	20	45	14	16.5	16	5	M8X1.25	7	M18X1.5	31.5	3/8	94	9	12	58	156
80	~800	37	40	95	72	25	45	20	19	16	5	M10X1.5	10	M22X1.5	38	3/8	114	11.5	14	72	190
100	~800	37	40	114	89	30	55	20	19	16	5	M10X1.5	10	M26X1.5	38	1/2	114	17	15	72	190
125	~1000	50	54	136	110	32	60	27	19	20	6	M12X1.75	13	M27X2.0	38	1/2	120	17	15	97	223

Technical Data 2

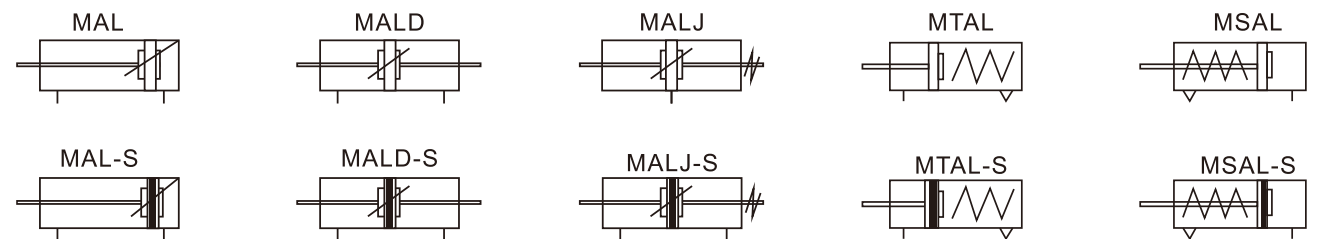
Cylinder Peripheral Component



Air cylinder theory force table

Bore(mm)		16			20			25			32			40			50		63	
OD of rod(mm)		6			8			10			12			16			16		16	
Acting type		Single acting spring extend	Double acting		Single acting spring extend	Double acting		Single acting spring extend	Double acting		Single acting spring extend	Double acting		Single acting spring extend	Double acting		Double acting		Double acting	
			Push force	Pull force		Push force	Pull force		Push force	Pull force		Push force	Pull force		Push force	Pull force	Push force	Pull force	Push force	Pull force
Actual working area(mm²)		201	201	181	314	314	264	490	490	412	804	804	690	1256	1256	1055	1963	1762	3116	2915
Working pressure (MPa)	0.1	-	20.1	18.1	-	31.4	26.4	-	49.0	41.2	-	80.4	69.0	-	125.6	105.5	196.3	176.2	311.6	291.5
	0.2	-	40.2	36.2	15.7	62.8	52.8	24.5	98.0	82.4	40.2	160.8	138.0	62.8	251.2	211.0	392.6	352.4	487.8	603.1
	0.3	20.1	60.3	54.3	47.1	94.2	79.2	73.5	147.0	123.6	120.6	241.2	207.0	188.4	376.8	316.5	588.9	528.6	799.4	894.6
	0.4	40.2	80.4	72.4	78.5	125.6	105.6	122.5	196.0	164.8	201.0	321.6	276.0	314.0	502.4	422.0	785.2	704.8	1111	1186
	0.5	60.3	100.5	90.5	109.9	157.0	132.0	171.5	245.0	206.0	281.4	402.0	345.0	439.6	628.0	527.5	981.5	881.0	1422	1477
	0.6	80.4	120.6	108.6	141.3	188.4	158.4	220.5	294.0	247.2	361.8	482.4	414.0	565.2	753.6	633.0	1177	1057	1734	1769
	0.7	100.4	140.7	126.7	172.7	219.8	184.8	269.5	343.0	288.4	442.2	562.8	483.0	690.8	879.2	738.5	1374	1233	2045	2060
	0.8	-	-	-	204.1	251.2	211.2	318.5	392.0	329.6	522.6	643.2	552.0	816.4	1004	844.0	1570	1409	2357	2352
	0.9	-	-	-	235.5	282.6	237.6	367.5	441.0	370.8	603.0	723.6	621.0	942.0	1130	949.5	1766	1585	2669	2643

MAL Series Mini Cylinder



Ordering Code MAL Series Mini Cylinder

M A L	-	C M		2 0	X	5 0	-	2 0	-	S	-	L B
Series code		Rear cover type		Bore		Stroke		Adjustable stroke		Magnet		Mounting type
MAL: Double acting MSAL: Spring extend MTAL: Spring return MALD: Double shaft acting MALJ: Adjustable cushion type		CA: Swivelling tail CM: Round tail U: Flat tail						Nil: Standard 10: 10mm 20: 20mm 30: 30mm 40: 40mm 50: 50mm 75: 75mm 100: 100mm		Nil: Without magnet S: With magnet		Nil: Standard cylinder LB: Leg mounting FA: Front rear plate mounting SDB: Trunnion bracket mounting

Note: Adjustable stroke type only available as a double-shaft cylinder.

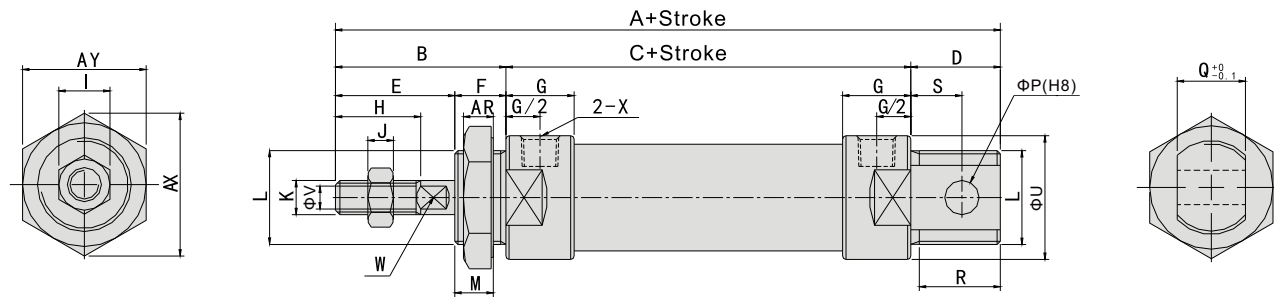
Specifications

Bore (mm)	16	20	25	32	40
Acting type	MAL, MALD, MALJ Series: Double acting, MSAL, MATL Series: Single acting				
Working medium	Clean air (40µm filtration)				
Mounting type	MAL, MSAL, MATL Series: Basic type LB FA SDB, MALD, MALJ Series: Basic type LB FA				
Working pressure range	MAL, MALD, MALJ Series: 0.1 to 0.9MPa, MSAL, MATL Series: 0.2 to 0.9MPa				
Max. working pressure	1.5MPa				
Working temperature	-5 to 70 °C				
Speed range	MAL Series: 30 to 800mm/s, Other Series: 50 to 800mm/s				
Port size	M5X0.8	G1/8			G1/4

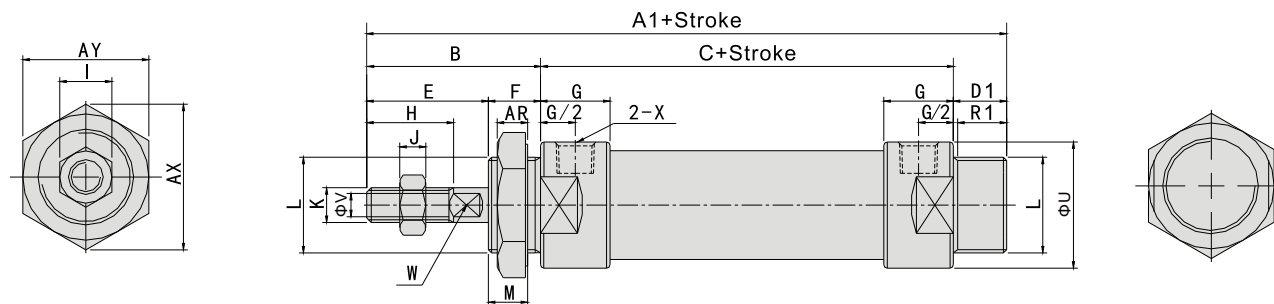
MAL Series Mini Cylinder

Main Dimensions

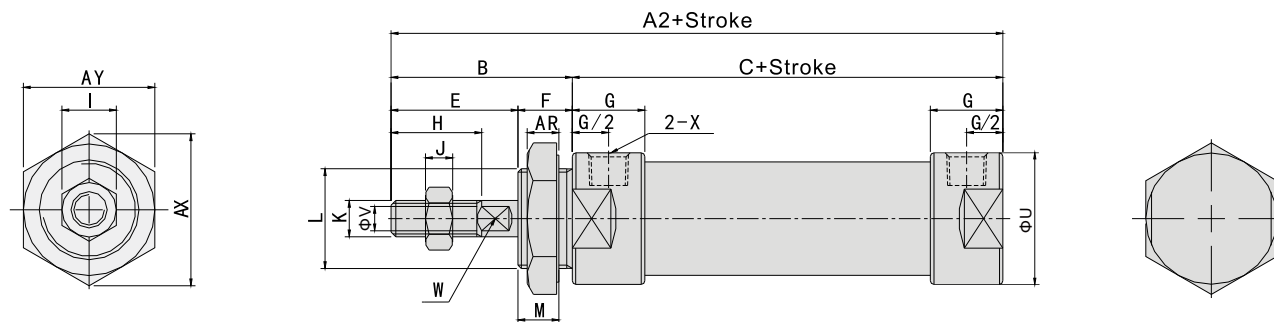
MAL-CA Swivelling Tail



MAL-CM Round Tail



MAL-U Flat Tail



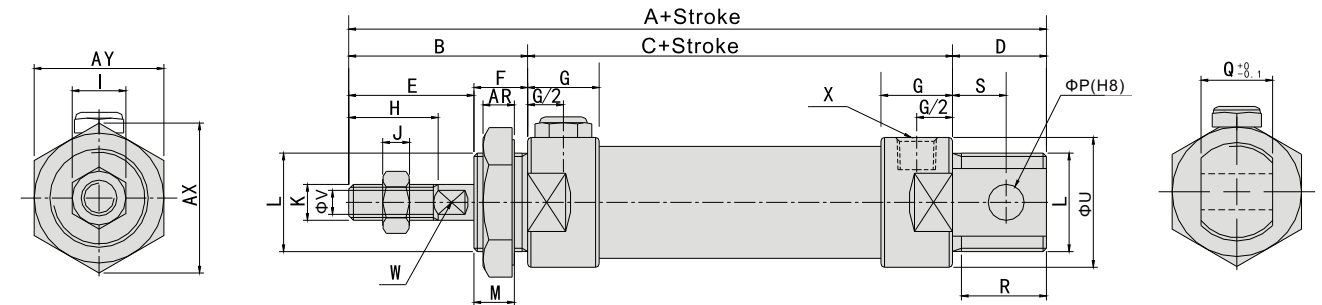
Bore	Sign	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
16		104	104	90	38	52	15	15	24	14	11	16	10	5	M6x1
20		131	122	110	40	70	21	12	28	12	16	20	12	6	M8x1.25
25		135	128	114	44	70	21	14	30	14	16	22	17	6	M10x1.25
32		141	128	114	44	70	27	14	30	14	16	22	17	6	M10x1.25
40		165	152	138	46	92	27	14	32	14	22	24	17	7	M12x1.25

Bore	Sign	L	M	ΦP	Q	R	R1	S	ΦU	ΦV	W	X	AR	AX	AY
16		M16x1.5	8	6	12	13	/	6	20	6	/	M5	7	24	27.5
20		M22x1.5	10	8	16	19	10	12	29	8	6	G1/8	7	33	29
25		M22x1.5	12	8	16	19	12	12	34	10	8	G1/8	7	33	29
32		M24x2.0	12	10	16	25	12	15	39.5	12	10	G1/8	8	37	32
40		M30x2.0	12	12	20	25	12	15	49.5	16	14	G1/4	9	47	41

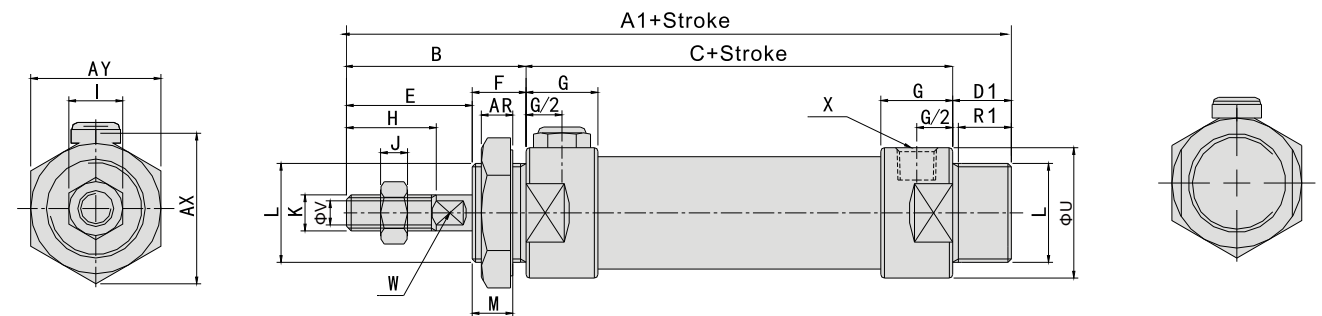
MAL Series Mini Cylinder

Main Dimensions

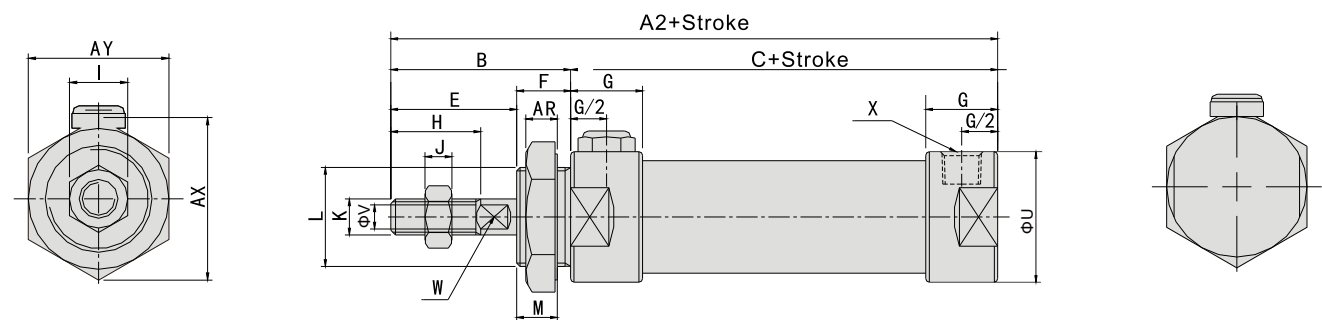
MSAL-CA Single Acting Swivelling Tail



MSAL-CM Single Acting Round Tail



MSAL-U Single Acting Flat Tail



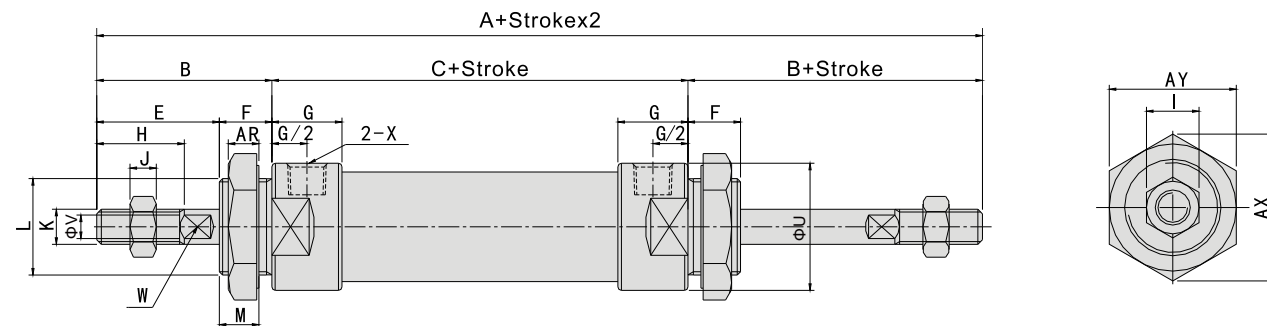
Sign	A	A1	A2	B	C	D	D1	E	F	G	H	I	J
Bore/Stroke	0~50	51~100	0~50	51~100	0~50	51~100							
20	131	156	122	147	110	135	40	70	95	21	12	28	12
25	135	160	128	153	114	139	44	70	95	21	14	30	14
32	141	166	128	153	114	139	44	70	95	27	14	30	14
40	165	190	152	177	138	163	46	92	117	27	14	32	14

Bore	Sign	K	L	M	ΦP	Q	R	R1	S	ΦU	ΦV	W	X	AR	AX	AY
20		M8X1.25	M22X1.5	10	8	16	19	10	12	29	8	6	G1/8	7	33	29
25		M10X1.25	M22X1.5	12	8	16	19	12	12	34	10	8	G1/8	7	33	29
32		M10X1.25	M24X2.0	12	10	16	25	12	15	39.5	12	10	G1/8	8	37	32
40		M12X1.25	M30X2.0	12	12	20	25	12	15	49.5	16	14	G1/4	9	47	41

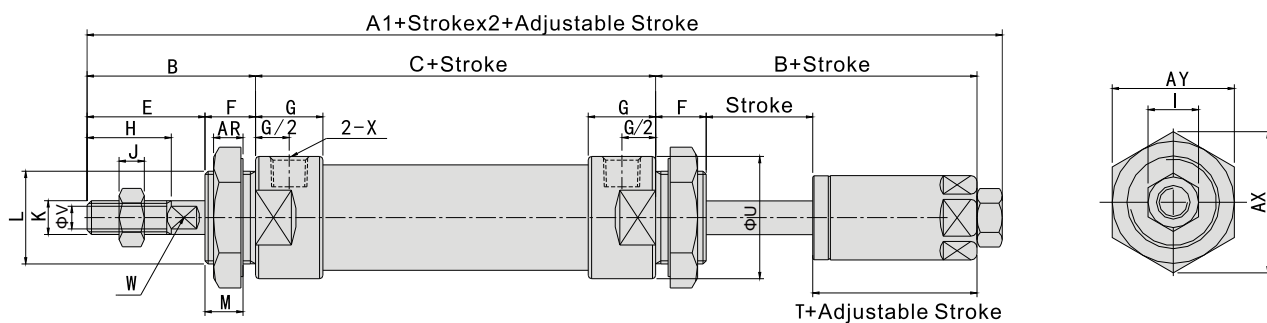
MAL Series Mini Cylinder

Main Dimensions

MALD Double shaft type



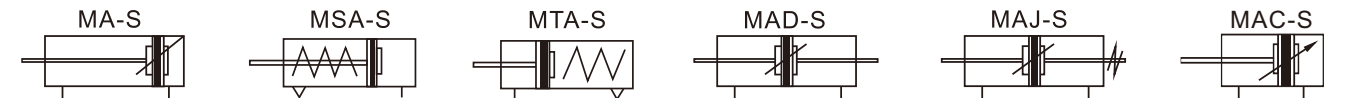
MALJ Double shaft adjustable stroke type



Bore	Sign	A	A1	B	C	E	F	G	H	I	J	K
20		131	122	40	70	28	12	16	20	12	6	M8X1.25
25		135	128	44	70	30	14	16	22	17	6	M10X1.25
32		141	128	44	70	30	14	16	22	17	6	M10X1.25
40		165	152	46	92	32	14	22	24	17	7	M12X1.25

Bore	Sign	L	M	ΦU	ΦV	W	X	AR	AX	AY	T
20		M22X1.5	10	29	8	6	G1/8	7	33	29	19
25		M22X1.5	12	34	10	8	G1/8	7	33	29	21
32		M24X2.0	12	39.5	12	10	G1/8	8	37	32	21
40		M30X2.0	12	49.5	16	14	G1/4	9	47	41	21

MA Series Mini Cylinder



Ordering Code MA Series Mini Cylinder

MA	-	CM	20	X	50	-	20	-	LB
Series code		Rear cover type			Stroke		Adjustable stroke		Mounting type
MA: Double acting		CA: Swivelling tail					Nil: Standard		Nil: Standard cylinder
MSA: Spring extend		CM: Round tail					10: 10mm		LB: Leg mounting
MTA: Spring return		U: Flat tail					20: 20mm		FA: Front rear plate mounting
MAD: Double rod							30: 30mm		SDB: Trunnion bracket mounting
MAJ: Adjustable stroke							40: 40mm		
MAR: Double acting with cushion							50: 50mm		
MAC: Double acting with cushion							75: 75mm		
MACD: Double rod with cushion							100: 100mm		
MACJ: Adjustable stroke with cushion									

Note: Adjustable stroke type only available as a double-shaft cylinder.

Specifications

Bore(mm)		16	20	25	32	40	50	63
Acting type	MSA MTA	Single acting					—	
	MA MAD MAJ	Double acting					—	
	MAR	—	Double acting					
	MAC MACD MACJ	—	Double acting with cushion					
Working medium		Air(to be filtered by 40μm filter element)						
Working pressure	Double acting	0.1 to 1.0MPa						
	Single acting	0.2 to 1.0MPa						
Max. working pressure		1.5MPa						
Working temperature		-20 to 70℃						
Speed range		Double acting: 30 to 500mm/s Single acting: 50 to 500mm/s						
Stroke tolerance		Stroke≤150 +1.0 0 Stroke>150 +1.4 0						
Cushion type		MAC , MACD, MACJ Series: Adjustable cushion Other series: Bumper						
Port size		M5×0.8	G1/8				G1/4	

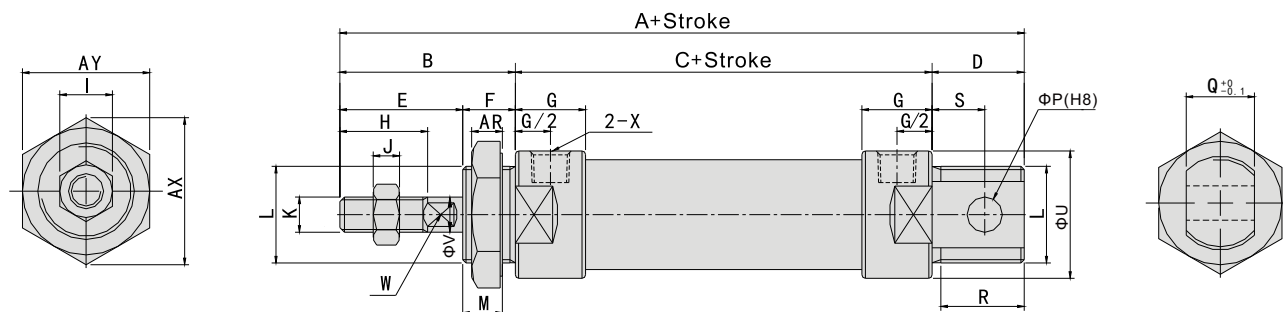
* PT thread, NPT thread and G thread are available.

MA Series Mini Cylinder

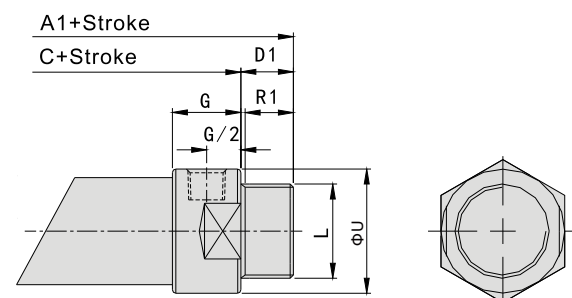
Main Dimensions

Φ 16~Φ 40

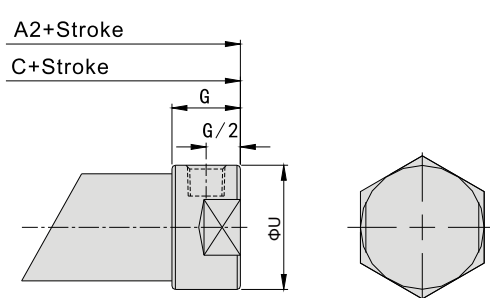
MA (MAC) - CA Swivelling tail



MA (MAC) - CM Round tail



MA (MAC) - U Flat tail

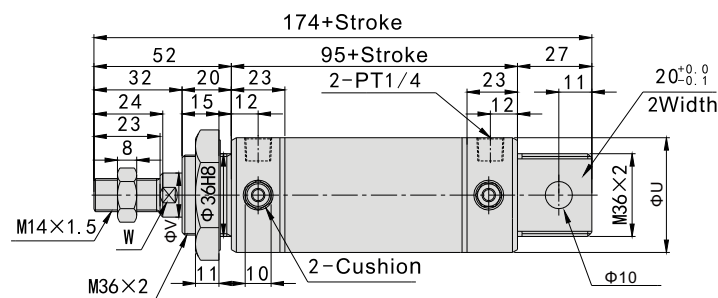
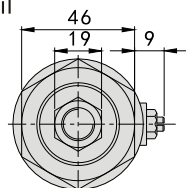


Bore	Sign	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
16		114	114	98	38	60	16	15	22	16	10	16	10	5	M6X1
20		137	128	116	40	76	21	12	28	12	16	20	12	6	M8X1.25
25		141	134	120	44	76	21	14	30	14	16	22	17	6	M10X1.25
32		147	134	120	44	76	27	14	30	14	16	22	17	6	M10X1.25
40		149	136	122	46	76	27	14	32	14	16.7	24	17	7	M12X1.25

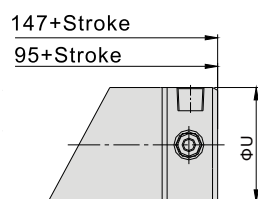
Bore	Sign	L	M	ΦP	Q	R	R1	S	ΦU	ΦV	W	X	AR	AX	AY
16		M16X1.5	14	6	12	14	14	9	21	6	5	M5	6	25	22
20		M22X1.5	10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25		M24X1.5	12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32		M24X2.0	12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40		M30X2.0	12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

MA (MAC) Φ50 Φ63

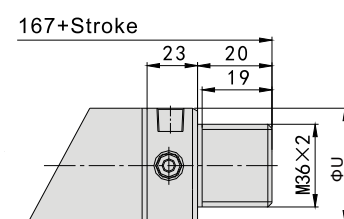
Swivelling tail



Flat tail



Round tail

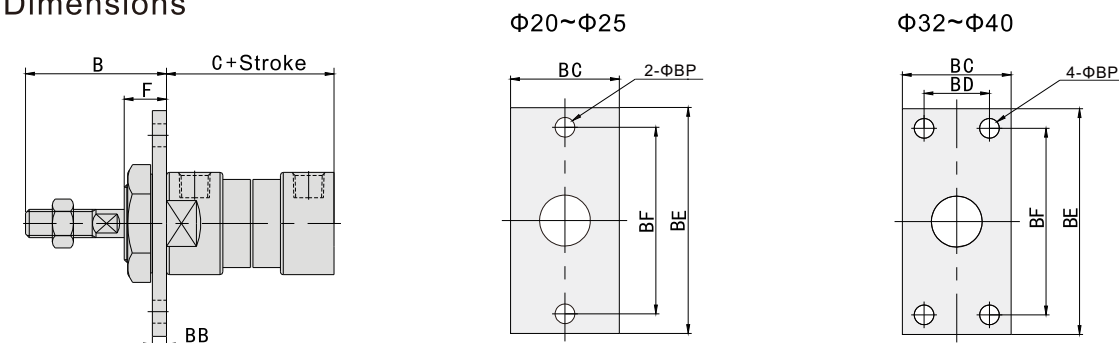


Bore	Sign	ΦU	ΦV
50		53	16
63		67	16

MAL/MA Series Mini Cylinder Brackets

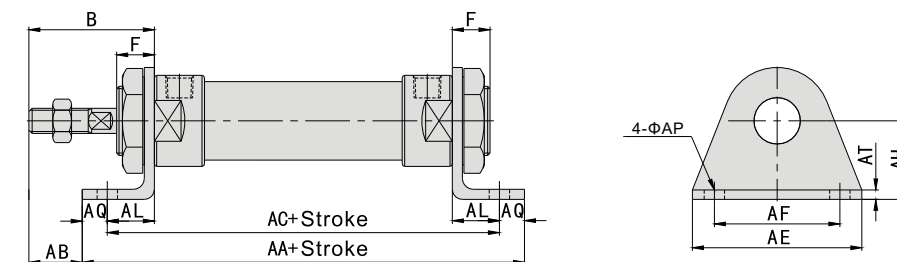
Main Dimensions

FA



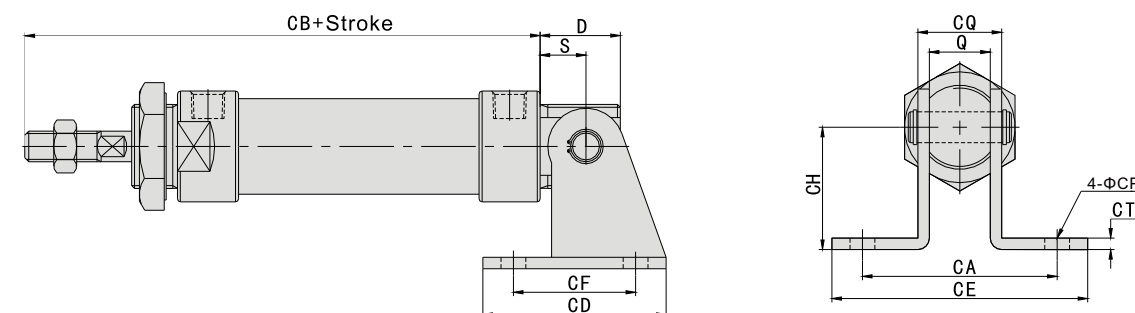
Sign	B	C	C (MSA Series)	C	C (MSAL Series)	BB	BC	BD	BE	BF	ΦBP	F
Bore/Stroke		(MA Series)	0~50	51~100	(MAL Series)	0~50	51~100					
16	38	60	60	85	-	-	-	3	26	-	52	40
20	40	76	76	101	70	70	95	4	38	-	64	50
25	44	76	76	101	70	70	95	4	38	-	64	50
32	44	76	76	101	70	70	95	4	47	33	72	58
40	46	76	76	101	92	92	117	4	50	36	84	70

LB



Sign	B	F	AA	AA	AB	AC	AC	AA	AA	AC	AC	AE	AF	AL	AQ	ΦAP	AT	AH
Bore/Stroke			(MA Series)	(MSA Series)		(MA Series)	(MSA Series)	(MAL Series)	(MSAL Series)	(MAL Series)	(MSAL Series)							
16	38	16	98	98	123	25	86	86	111	-	-	-	-	-	44	32	13	6
20	40	12	122	122	147	25	106	106	131	116	116	141	100	100	125	54	40	15
25	44	14	122	122	147	29	106	106	131	116	116	141	100	100	125	54	40	15
32	44	14	142	142	167	19	126	126	151	136	136	161	120	120	145	59	45	25
40	46	14	142	142	167	21	126	126	151	158	158	183	142	142	167	64	50	25

SDB

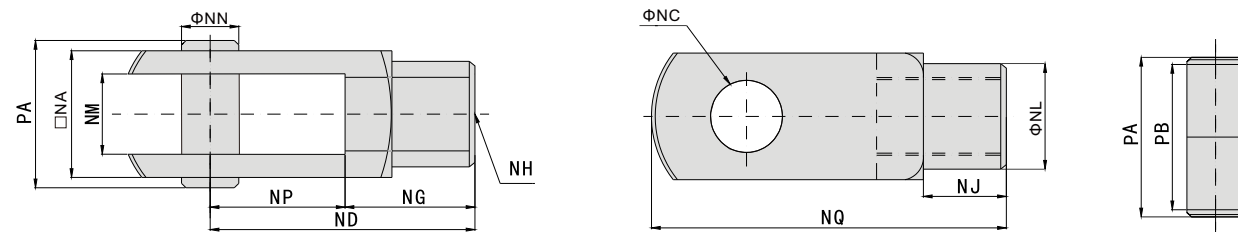


Sign	D	S	Q	CA	CB	CB	CB	CB	CD	CE	CF	CH	CT	ΦCP	CQ
Bore/Stroke					(MA Series)	(MSA Series)	(MAL Series)	(MSAL Series)							
16	9	12	-	107	107	132	-	-	23	-	12	20	2.3	5.5	16.5
20	12	16	51	128	128	153	122	122	48	67	32	32	3	6.5	22
25	12	16	51	132	132	157	126	126	48	67	32	32	3	6.5	22
32	15	16	51	135	135	160	129	129	52	67	36	36	4	6.5	24
40	15	20	55	137	137	162	153	153	56	71	40	40	4	6.5	28

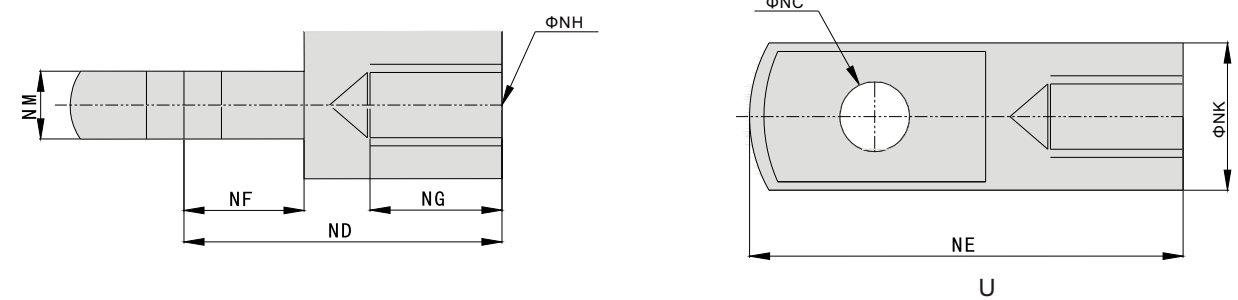
MAL/MA Series Mini Cylinder Brackets

Main Dimensions

Y Fitting

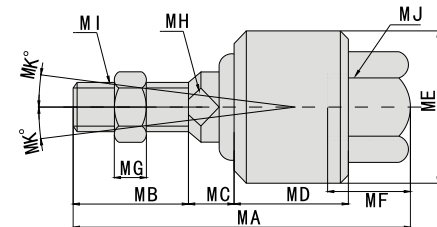


I Fitting



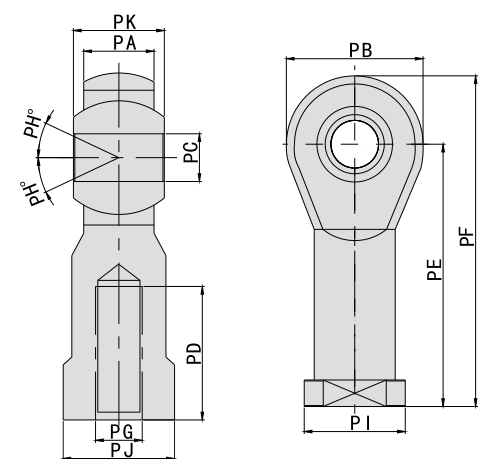
Bore	Sign	NA	ΦNC	ND	NE	NF	NG	ΦNH	NJ	ΦNK	ΦNL	NM	ΦNN	NP	NQ	PA	PB
16		12	3.5	12	28	8.5	12.5	M6X1	7	12	12	6	5	8.5	28	17	12.5
20		16	8	30	40	11	15	M8X1.25	10	16	14	8	8	15	40	21	16.5
25		19	10	40	52	15	20	M10X1.25	12	20	18	10	10	20	52	25	19.5
32		19	10	40	52	15	20	M10X1.25	12	20	18	10	10	20	52	25	19.5
40		25.4	10	48	67	15	25	M12X1.25	20	24	23	14	10	20	57	31	26

Floating Fitting



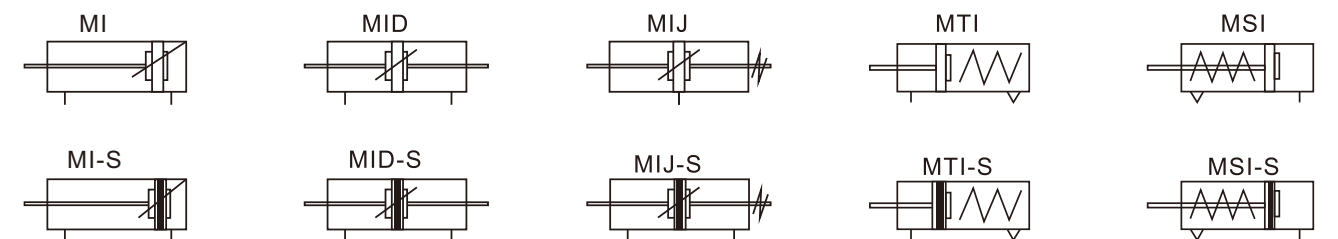
Bore	Sign	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK
20		51	20	6	17	24	11.5	6	8	M8X1.25	M8X1.25	13
25		58	22	7	21	26	11.5	7	10	M10X1.25	M10X1.25	12
32		58	22	7	21	26	11.5	7	10	M10X1.25	M10X1.25	12
40		58	22	8	21	28	11.5	8	12	M12X1.25	M12X1.25	12
50		70	22.5	8.5	28	34.5	13	8	15	M14X1.5	M14X1.5	13
63		70	22.5	8.5	28	34.5	13	8	15	M14X1.5	M14X1.5	13

Bearing Fitting



Bore	Sign	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK
20		9	24	8	16	36	48	M8X1.25	13	16	14	12
25		11	26	10	20	43	56	M10X1.25	13	19	17	14
32		11	26	10	20	43	56	M10X1.25	13	19	17	14
40		12	32	12	24	50	66	M12X1.25	13	22	19	16
50		15	40	16	28	64	84	M16X1.5	15	27	22	21
63		15	40	16	28	64	84	M16X1.5	15	27	22	21

MI Series Mini Cylinder



Ordering Code MI Series Mini Cylinder

MI	16	x	40	-	S	-	CA
Series code	Bore	Stroke	Magnet		Rear cover type		
MI: Basic type MID: Double shaft type MIJ: Double shaft adjustable type MSI: Spring extend MTI: Spring return MIC: Double acting cushion MICJ: Adjustable stroke with cushion Mark: According to ISO6432 CETOPRP52P Standard			Nil: Without magnet S: With magnet		CA: Swiveling tail CM: Round tail U: Flat tail		

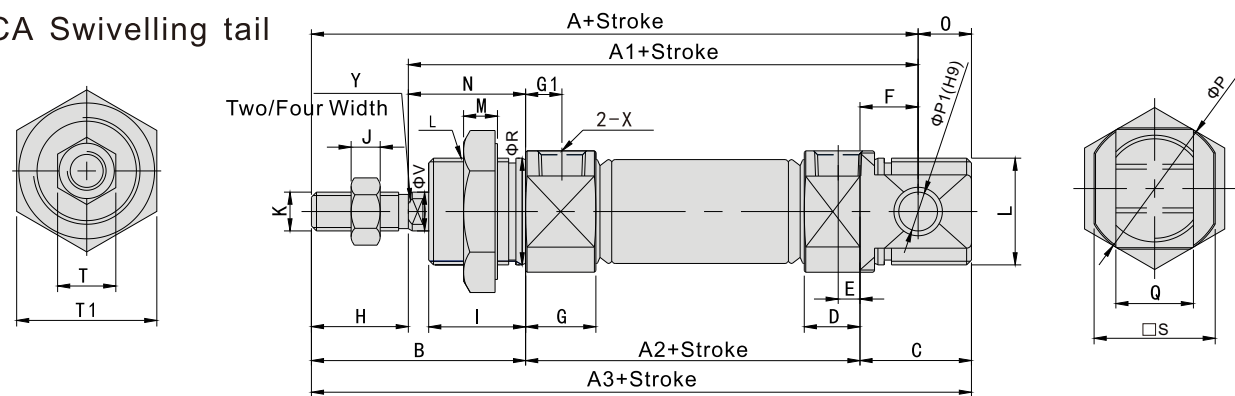
Specifications

Bore(mm)		8	10	12	16	20	25	32	40
Acting type		Double acting, Single acting spring extend, Single acting spring return							
Working medium		Clean air (40μm filtration)							
Pressure range	Double acting	0.05 to 0.7MPa							
	Single acting	0.2 to 0.7MPa							
Max. working pressure		1.5MPa							
Working temperature		-5 to 70℃							
Speed range		50 to 750mm/s							
Cushion type		MIC Series: Adjustable cushion Other Series: Anti-bump cushion							
Material		Stainless steel barrel							
Port size		M5X0.8				G1/8			G1/4

MI Series Mini Cylinder

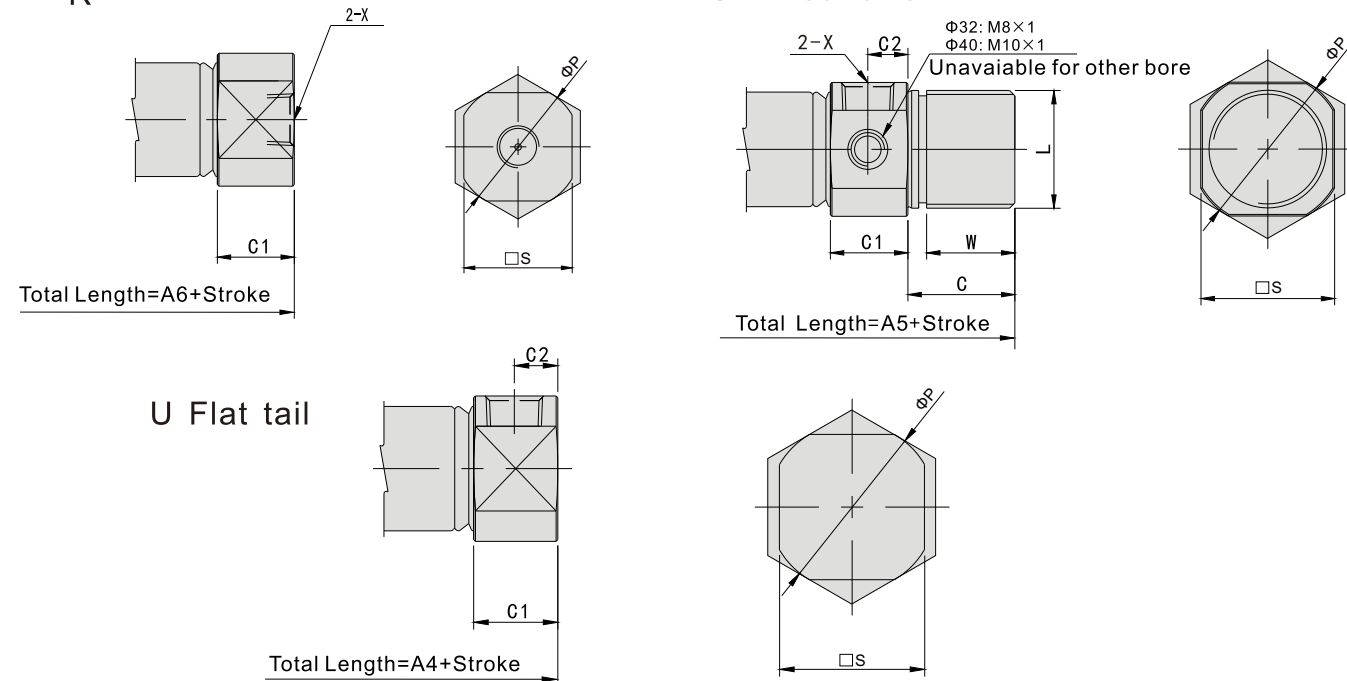
Main Dimensions

CA Swivelling tail

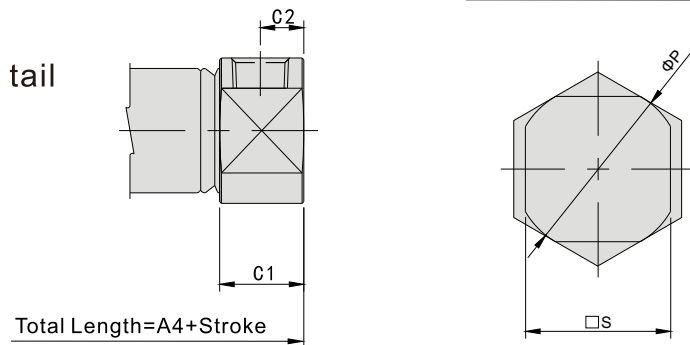


R

CM Round tail



U Flat tail



Bore	Sign	A	A1	A2	A3	A4	A5	A6	B	C	C1	C2	D	E	F	G	G1	H	I
8		76	64	46	86	74	-	-	28	12	9.5	5	9.5	5	6	11.5	7	12	12
10		76	64	46	86	74	-	-	28	12	9.5	5	9.5	5	6	11.5	7	12	12
12		91	75	50	105	88	-	-	38	17	10.5	6	10.5	6	9	12.5	8	16	17
16		98	82	56	111	94	111	94	38	17	10.5	6	10.5	6	9	12.5	8	16	17
20		115	95	62	126	106	126	106	44	20	14.5	7.5	14.5	7.5	12	14.5	7.5	20	20
25		126	104	65	137	115	137	114.5	50	22	15.5	8	16	8	12	16	8	22	22
32		-	-	-	-	125	140	126	58	14	15.5	8	-	-	-	16.5	9	20	30
40		-	-	-	-	158	174	158	69	16	22	11.5	-	-	-	22	12	24	35

Bore	Sign	J	K	L	M	N	O	ΦP	ΦP1	Q	ΦR	S	T	T1	X	ΦV	W	Y
8		2.5	M4X0.7	M12X1.25	6	16	10	17	4	8	12	15	7	17	M5X0.8	4	-	-
10		2.5	M4X0.7	M12X1.25	6	16	10	17	4	8	12	15	7	17	M5X0.8	4	-	-
12		5	M6X1.0	M16X1.5	6	22	14	20	6	12	16	18	10	22	M5X0.8	6	-	5
16		5	M6X1.0	M16X1.5	6	22	13	22	6	12	16	20	10	22	M5X0.8	6	13.5	5
20		6	M8X1.25	M22X1.5	7	24	11	29	8	16	22	25	12	29	G1/8	8	16.5	6
25		6	M10X1.25	M22X1.5	7	28	11	33.5	8	16	22	30	17	29	G1/8	10	18.5	8
32		6	M10X1.5	M30X1.5	7	38	-	37.5	-	-	30	34.5	17	36	G1/8	12	10.5	10
40		7	M12X1.75	M38X1.5	8	45	-	46.5	-	-	38	42.5	17	46	G1/4	16	12.5	14

CJ2B Series Mini Cylinder

Ordering Code CJ2B Series Mini Cylinder

C	J	2	B		6	-	15	-	R
Magnet				Acting	Stroke				Join type
Nil: Without magnet D: With magnet				Nil: Basic type S: Single acting spring extend T: Single acting spring return	6: 6mm 10: 10mm 16: 16mm				Nil: Vertical R: Horizontal

Specifications

Bore (mm)	6	10	16
Working medium	Clean air (40μm filtration)		
Guaranteed pressure	1.05MPa		
Max. working pressure	0.7MPa		
Min. working pressure	0.12MPa	0.06MPa	
Working temperature	-10 to 70℃		
Speed range	50 to 750mm/s		
Cushion type	Rubber cushion		
Tolerance of stroke	±1.0mm		



CDM2B Series Mini Cylinder

Ordering Code CDM2B Series Mini Cylinder

C	M	2	B		-	20	x	50	-	
Magnet				Acting	Stroke				Cushion	
Nil: No magnet D: With magnet				Nil: Basic type S: Single acting spring extend T: Single acting spring return	20 to 40mm				Nil: Rubber cushion A: Air cushion	

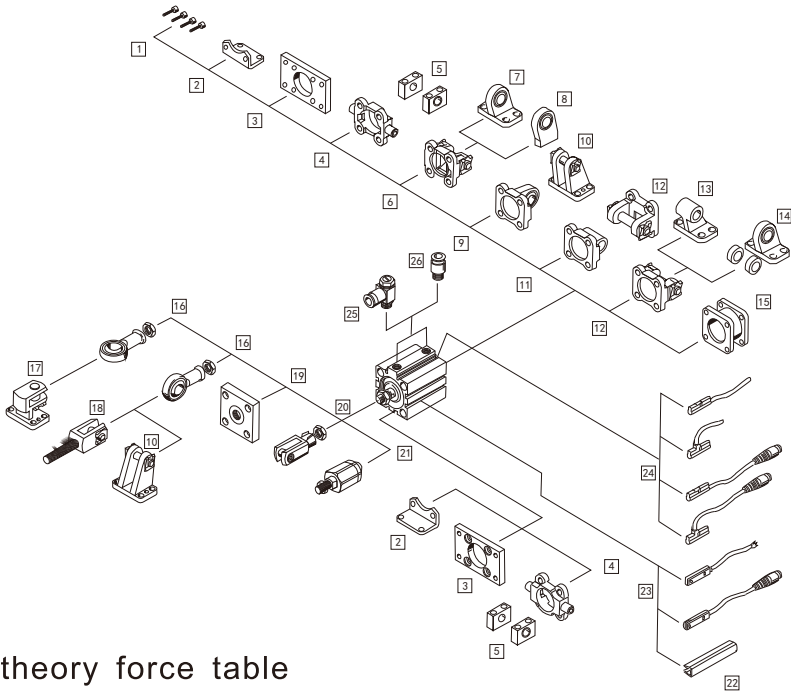
Specifications

Bore (mm)	20	25	32	40
Working medium	Clean air (40μm filtration)			
Acting type	Double acting			
Working pressure	0.05 to 1.0MPa			
Working temperature	-10 to 70°C			
Cushion type	Rubber cushion (Standard), Air cushion (Optional)			
Speed range	Min: 10mm/s		Max: 1000mm/s	



Technical Data 3

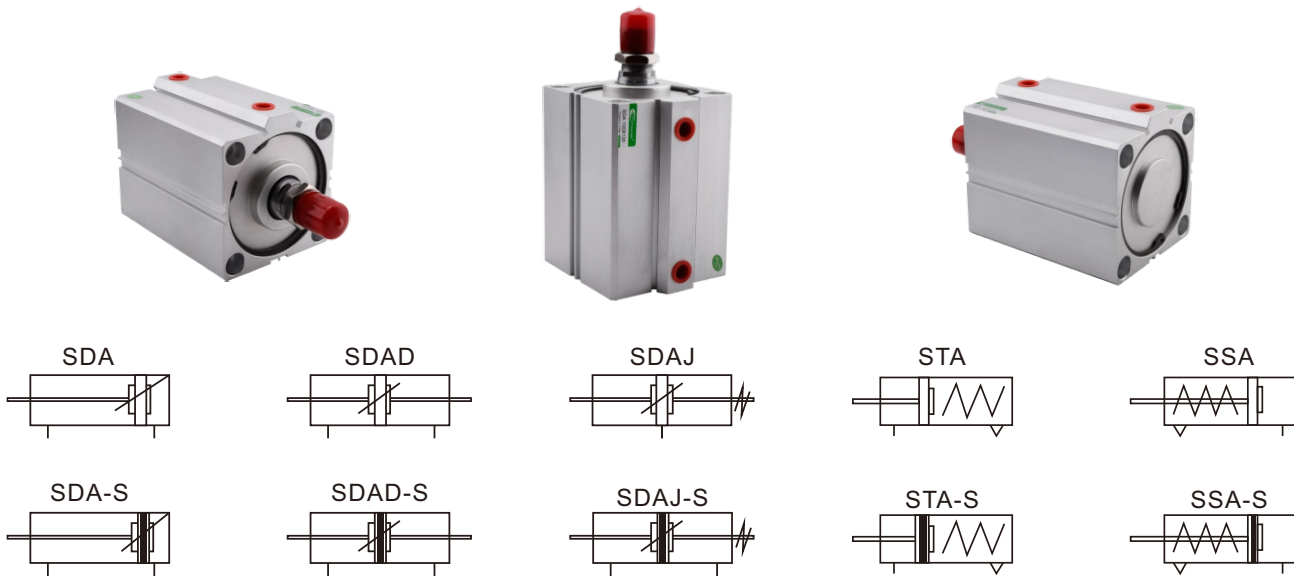
Cylinder Peripheral Component



Air cylinder theory force table

Bore (mm)	Piston Size (mm)	Acting Type	Pressure Square (mm²)	Air Pressure(MPa)						
				0.1	0.2	0.3	0.4	0.5	0.6	0.7
12	6	Single acting extend	113	-	7.0	18.3	29.6	40.9	52.2	63.5
		Single acting return	85	-	1.4	9.9	18.4	26.9	35.4	43.9
		Double acting	Press side	113	-	22.6	33.9	45.2	56.5	67.8
			Pull side	85	-	17	25.5	34	42.5	51
16	6	Single acting extend	201	-	13.6	33.7	53.8	73.9	94.0	114.1
		Single acting return	173	-	8.0	25.3	42.6	59.9	77.2	94.5
		Double acting	Press side	201	-	40.2	60.3	80.4	100.5	120.6
			Pull side	173	-	34.6	51.9	69.2	86.5	103.8
20	8	Single acting extend	314	-	28.7	60.1	91.5	122.9	154.3	185.7
		Single acting return	264	-	18.7	45.1	71.5	97.9	124.3	150.7
		Double acting	Press side	314	-	62.8	94.2	125.6	157.0	188.4
			Pull side	264	-	52.8	79.2	105.6	132.0	158.4
25	10	Single acting extend	490	-	58.0	107.0	156.0	205.0	254.0	303.0
		Single acting return	412	-	42.4	83.6	124.8	166.0	207.2	248.4
		Double acting	Press side	490	-	98.0	147.0	196.0	245.0	294.0
			Pull side	412	-	82.4	123.6	164.8	206.0	247.2
32	12	Single acting extend	804	-	112.1	192.5	272.9	353.3	433.7	514.1
		Single acting return	690	-	89.3	158.3	227.3	296.3	365.3	434.3
		Double acting	Press side	804	-	160.8	241.2	321.6	402.0	482.4
			Pull side	690	-	138.0	207.0	276.0	345.0	414.0
40	16	Single acting extend	1256	-	200.8	326.4	452.0	577.6	703.2	828.8
		Single acting return	1055	-	160.6	266.1	371.6	477.1	582.6	688.1
		Double acting	Press side	1256	125.6	251.2	376.8	502.4	628.0	753.6
			Pull side	1055	105.5	211.0	316.5	422.0	527.5	633.0
50	20	Single acting extend	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1
		Single acting return	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3
63	20	Double acting	Press side	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2
			Pull side	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8
80	25	Single acting extend	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2
		Single acting return	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2
100	32	Double acting	Press side	7853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8
			Pull side	7049	704.9	1409.8	2114.7	2819.6	3524.5	4229.4

SDA Series Compact Cylinder



Ordering Code SDA Series Compact Cylinder

S	D	A		S		2	0	X	3	0	-	2	0	-	B	
Series code			Magnet			Bore			Stroke			Adjustable stroke			Thread	
SDA: Double acting			Nil: Without magnet									Nil: Standard			Nil: Female thread	
SSA: Single acting spring extend			S: With magnet									10: 10mm			B: Male thread	
STA: Single acting spring return												20: 20mm			N: No thread	
SDAD: Double shaft double acting												30: 30mm				
SDAJ: Adjustable cushion type												40: 40mm				
												50: 50mm				
												75: 75mm				
												100: 100mm				

Note: Adjustable stroke type only available as a double-shaft cylinder.

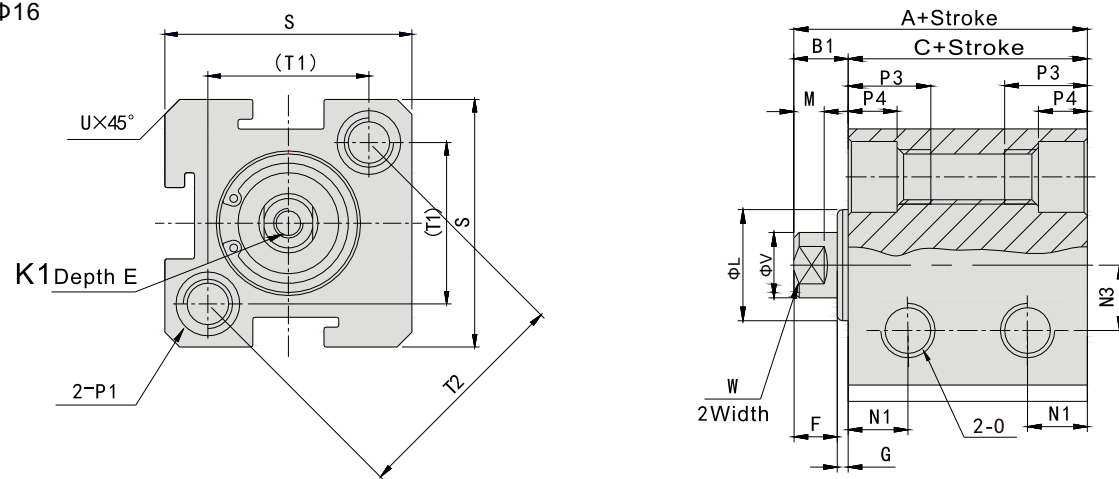
Specifications

Bore (mm)		12	16	20	25	32	40	50	63	80	100
Acting type		Double acting									
		Single acting spring extend, Single acting spring return								-	
Working medium		Clean air (40µm filtration)									
Pressure range	Double acting	0.1 to 0.9MPa									
	Single acting	0.2 to 0.9MPa								-	
Max. working pressure		1.5MPa (213psi)									
Working temperature		-5 to 70℃									
Speed range	Double acting	30 to 500mm/s						30 to 350mm/s		30 to 250mm/s	
	Single acting	100 to 500mm/s						-			
Cushion type		Fixed cushion									
Port size		M5×0.8				G1/8		G1/4		G3/8	

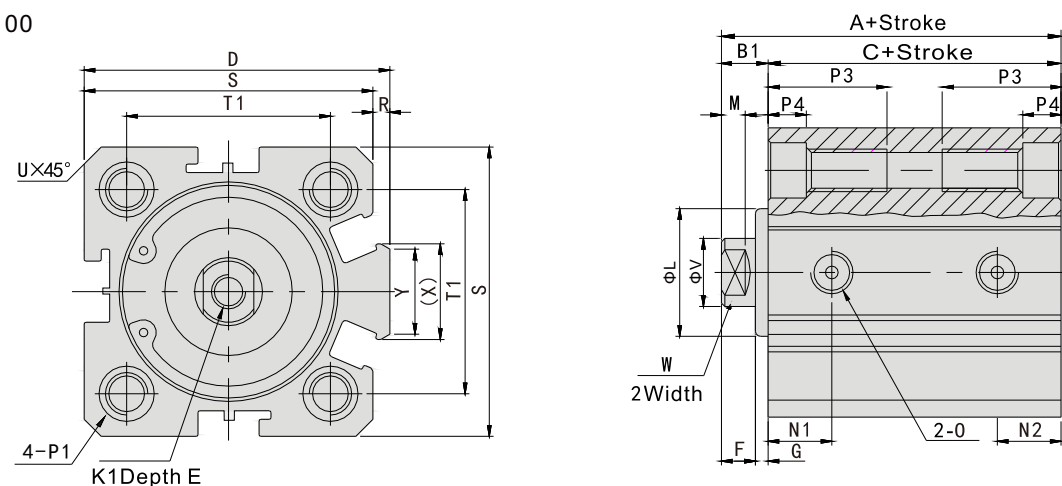
SDA Series Compact Cylinder

Main Dimensions SDA/SDAS (Double Acting Type)

Φ12-Φ16



Φ20-Φ100



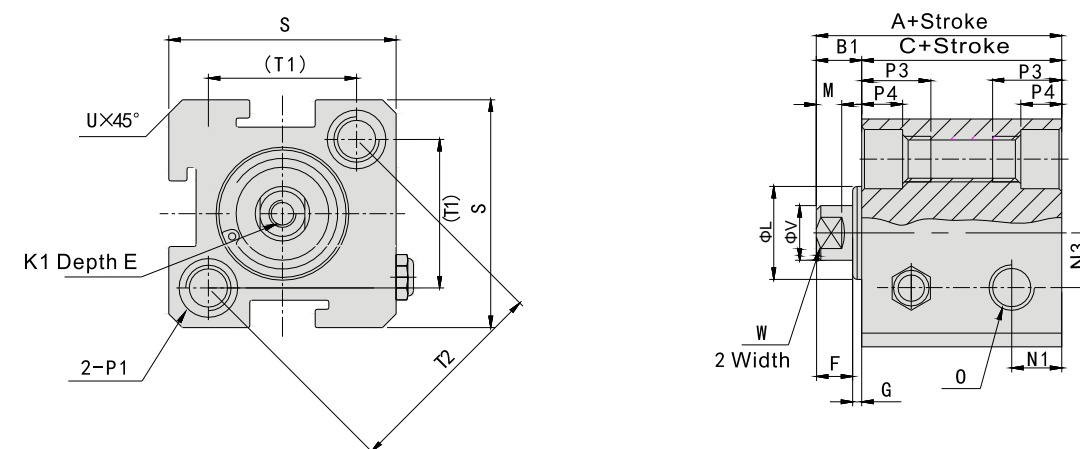
Model	Standard			With Magnet			D	E	F	G	K1	ΦL	M	N1		N2		N3
	A	B1	C	A	B1	C								S=5	S>5	S=5	S>5	
12	22	5	17	32	5	27	-	6	4	1	M3X0.5	10.2	2.8	6.3		6.3		6
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3X0.5	11	2.8	7.3		7.3		6.5
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4X0.7	15	2.8	7.5		7.5		-
25	27	6	21	37	6	31	42	10	4	2	M5X0.8	17	2.8	8		8		-
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6X1	22	2.8	9		9		-
40	33	7	26	43	7	36	58.5	12	4	3	M8X1.25	28	2.8	10		10		-
50	37	9	28	47	9	38	71.5	15	5	4	M10X1.5	38	2.8	10.5		10.5		-
63	41	9	32	51	9	42	84.5	15	5	4	M10X1.5	40	2.8	9.5	12	9.5	11	-
80	52	11	41	62	11	51	104	20	6	5	M14X1.5	45	4	11.5	14.5	11.5	14.5	-
100	63	12	51	73	12	61	124	20	7	5	M18X1.5	55	4	16	20.5	16	20.5	-

Sign	O	P1	P3	P4	R	S	T1	T2	U	ΦV	W	X	Y
Bore													
12	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double side: Φ10 Thread: M8×1.25 Through hole: Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	G1/4	Double side: Φ11 Thread: M8×1.25 Through hole: Φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	G1/4	Double side: Φ11 Thread: M8×1.25 Through hole: Φ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	G3/8	Double side: Φ14 Thread: M12×1.75 Through hole: Φ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	G3/8	Double side: Φ17.5 Thread: M14×2 Through hole: Φ11.3	30	13	10	114	90	-	3.65	32	27	35	26

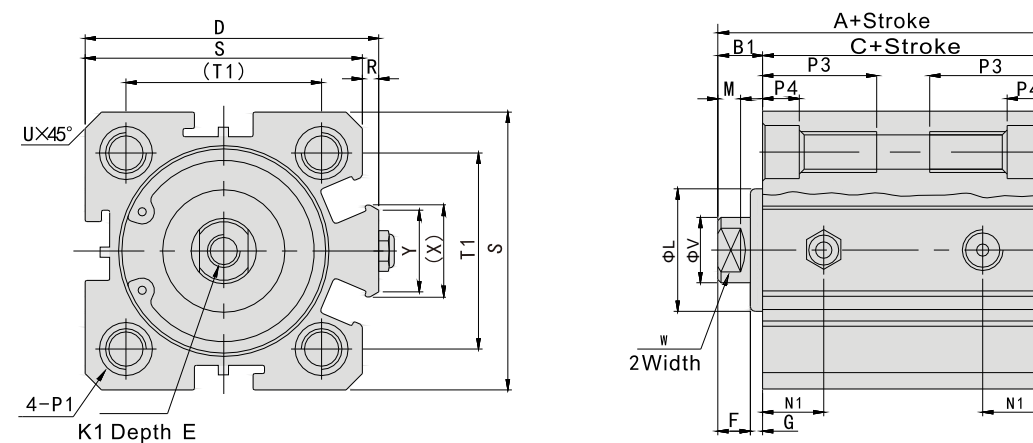
SDA Series Compact Cylinder

Main Dimensions SSA/SSAS (Single Acting Spring Extend)

Φ12-Φ16



Φ20-Φ40



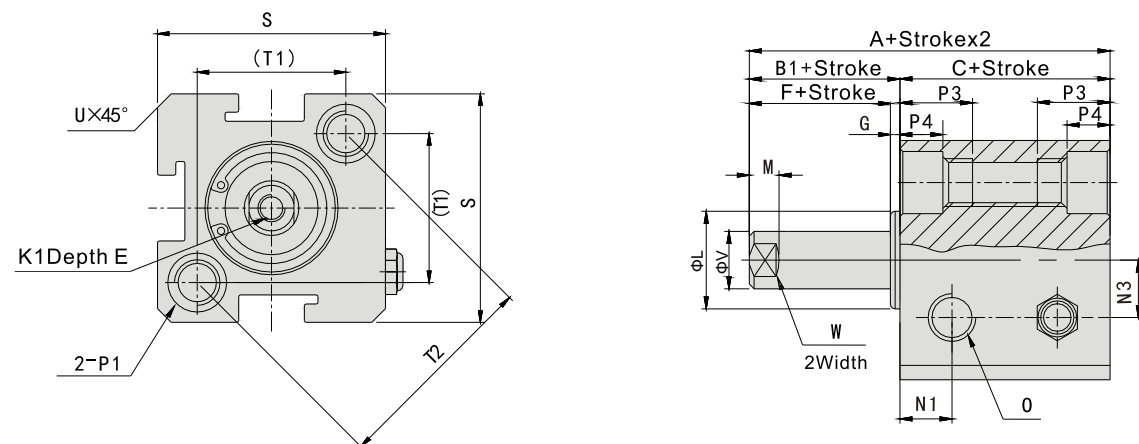
Model	Standard					With Magnet					D	E	F	G	K1	ΦL	M	N1	N3
Bore/Sign	A		B1	C		A		B1	C										
	≤10	>10		≤10	>10	≤10	>10		≤10	>10									
12	32	42	5	27	37	42	52	5	37	47	–	6	4	1	M3X0.5	10.2	2.8	6.3	6
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	–	6	4	1.5	M3X0.5	11	2.8	7.3	6.5
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4X0.7	16	2.8	7.5	–
25	37	47	6	31	41	47	57	6	41	51	42	10	4	2	M5X0.8	17	2.8	8	–
32	41.5	51.5	7	34.5	44.5	51.5	61.5	7	44.5	54.5	50	12	4	3	M6X1	22	2.8	9	–
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8X1.25	28	2.8	10	–

Sign	O	P1	P3	P4	R	S	T1	T2	U	ΦV	W	X	Y
Bore													
12	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double side: Φ10 Thread: M8×1.25 Through hole: Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

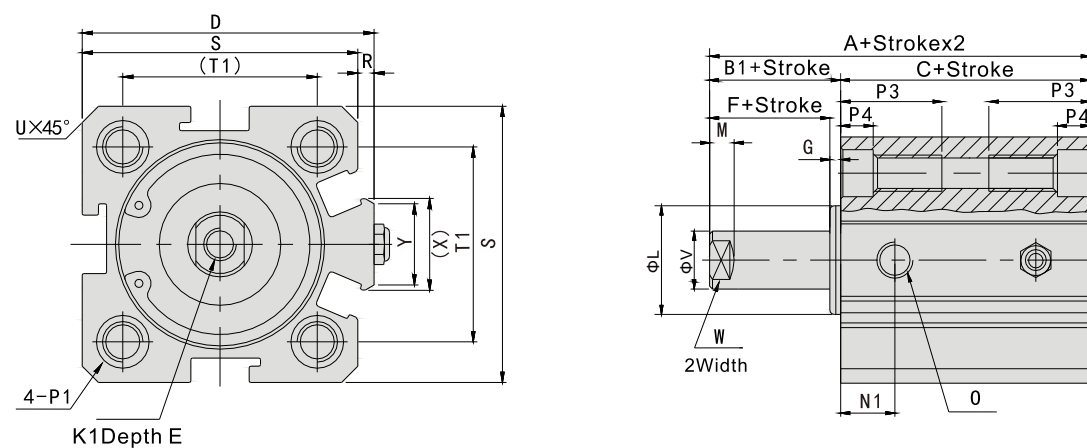
SDA Series Compact Cylinder

Main Dimensions STA/STAS (Single Acting Spring Return)

Φ12-Φ16



Φ20-Φ40

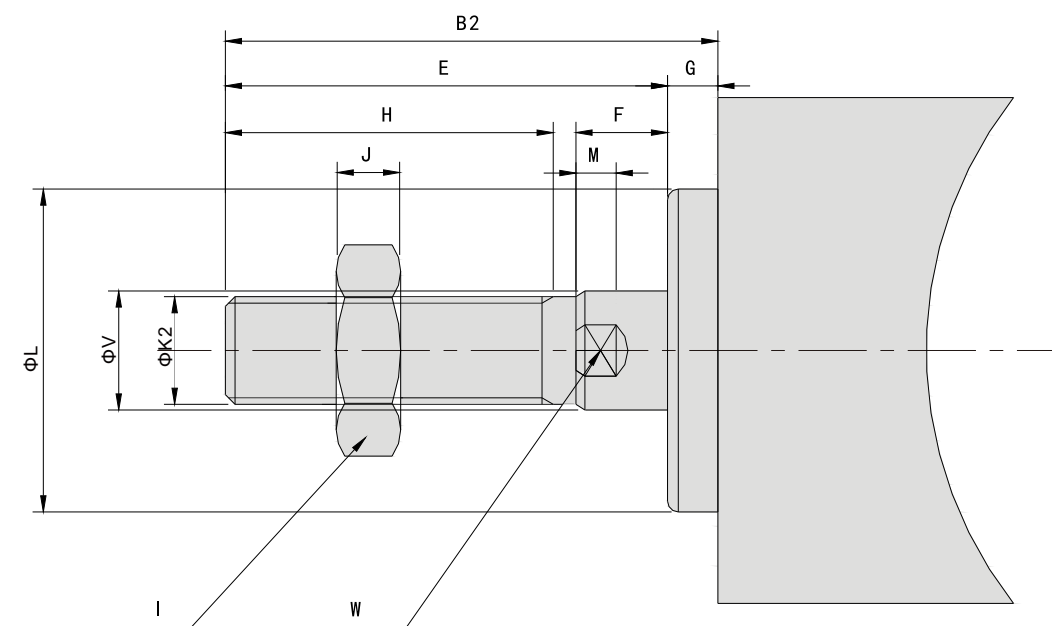


Model	Standard					With Magnet					D	E	F	G	K1	ΦL	M	N1	N3
Bore/Sign	A		B1	C		A		B1	C										
	≤10	>10		≤10	>10	≤10	>10												
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3X0.5	10.2	2.8	6.3	6
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3X0.5	11	2.8	7.3	6.5
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4X0.7	15	2.8	7.5	-
25	37	47	6	31	41	47	57	6	41	51	42	10	4	2	M5X0.8	17	2.8	8	-
32	41.5	51.5	7	34.5	44.5	51.5	61.5	7	44.5	54.5	50	12	4	3	M6X1	22	2.8	9	-
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8X1.25	28	2.8	10	-

Sign	O	P1	P3	P4	R	S	T1	T2	U	ΦV	W	X	Y
12	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double side: Φ10 Thread: M8×1.25 Through hole: Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16

SDA Series Compact Cylinder

Main Dimensions SDA/SSA/STA

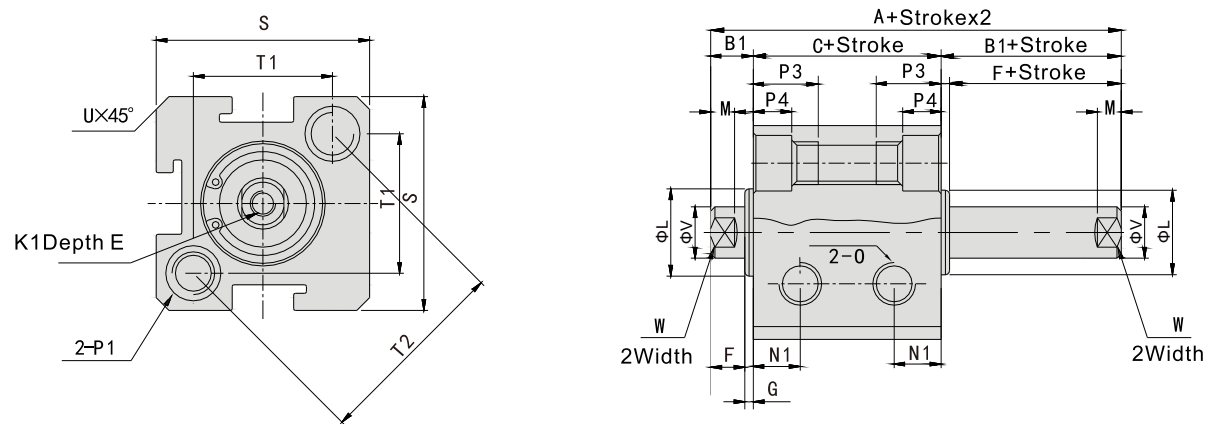


Bore	Sign	B2	E	F	G	H	I	J	ΦK2	ΦL	M	ΦV	W
12		17	16	4	1	10	8	4	M5X0.8	10.2	2.8	6	5
16		17.5	16	4	1.5	10	8	4	M5X0.8	11	2.8	6	5
20		20.5	19	4	1.5	13	10	5	M6X1.0	15	2.8	8	6
25		23	21	4	2	15	12	6	M8X1.25	17	2.8	10	8
32		25	22	4	3	15	17	6	M10X1.25	22	2.8	12	10
40		35	32	4	3	25	19	8	M14X1.5	28	2.8	16	14
50		37	33	5	4	25	27	11	M18X1.5	38	2.8	20	17
63		37	33	5	4	25	27	11	M18X1.5	40	2.8	20	17
80		44	39	6	5	30	32	13	M22X1.5	45	4	25	22
100		50	45	7	5	35	36	13	M26X1.5	55	4	32	27

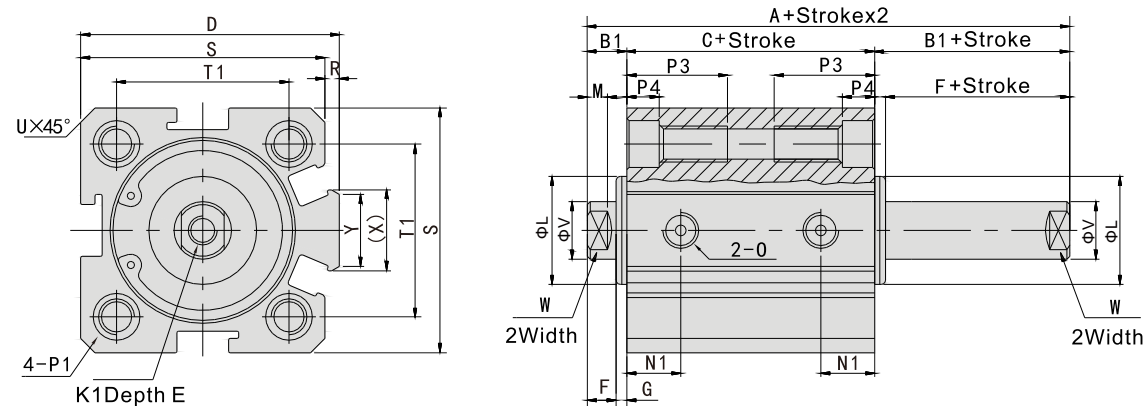
SDA Series Compact Cylinder

Main Dimensions SDAD/SDADS (Double Shaft Acting Adjustable Type)

Φ12-Φ16



Φ20-Φ100



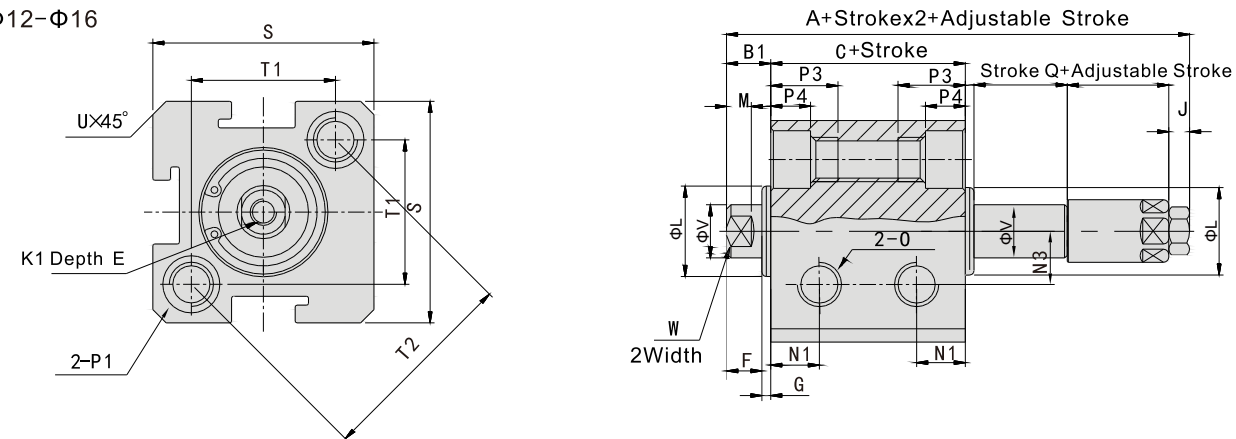
Model Bore/Sign	Standard			With Magnet			D	E		F	G	K1	ΦL	M	N1		N3
	A	B1	C	A	B1	C		S≤10	S>10						S=5	S>5	
12	27	5	17	37	5	27	-	6		4	1	M3X0.5	10.2	2.8	6.3		6
16	29.5	5.5	18.5	39.5	5.5	28.5	-	6		4	1.5	M3X0.5	11	2.8	7.3		6.5
20	30.5	5.5	19.5	40.5	5.5	29.5	36	8(S=5 6.5)		4	1.5	M4X0.7	15	2.8	7.5		-
25	33	6	21	43	6	31	42	10(S=5 7)		4	2	M5X0.8	17	2.8	8		-
32	38.5	7	24.5	48.5	7	34.5	50	8	12	4	3	M6X1	22	2.8	9		-
40	40	7	26	50	7	36	58.5	8	12	4	3	M8X1.25	28	2.8	10		-
50	46	9	28	56	9	38	71.5	8	15	5	4	M10X1.5	38	2.8	10.5		-
63	50	9	32	60	9	42	84.5	10	15	5	4	M10X1.5	40	2.8	9.5	11.8	-
80	63	11	41	73	11	51	104	13	20	6	5	M14X1.5	45	4	11.5	14.5	-
100	75	12	51	85	12	61	124	18	20	7	5	M18X1.5	55	4	16	20.5	-

Sign Bore	O	P1	P3	P4	R	S	T1	T2	U	ΦV	W	X	Y
12	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	25	16.2	23	1.6	6	5	-	-
16	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	-	29	19.8	28	1.6	6	5	-	-
20	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	M5X0.8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	15	5.5	2	40	28	-	3.1	10	8	12	10
32	G1/8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	G1/8	Double side: Φ10 Thread: M8×1.25 Through hole: Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	G1/4	Double side: Φ11 Thread: M8×1.25 Through hole: Φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	G1/4	Double side: Φ11 Thread: M8×1.25 Through hole: Φ6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80	G3/8	Double side: Φ14 Thread: M12×1.75 Through hole: Φ9.2	25	10.5	10	94	74	-	3.65	25	22	36	26
100	G3/8	Double side: Φ17.5 Thread: M14×2 Through hole: Φ11.3	30	13	10	114	90	-	3.65	32	27	35	26

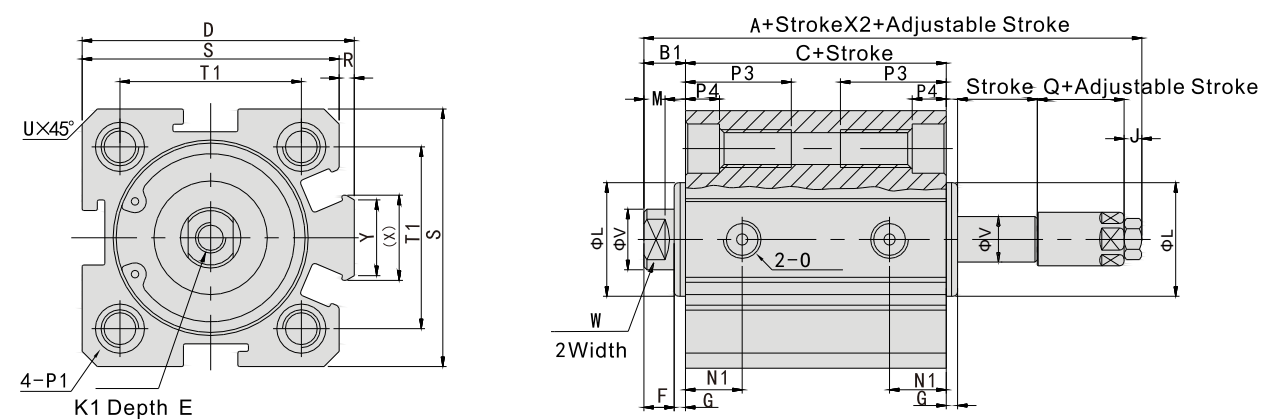
SDA Series Compact Cylinder

Main Dimensions SDAJ/SDAJS (Double Shaft Adjustable Stroke Type)

Φ12-Φ16



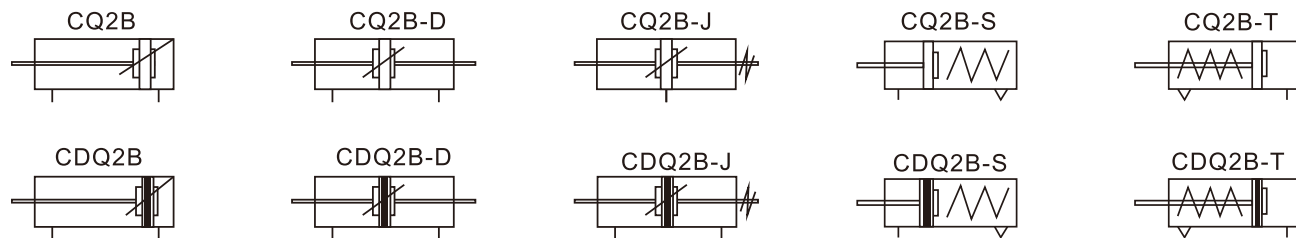
Φ20-Φ100



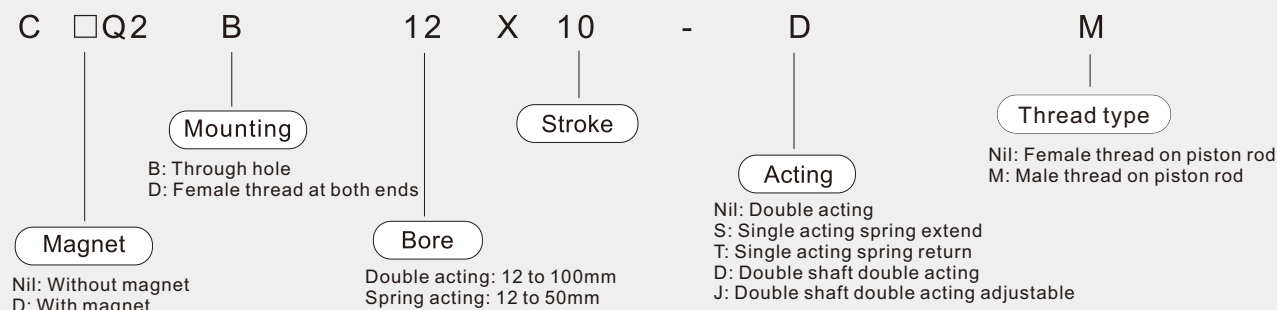
Model Bore/Sign	Standard			With Magnet			D	E		F	G	J	K1	ΦL	M	N1	
	A	B1	C	A	B1	C		S≤10	S>10							S=5	S>5
12	40	5	17	50	5	27	-	6		4	1	4	M3X0.5	10.2	2.8	6.3	
16	42.5	5.5	18.5	52.5	5.5	28.5	-	6		4	1.5	4	M3X0.5	11	2.8	7.3	
20	47.5	5.5	19.5	57.5	5.5	29.5	36	8(S=5 6.5)		4	1.5	5	M4X0.7	15	2.8	7.5	
25	55	6	21	65	6	31	42	10(S=5 7)		4	2	6	M5X0.8	17	2.8	8	
32	61.5	7	24.5	71.5	7	34.5	50	8	12	4	3	6	M6X1	22	2.8	9	
40	65	7	26	75	7	36	58.5	8	12	4	3	8	M8X1.25	28	2.8	10	
50	73	9	28	83	9	38	71.5	8	15	5	4	11	M10X1.5	38	2.8	10.5	
63	77	9	32	87	9	42	84.5	10	15	5	4	11	M10X1.5	40	2.8	9.5	11.8
80	94	11	41	104	11	51	104	13	20	6	5	13	M14X1.5	45	4	11.5	14.5
100	105	12	51	115	12	61	124	18	20	7	5	13	M18X1.5	55	4	16	20.5

Sign Bore	N3	O	P1	P3	P4	Q	R	S	T1	T2	U	ΦV	W	X	Y
12	6	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	13	-	25	16.2	23	1.6	6	5	-	-
16	6.5	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	12	4.5	13	-	29	19.8	28	1.6	6	5	-	-
20	-	M5X0.8	Double side: Φ6.5 Thread: M5×0.8 Through hole: Φ4.2	14	4.5	16	2	34	24	-	2.1	8	6	11.3	10
25	-	M5X0.8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	15	5.5	19	2	40	28	-	3.1	10	8	12	10
32	-	G1/8	Double side: Φ8.2 Thread: M6×1.0 Through hole: Φ4.6	16	5.5	21	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8	Double side: Φ10 Thread: M8×1.25 Through hole: Φ6.5	20	7.5	21	6.5	52	40	-	2.25	16	14	21.3	16
50	-	G1/4	Double side: Φ11 Thread: M8×1.25 Through hole: Φ6.5	25	8.5	21	9.5	62	48	-	4.15	20	17	30	20
63	-	G1/4	Double side: Φ11 Thread: M8×1.25 Through hole: Φ6.5	25	8.5	21	9.5	75	60	-	3.15	20	17	28.7	20
80	-	G3/8	Double side: Φ14 Thread: M12×1.75 Through hole: Φ9.2	25	10.5	24	10	94	74	-	3.65	25	22	36	26
100	-	G3/8	Double side: Φ17.5 Thread: M14×2 Through hole: Φ11.3	30	13	24	10	114	90	-	3.65	32	27	35	26

CQ2 Series Compact Cylinder



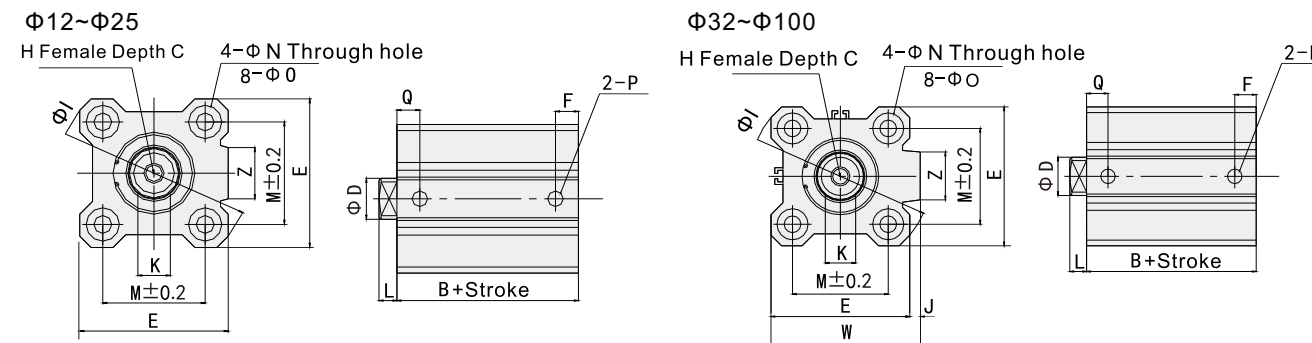
Ordering Code CQ2 Series Compact Cylinder



Specifications

Bore (mm)	12	16	20	25	32	40	50	63	80	100
Working medium	Clean air (40µm filtration)									
Acting type	Double acting, Single acting spring extend, Single acting spring return									
Guaranteed pressure	1.5MPa									
Max. working pressure	1.0MPa									
Working temperature	5 to 60°C									
Thread on piston rod	Female thread (Standard), Male thread (Optional)									
Tolerance of stroke	+1.0 mm 0									
Lubrication	Not required									
Installation	Through hole (Standard), Female thread on both sides (Optional)									
Port size	M5X0.8				G1/8		G1/4		G3/8	

Main Dimensions Double acting/Single acting CQ2B (Through Hole)



Double Acting

Bore	Stroke	B	ΦD	E	F	H	C	Φ1	J	K	L	M	ΦN	ΦO	P	Q	W	Z
12	5~30	17	6	25	5	M3×0.5	6	32	-	5	3.5	15.5	3.5	6.5Depth3.5	M5×0.8	7.5	-	-
16	5~30	18.5	8	29	5.5	M4×0.7	8	38	-	6	3.5	20	3.5	6.5Depth3.5	M5×0.8	8	-	10
20	5~50	19.5	10	36	5.5	M5×0.8	7	47	-	8	4.5	25.5	5.5	9Depth7	M5×0.8	9	-	10
25	5~50	22.5	12	40	5.5	M6×1.0	12	52	-	10	5	28	5.5	9Depth7	M5×0.8	11	-	10
32	5~50	23	16	45	5.5	M8×1.25	13	60	4.5	14	7	34	5.5	9Depth7	M5×0.8	11.5	49.5	14
40	5~50	29.5	16	52	8	M8×1.25	13	69	5	14	7	40	5.5	9Depth7	1/8	11	57	14
50	10~50	30.5	20	64	10.5	M10×1.5	15	86	7	17	8	50	6.6	11Depth8	1/4	10.5	71	19
63	10~50	36	20	77	10.5	M10×1.5	15	103	7	17	8	60	9	14Depth10.5	1/4	15	84	19
80	10~50	43.5	25	98	12.5	M16×2.0	21	132	6	22	10	77	11	17.5Depth13.5	3/8	16	104	26
100	10~50	53	30	117	13	M20×2.5	27	156	6.5	27	12	94	11	17.5Depth13.5	3/8	23	123.5	26

Long Stroke Note2)

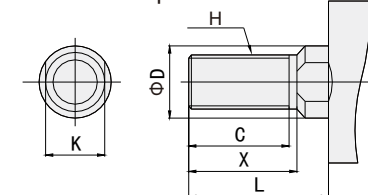
Bore	Stroke	B	F	P	Q	Bore	Stroke	B	F	P	Q
32	75,100	33	7.5	1/8	10.5	63	75,100	46	10.5	1/4	15
40	75,100	39.5	8	1/8	11	80	75,100	53.5	12.5	3/8	16
50	75,100	40.5	10.5	1/4	10.5	100	75,100	63	13	3/8	23

Note1) Standard stroke is at 5mm interval;
Note2) The stroke is medium stroke between 55mm and 100mm (55, 60, 65, 70, 80, 85, 90, 95) plus 5, 10, 15 or 20mm thick backing plate;
Note3) Unless specified, the dimensions of the model with through hole is the same as those of the model with female thread at both ends.

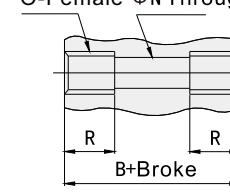
Single Acting

Bore	B			ΦD	E	F		H	C	Φ1	J	K	L	M	ΦN	ΦO	P			Q		W	Z
	5st	10st	20st			5st	10st										5st	10st	20st	5st	10st		
12	22	27	-	6	25	5	5	M3×0.5	6	32	-	5	3.5	15.5	3.5	6.5Depth3.5	M5×0.8	-	7.5	7.5	-	-	
16	23.5	28.5	-	8	29	5.5	5.5	M4×0.7	8	38	-	6	3.5	20	3.5	6.5Depth3.5	M5×0.8	-	8	8	-	10	
20	24.5	29.5	-	10	36	5.5	5.5	M5×0.8	7	47	-	8	4.5	25.5	5.5	9Depth7	M5×0.8	-	9	9	-	10	
25	27.5	32.5	-	12	40	5.5	5.5	M6×1.0	12	52	-	10	5	28	5.5	9Depth7	M5×0.8	-	11	11	-	10	
32	28	33	-	16	45	5.5	7.5	M8×1.25	13	60	4.5	14	7	34	5.5	9Depth7	M5×0.8	1/8	-	11.5	10.5	49.5	18
40	34.5	39.5	-	16	52	8	8	M8×1.25	13	69	5	14	7	40	5.5	9Depth7	1/8	-	11	11	57	18	
50	-	40.5	50.5	20	64	10.5	10.5	M10×1.5	15	86	7	17	8	50	6.6	11Depth8	-	1/4	10.5	10.5	71	22	

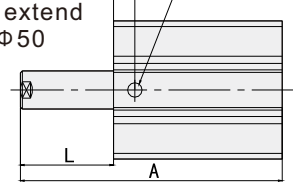
Male thread on piston rod



Female thread at both ends



Single acting spring extend Φ12~Φ50



Bore	C	X	ΦD	H	L	K
12	9	10.5	6	M5×0.8	14	5
16	10	12	8	M6×1.0	15.5	6
20	12	14	10	M8×1.25	18.5	8
25	15	17.5	12	M10×1.5	22.5	10
32	20.5	23.5	16	M14×1.5	28.5	14
40	20.5	23.5	16	M14×1.5	28.5	14
50	26	28.5	20	M18×1.5	33.5	17
63	26	28.5	20	M18×1.5	33.5	17
80	32.5	35.5	25	M22×1.5	43.5	22
100	32.5	35.5	30	M26×1.5	43.5	27

Bore	O	R
12	M4×0.7	7
16	M4×0.7	7
20	M6×1.0	10
25	M6×1.0	10
32	M6×1.0	10
40	M6×1.0	10
50	M8×1.25	14
63	M10×1.5	18
80	M12×1.75	22
100	M12×1.75	22

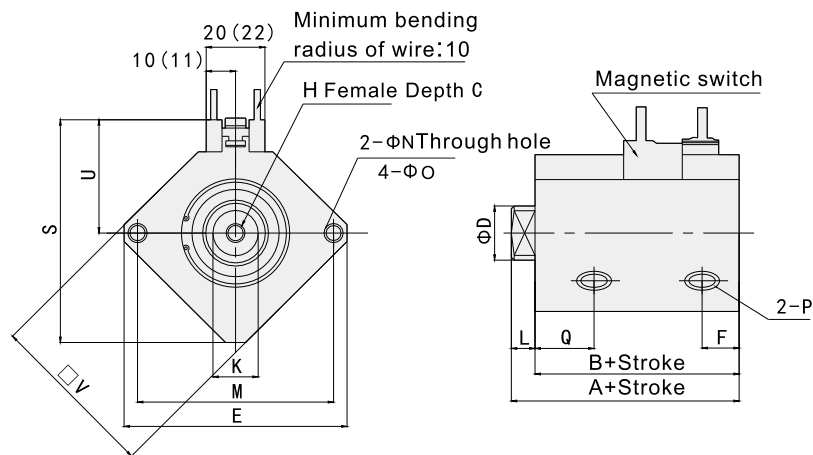
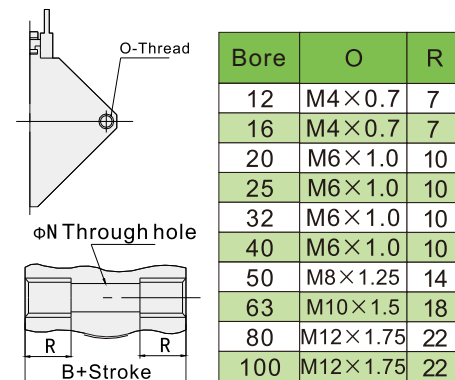
Bore	A			L		
	5st	10st	20st	5st	10st	20st
12	30.5	40.5	-	8.5	13.5	-
16	32	42	-	8.5	13.5	-
20	34	44	-	9.5	14.5	-
25	37.5	47.5	-	10	15	-
32	40	50	-	12	17	-
40	46.5	56.5	-	12	17	-
50	-	58.5	78.5	-	18	28

Note: Unless otherwise specified, the dimensions of model with through hole are the same as those of model with female thread at both ends.

CQ2 Series Compact Cylinder

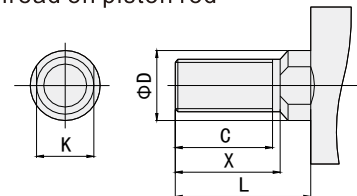
Main Dimensions CDQ2B

Φ12~Φ25

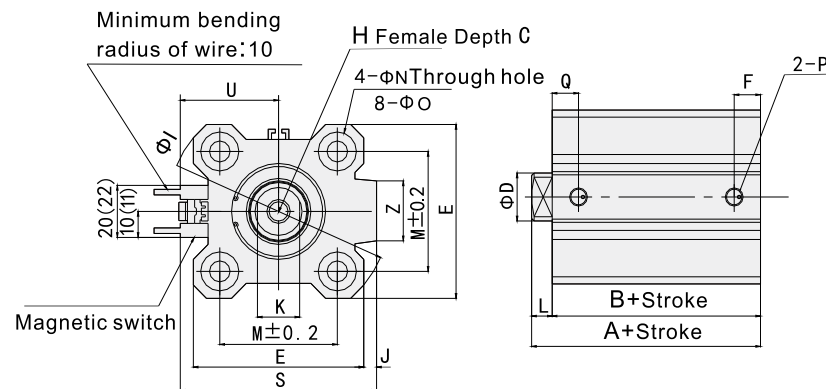
Both ends through hole^{Note3)}

Bore	O	R
12	M4×0.7	7
16	M4×0.7	7
20	M6×1.0	10
25	M6×1.0	10
32	M6×1.0	10
40	M6×1.0	10
50	M8×1.25	14
63	M10×1.5	18
80	M12×1.75	22
100	M12×1.75	22

Male thread on piston rod



Φ32~Φ100



Bore	C	X	ΦD	H	L	K
12	9	10.5	6	M5×0.8	14	5
16	10	12	8	M6×1.0	15.5	6
20	12	14	10	M8×1.25	18.5	8
25	15	17.5	12	M10×1.5	22.5	10
32	20.5	23.5	16	M14×1.5	28.5	14
40	20.5	23.5	16	M14×1.5	28.5	14
50	26	28.5	20	M18×1.5	33.5	17
63	26	28.5	20	M18×1.5	33.5	17
80	32.5	35.5	25	M22×1.5	43.5	22
100	32.5	35.5	30	M26×1.5	43.5	27

Bore	Stroke	A	B	ΦD	E	F	H	C	ΦI	J	K	L	M	ΦN	ΦO	P	Q	S	U	V	Z
12	5~30	31.5	28	6	32	6.5	M3×0.5	6	–	–	5	3.5	22	3.5	6.5Depth3.5	M5×0.8	11	35.5	19.5	25	–
16	5~30	34	30.5	8	38	5.5	M4×0.7	8	–	–	6	3.5	28	3.5	6.5Depth3.5	M5×0.8	10	41.5	22.5	29	–
20	5~50	36	31.5	10	46.8	5.5	M5×0.8	7	–	–	8	4.5	36	5.5	9Depth7	M5×0.8	10.5	48	24.5	36	–
25	5~50	37.5	32.5	12	52	5.5	M6×1.0	12	–	–	10	5	40	5.5	9Depth7	M5×0.8	11	53.5	27.5	40	–
32	5~50	40	33	16	45	7.5	M8×1.25	13	60	4.5	14	7	34	5.5	9Depth7	1/8	10.5	58.5	31.5	–	18
40	5~50	46.5	39.5	16	52	8	M8×1.25	13	69	5	14	7	40	5.5	9Depth7	1/8	11	66	35	–	18
50	10~50	48.5	40.5	20	64	10.5	M10×1.5	15	86	7	17	8	50	6.6	11Depth8	1/4	10.5	80	41	–	22
63	10~50	54	46	20	77	10.5	M10×1.5	15	103	7	17	8	60	9	14Depth10.5	1/4	15	93	47.5	–	22
80	10~50	63.5	53.5	25	98	12.5	M16×2.0	21	132	6	22	10	77	11	17.5Depth13.5	3/8	16	112.5	57.5	–	26
100	10~50	75	63	30	117	13	M20×2.5	27	156	6.5	27	12	94	11	17.5Depth13.5	3/8	23	132.5	67.5	–	26

Long Stroke^{Note2)} (mm)

Bore	Stroke	A	B	F	P	Q
32	75,100	40	33	7.5	1/8	10.5
40	75,100	46.5	39.5	8	1/8	11
50	75,100	48.5	40.5	10.5	1/4	10.5
63	75,100	54	46	10.5	1/4	15
80	75,100	63.5	53.5	12.5	3/8	16
100	75,100	75	63	13	3/8	23

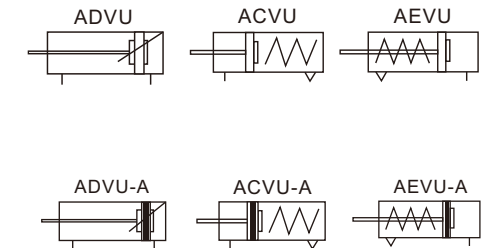
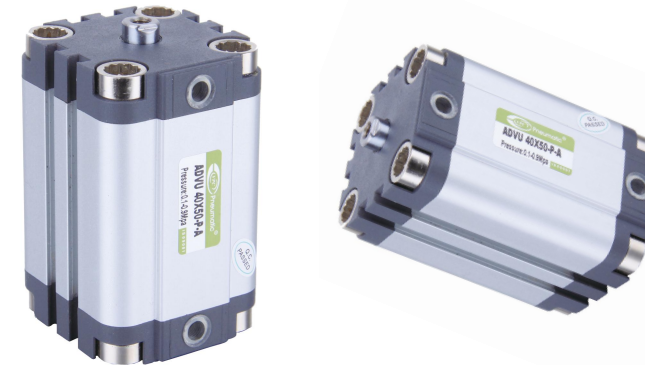
Note1) Standard stroke is at 5mm interval.

Note2) The stroke is medium stroke between 55mm and 100mm (55,60,65,70,80,85,90,95), plus 5, 10, 15 or 20mm thick backing plate.

Note3) Unless specified, the dimensions of the model with through hole is the same as those of the model with female thread at both ends.

Note4) The 5mm stroke cylinder can only install 1pc magnetic switch.

ADVU Series Compact Cylinder



Ordering Code ADVU Series Compact Cylinder

ADVU	12	X	10	-	25	A	B
Series code	Bore	Stroke	Adjustable stroke	Magnet	Thread		
ADVU: Double acting AEVU: Spring return ACVU: Spring extend ADVUD: Double shaft acting ADVUJ: Adjustable cushion type			Nil: Standard	Nil: Without magnet A: With magnet	Nil: Female thread B: Male thread		

Note: Adjustable stroke type only available as a double-shaft cylinder.

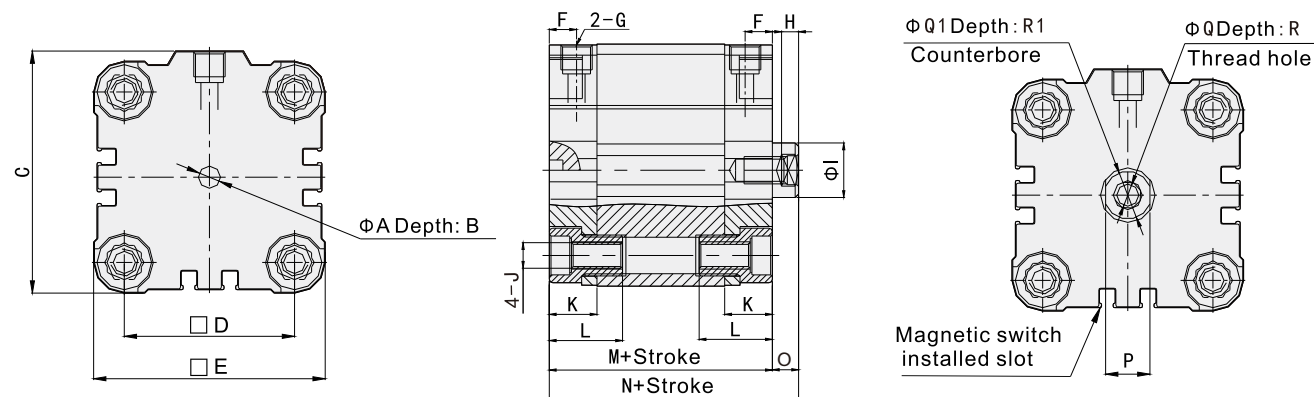
Specifications

Bore (mm)		12	16	20	25	32	40	50	63	80	100
Working medium		Clean air (40μm filtration)									
Acting type		Double acting spring extend, Spring return									
Pressure range	Double acting	0.1 to 1.0MPa									
	Spring acting	0.2 to 1.0MPa									
Max. working pressure		1.5MPa									
Working temperature		-5 to 70℃									
Speed range		Double acting: 30 to 500mm/s Spring acting: 50 to 500mm/s									
Tolerance of stroke		0 to 150 ^{+1.0} ₀ mm >150 ^{+1.4} ₀ mm									
Cushion type		Rubber cushion									
Port size		M5X0.8				G1/8					G1/4

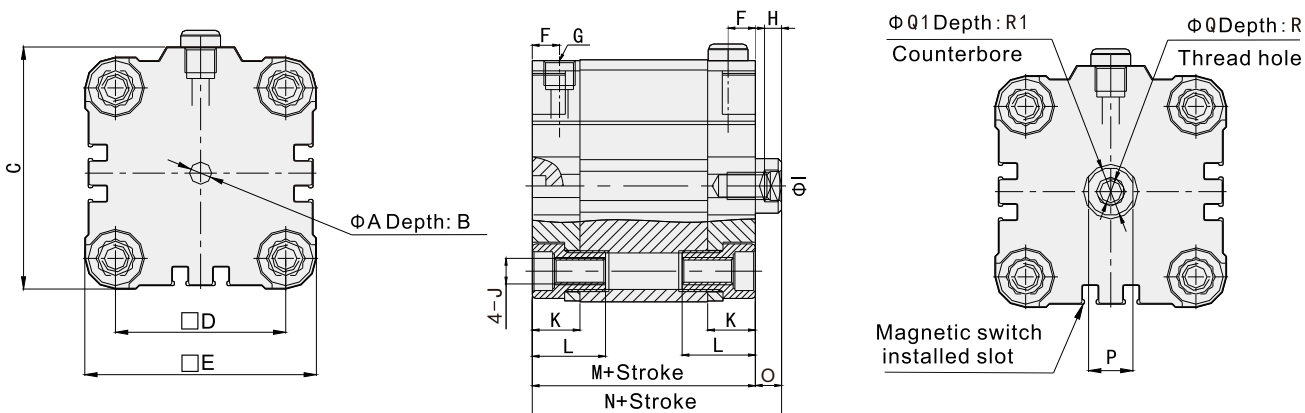
ADVU Series Compact Cylinder

Main Dimensions

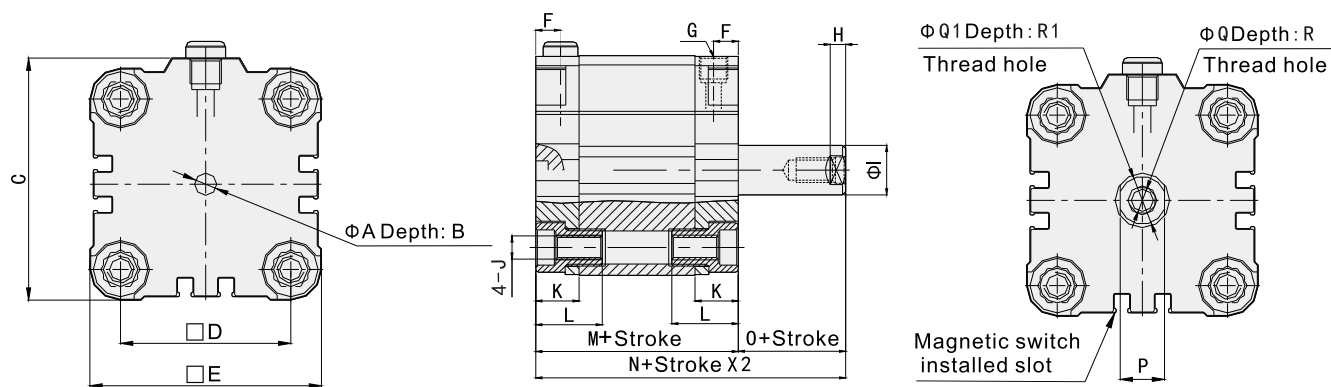
ADVU



AEVU



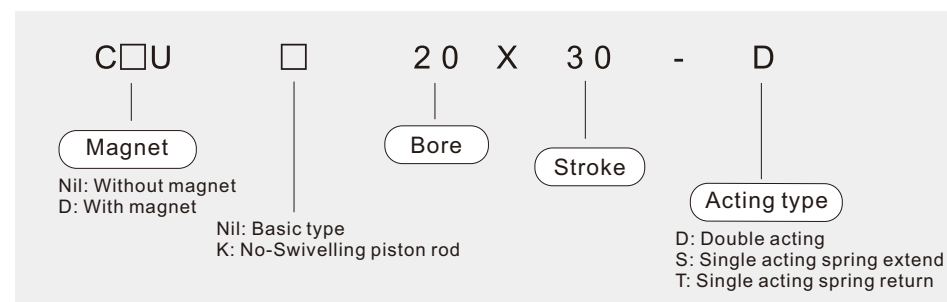
ACVU



Sign	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Q1	R	R1
Bore 12	6	4	30	18	29	8	M5X0.8	3	6	M4X0.7	11.5	18	38	42.5	4.5	5	M3X0.5	3.3	8	1.5
16	6	4	30	18	29	8	M5X0.8	3	8	M4X0.7	11.5	18	38	42.5	4.5	7	M4X0.7	4.5	10	1.5
20	6	4	37.5	22	36	8	M5X0.8	3	10	M5X0.8	11.5	18	38	42.5	4.5	9	M5X0.8	5.5	12	2
25	6	4	41.5	26	40	8	M5X0.8	4	10	M5X0.8	11.5	18	39.5	45	5.5	9	M5X0.8	5.5	12	2
32	6	4	52	32	50	8	G1/8	4.5	12	M6X1.0	14	21	44.5	50.5	6	32	M6X1.0	6.5	14	2.6
40	6	4	62.5	42	60	8	G1/8	4.5	12	M6X1.0	14	21	45.5	52	6.5	10	M6X1.0	6.5	14	2.6
50	6	4	71	50	68	8	G1/8	5	16	M8X1.25	14	22	45.5	53	7.5	10	M8X1.25	8.5	16	3.3
63	8	4	91	62	87	8	G1/8	5	16	M10X1.5	15	24	50	57.5	7.5	13	M8X1.25	8.5	16	3.3
80	8	4	111	82	107	8.5	G1/8	5.5	20	M10X1.5	16	27	56	64	8	17	M10X1.5	10.5	20	4.7
100	8.1	4	133	103	128	10.5	G1/8	7	25	M10X1.5	19	32	66.5	76.5	10	22	M12X17.5	12.5	24	6.1

CU Series Free Installation Cylinder

Ordering Code CU Series Free Installation Cylinder

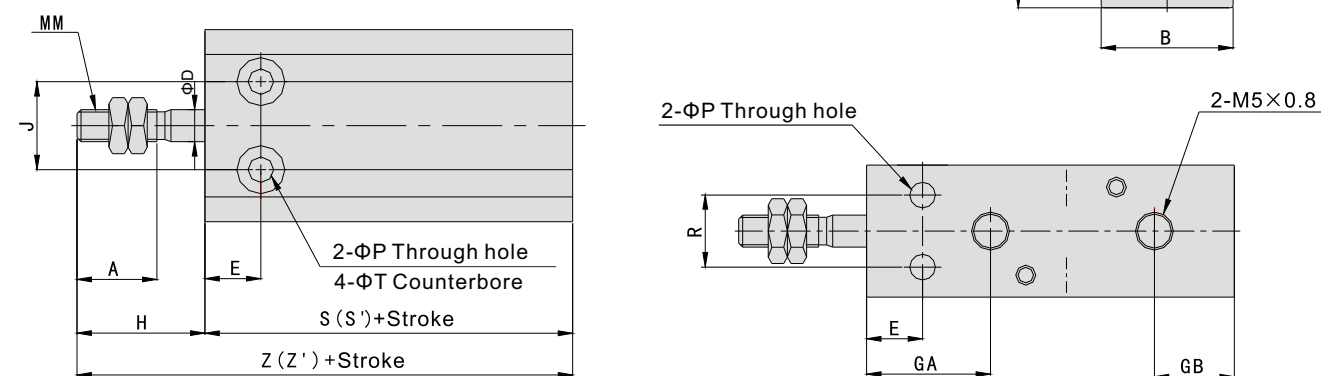


Specifications

Bore (mm)			6	10	16	20	25	32
Working medium			Clean air (40μm filtration)					
Acting type			Double acting/Single acting					
Min. pressure (MPa)	Double acting	Single piston rod	0.12	0.06		0.05		
		Double piston rod	0.15	0.10		0.08		
		Double piston rod	0.18	0.13		0.11		
	Single acting	Standard	0.20	0.15		0.13		
		Non-rotating	0.23	0.18		0.16		
Max. working pressure			0.7MPa					
Working temperature			5 to 60℃					
Cushion type			Rubber cushion					
Tolerance of stroke(mm)			+0.1 0					
Lubrication			Not required					
Installation			Free					
Non-rotating accuracy			± 0.8°			± 0.5°		
Port size			M5×0.8					G1/8

Main Dimensions

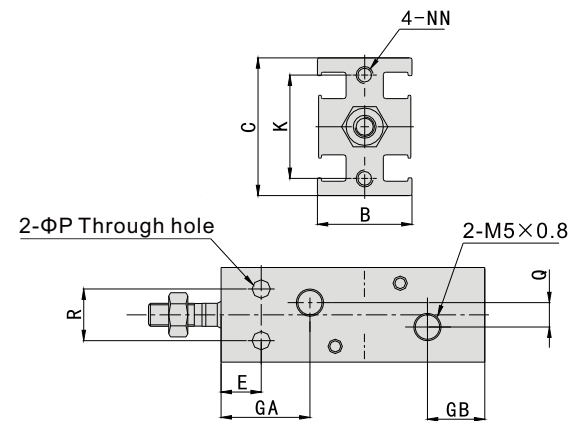
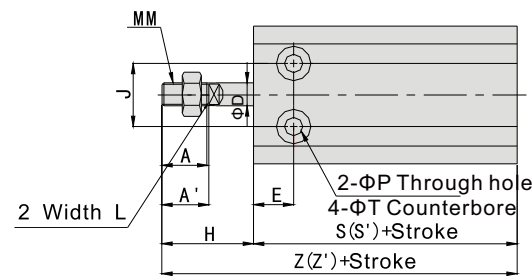
Φ6~Φ10



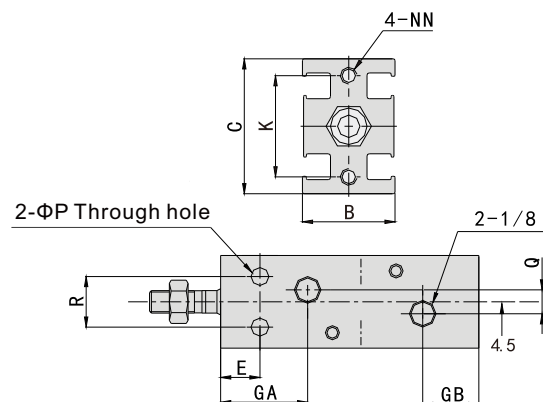
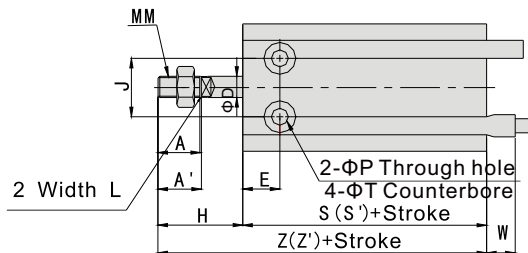
CU Series Free Installation Cylinder

Main Dimensions

Φ16~Φ25



Φ32



Common Dimensions Table

Model	A	A1	B	C	ΦD	E	GA	GB	J	K	L	MM	NN	ΦP	Q	R	ΦT
C□U6	7	-	13	22	3	7	14.5	10	10	17	-	M3X0.5	M3X0.5Depth5	3.2	-	7	6Depth4.8
C□U10	10	-	15	24	4	7	15.5	10	11	18	-	M4X0.7	M3X0.5Depth5	3.2	-	9	6Depth5
C□U16	11	12.5	20	32	6	7	16.5	11.5	14	25	5	M5X0.8	M4X0.7Depth6	4.5	4	12	7.6Depth6.5
C□U20	12	14	26	40	8	9	19	12.5	16	30	6	M6X1.0	M5X0.8Depth8	5.5	9	16	9.3Depth8
C□U25	15.5	18	32	50	10	10	21.5	13	20	38	8	M8X1.25	M5X0.8Depth8	5.5	9	20	9.3Depth9
C□U32	19.5	22	40	62	12	11	23	13	24	48	10	M10X1.25	M6X1.0Depth9	6.6	13.5	24	11Depth11.5

Double Acting

Model	H	Standard		With Magnet		
		S	Z	W	S'	Z'
C□U6-□D	13	33	46	2.5	33	46
C□U10-□D	16	36	52	1	36	52
C□U16-□D	16	30	46	0	40	56
C□U20-□D	19	36	55	1	46	65
C□U25-□D	23	40	63	-1	50	73
C□U32-□D	27	42	69	-4	52	79

Single Acting(With spring Return)

Model	H	Standard						W	With Magnet					
		S			Z				S'			Z'		
		5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st
C□U6-□S	13	38	43	48	51	56	61	2.5	38	43	48	51	56	61
C□U10-□S	16	41	46	56	57	62	72	1	41	46	56	57	62	72
C□U16-□S	16	35	40	50	51	56	66	0	45	50	60	61	66	76
C□U20-□S	19	41	46	56	60	65	75	1	51	56	66	70	75	85
C□U25-□S	23	45	50	60	68	73	83	-1	55	60	70	78	83	93
C□U32-□S	27	47	52	62	74	79	89	-4	57	62	72	84	89	99

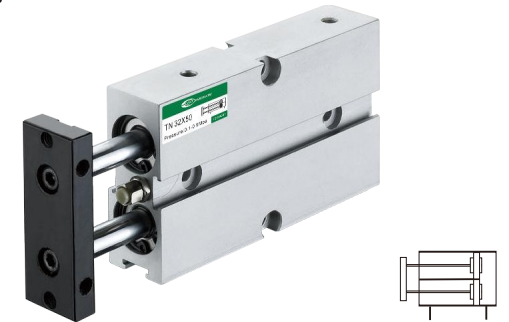
Single Acting(With spring Extend)

Model	H			Standard						W	With Magnet					
				S			Z				S'			Z'		
	5st	10st	15st	5st	10st	15st	5st	10st	15st		5st	10st	15st	5st	10st	15st
C□U6-□T	18	23	28	38	43	48	56	66	76	2.5	38	43	48	56	66	76
C□U10-□T	21	26	31	41	46	56	62	72	87	1	41	46	56	62	72	87
C□U16-□T	21	26	31	45	50	60	66	76	91	0	45	50	60	66	76	91
C□U20-□T	24	29	34	41	46	56	65	75	90	1	51	56	66	75	85	100
C□U25-□T	28	33	38	45	50	60	73	83	98	-1	55	60	70	83	93	108
C□U32-□T	32	37	42	47	52	62	79	89	104	-4	57	62	72	89	99	114

TN Series Double-shaft Cylinder

Ordering Code TN Series Double-shaft Cylinder

TN	20	X	50	-	S
	Bore		Stroke		Magnet
					Blank : Without Magnet S:With Magnet

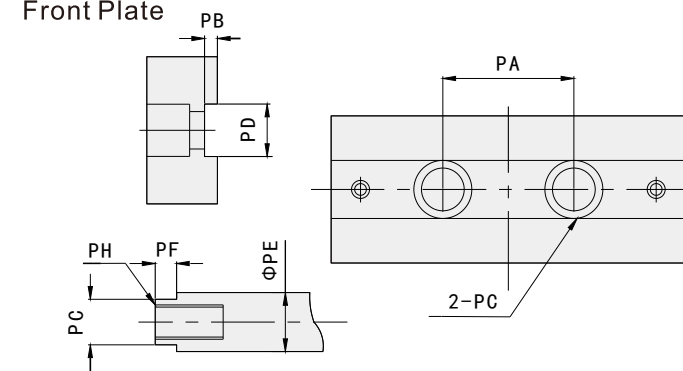


Specifications

Bore (mm)	10	16	20	25	32
Working medium	Clean air (40μm filtration)				
Acting type	Double acting				
Working pressure range	0.1 to 0.9MPa				
Max. working pressure	1.5MPa				
Working temperature	-5 to 70°C				
Speed range	30 to 500mm/s				
Adjustable stroke	-10 to 0mm				
Cushion type	Rubber cushion				
No rotating accuracy	0.4°	0.3°			
Port size	M5X0.8				G1/8

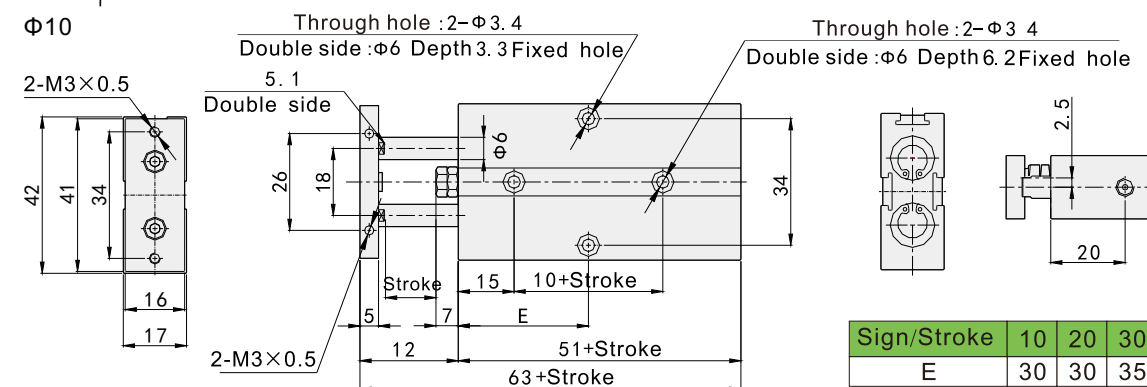
Main Dimensions

Front Plate



Bore/Sign	PA	PB	PC
10	18	0.7	Φ6.2×3.5Depth Through hole:Φ3.3
16	24	1	Φ7.8×4.6Depth Through hole:Φ4.3
20	28	1	Φ11×6.8Depth Through hole:Φ6.5
25	34	1	Φ11×6.8Depth Through hole:Φ6.5
32	42	2	Φ17×12Depth Through hole:Φ10.5

Bore/Sign	PD	PE	PF	PG	PG
10	5.2	6	2.2	5.1	M3X0.5 Depth5.5
16	6.2	8	3	6.1	M4X0.7 Depth9
20	8.2	10	3	8.1	M6X1 Depth10
25	10.2	12	3	10.1	M6X1 Depth10
32	14.2	16	3	14.1	M10X1.5 Depth13



Sign/Stroke	10	20	30	40	50	60	70
E	30	30	35	40	45	50	55

CXS Series Double-shaft Cylinder

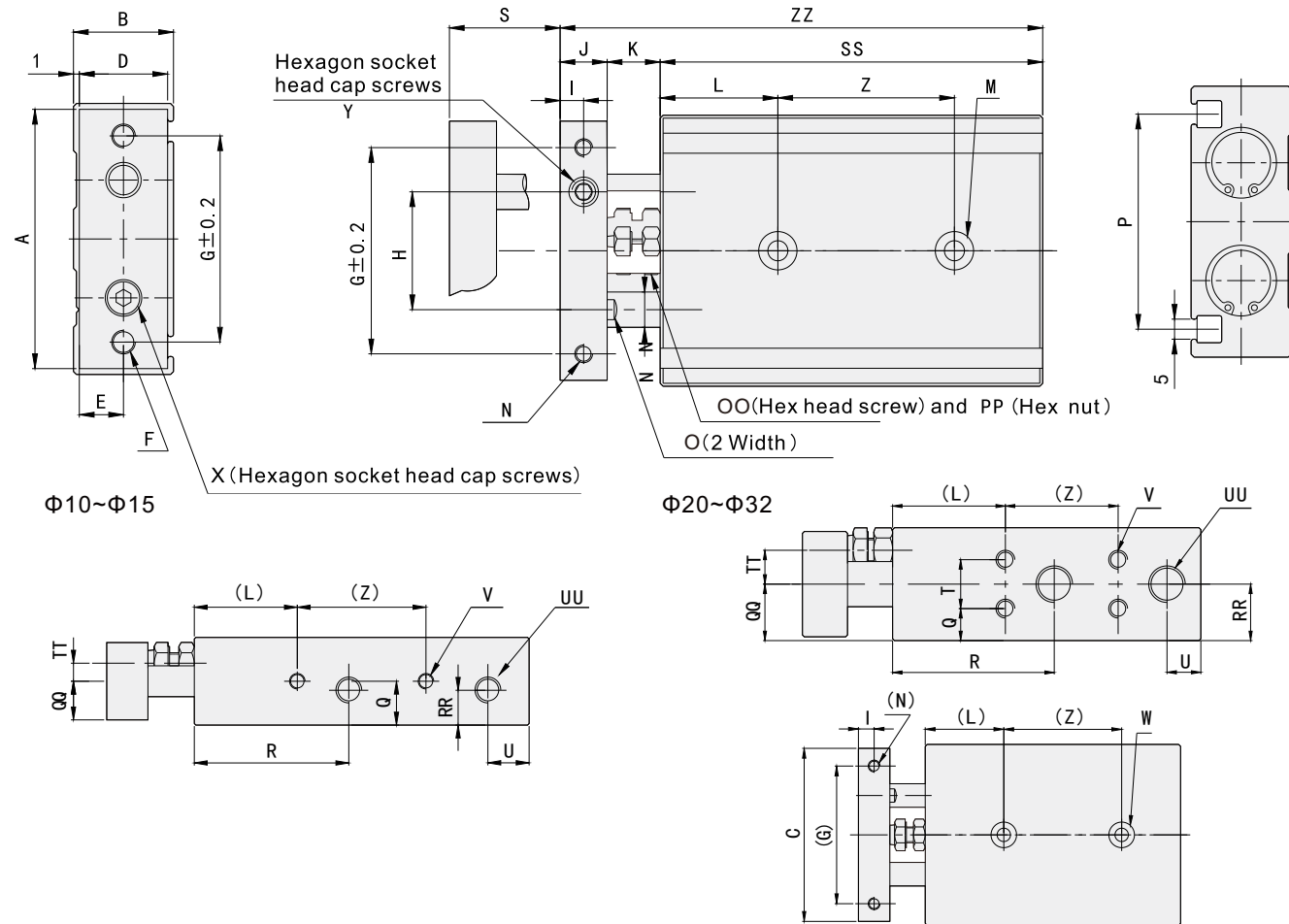
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Model	Stroke	10+1/2Stroke	13+Stroke	45+Stroke	58. 5+Stroke
CXS□6-10	10	15	23	55	68.5
CXS□6-20	20	20	33	65	78.5
CXS□6-30	30	25	43	75	88.5
CXS□6-40	40	30	53	85	98.5
CXS□6-50	50	35	63	95	108.5

CXS Series Double-shaft Cylinder

Main Dimensions

CXS□10 \ 15 \ 20 \ 25 \ 32



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	NN	O	OO	P	PP	Q	QQ	R	RR	S	SS	T	TT	U	UU	V	W	X	Y	Z	ZZ	
CXS□10-10																									10	65										
CXS□10-20																									20	75										
CXS□10-30	46	17	44	15	7.5	2-M4 x0.7 Through hole	35	20	4	8	9	20	2-Φ3.4 Through hole 2-Φ6.5 Counterbore 3.3	2-M3 x0.5 Thread depth 5	Φ6	5	M4 x 0.7 x 14.5 L	33.6	M4 x 0.7	8.5	7	30	7	30	85		5	8	4-M5×0.8 Thread depth 4.5 (Port size)	4-M3x 0.5 Thread depth 4.5	2-M4 x0.7 Thread depth 7	M3 x 0.5 x 10 L	M3 x 0.5 x 5 L	30	82 92	
CXS□10-40																								40	95											
CXS□10-50																								50	105											
CXS□15-10																									10	70										
CXS□15-20																									20	80										
CXS□15-30	58	20	56	18	9	2-M5 x0.8 Through hole	45	25	5	10	9	30	2-Φ4.3 Through hole 2-Φ8 Counterbore 4.4	2-M4 x0.7 Thread depth 6	Φ8	6	M4 x 0.7 x 14.5 L	48	M4 x 0.7	10	10	38.5	10	30	90		5	8	4-M5×0.8 Thread depth 4.5 (Port size)	4-M4x 0.7 Thread depth 5	2-M5 x0.8 Thread depth 8	M5 x 0.8 x 10 L	M4 x 0.7 x 4 L	25	89 99	
CXS□15-40																								40	100											
CXS□15-50																								50	110											
CXS□20-10																									10	80										
CXS□20-20																									20	90										
CXS□20-30																									30	100										
CXS□20-40	64	25	62	23	11.5	2-M5 x0.8 Through hole	50	28	6	12	12	30	2-Φ5.5 Through hole 2-Φ9.5 Counterbore 5.3	2-M4 x0.7 Thread depth 6	Φ10	8	M6 x 1.0 x 18.5 L	53	M6 x 1.0	7.7	12.5	45	7.75	40	110		5	8	4-M5×0.8 Thread depth 4.5 (Port size)	8-M4x 0.7 Thread depth 6	2-M6 x1.0 Thread depth 10	M6 x 1.0 x 12 L	M5 x 0.8 x 5 L	40	124 134	
CXS□20-50																								50	120											
CXS□20-75																								75	145											
CXS□20-100																								100	170											
CXS□25-10																									10	82										
CXS□25-20																									20	92										
CXS□25-30																									30	102										
CXS□25-40	80	30	78	28	14	2-M6 x1.0 Through hole	60	35	6	12	12	30	2-Φ6.9 Through hole 2-Φ11 Counterbore 6.3	2-M5 x0.8 Thread depth 7.5	Φ12	10	M6 x 1.0 x 18.5 L	64	M6 x 1.0	8.5	15	46	15	40	112		9	9	4-1/8 Thread depth 6.5 (Port size)	8-M5 x0.8 Thread depth 7.5	2-M8 x1.25 Thread depth 12	M6 x 1.0 x 14 L	M6 x 1.0 x 5 L	40	136 146	
CXS□25-50																								50	122											
CXS□25-75																								75	147											
CXS□25-100																								100	172											
CXS□32-10																									10	92										
CXS□32-20																									20	102										
CXS□32-30																									30	112										
CXS□32-40	98	38	96	36	18	2-M6 x1.0 Through hole	75	44	8	16	14	30	2-Φ6.9 Through hole 2-Φ11 Counterbore 6.3	2-M5 x0.8 Thread depth 8	Φ16	13	M8 x 1.25 x 23 L	76	M8 x 1.25	9	19	56	19	40	122		11	5	10	4-1/8 Thread depth 6.5 (Port size)	8-M5 x0.8 Thread depth 7.5	2-M8 x1.25 Thread depth 12	M8 x 1.25 x 16 L	M8 x 1.25 x 8 L	40	142 152
CXS□32-50																								50	132											
CXS□32-75																								75	157											
CXS□32-100																								100	182											

STM Series Slide Cylinder

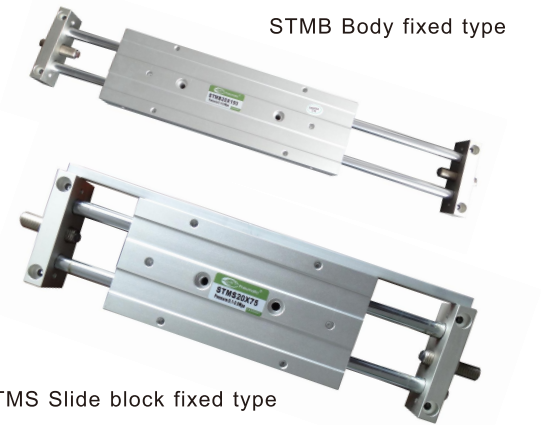
Ordering Code STM Series Slide Cylinder

STM □ 20 X 50

Fixed type
B: Body fixed type
S: Slide block fixed type

Bore

Stroke



Performance

- * Two type of fixed type&slide block fixed type;
- * Double shaft provide good anti-bend performance and guarantee long life cycle and correct direction;
- * Using the high temperature sealing material, guarantee a good condition under 150°C;
- * Magnet is permanently mounted, which can trigger the magnetic switch to judge the movement position.



Specifications

Bore (mm)	10	16	20	25
Working medium	Clean air (40μm filtration)			
Acting type	Double acting			
Working pressure range	0.1 to 1.0MPa			
Max. working pressure	1.5MPa			
Working temperature	-20 to 70°C			
Speed range	30 to 500mm/s			
Stroke Tolerance	+1.0 mm			
Cushion type	Shock absorber(Optional)			
No-rotating accuracy	± 0.1°		± 0.05°	
Port size	M5X0.8			G1/8

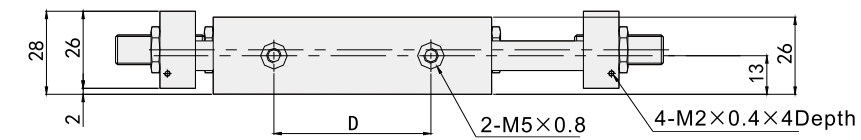
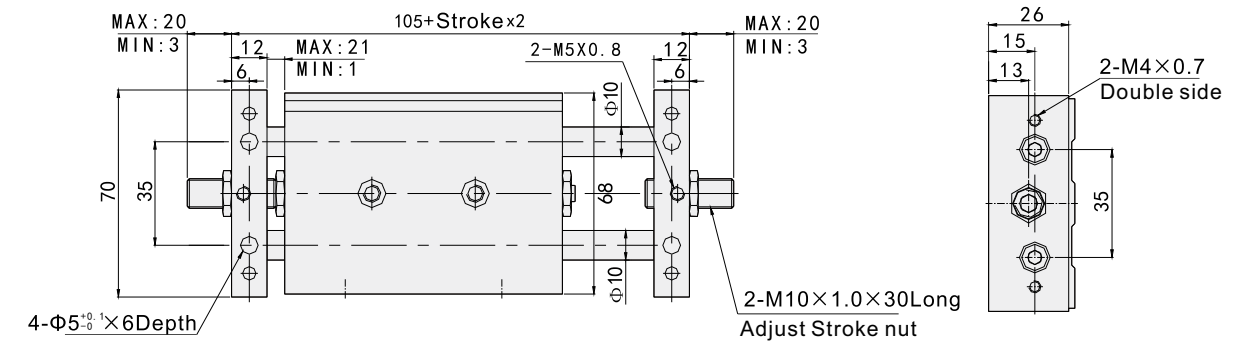
Stroke remark

Bore (mm)	Standard Stroke (mm)								Max.Stroke	Permit Stroke
10	25	50	75	100					100	150
16	25	50	75	100	125	150	175	200	200	250
20	25	50	75	100	125	150	175	200	250	300
25	25	50	75	100	125	150	175	200	250	300

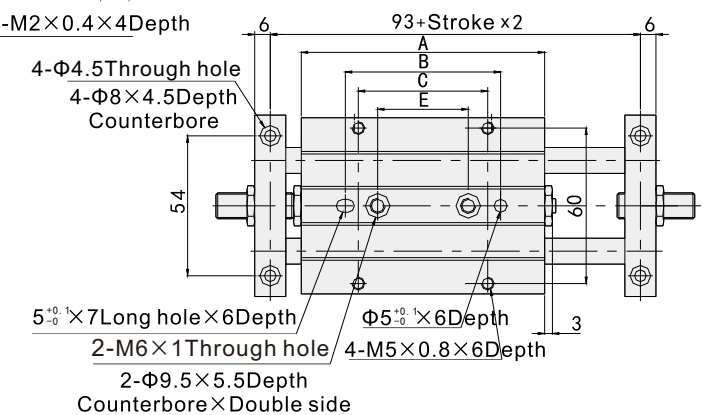
STM Series Slide Cylinder

■ Main Dimensions

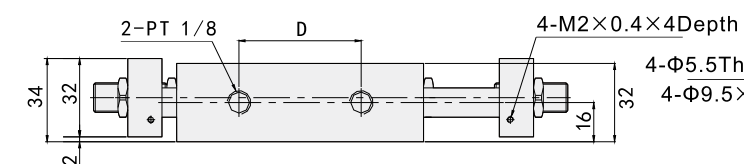
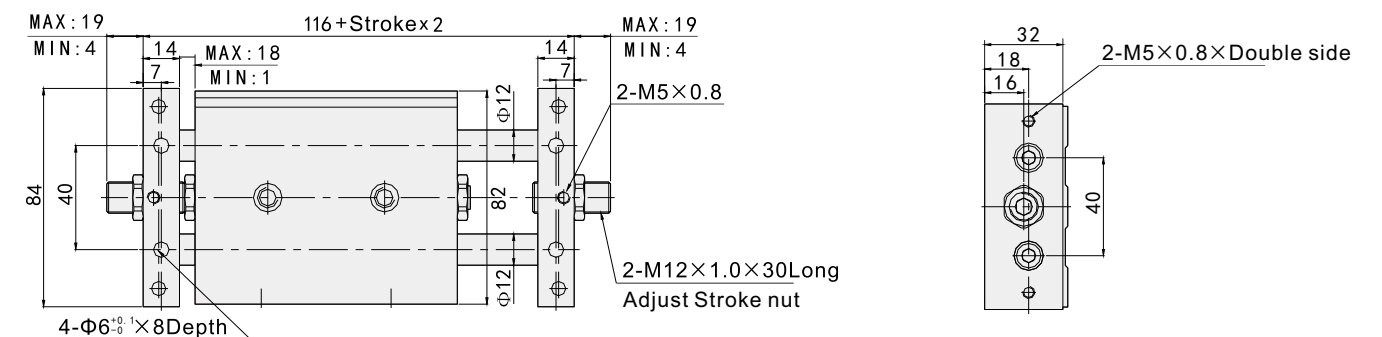
Φ20



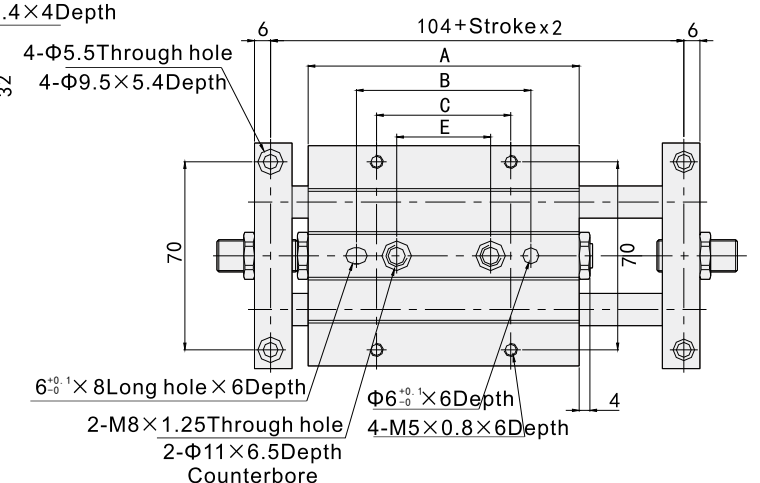
Stroke/Sign	A	B	C	D	E
25	94	60	50	53	35
50	119	85	50	78	45
75	144	110	75	103	45
100	169	135	100	128	70
125	194	150	120	153	90
150	219	150	120	178	90
175	244	150	120	203	90
200	269	150	120	228	90
250	319	150	120	278	90



Φ25

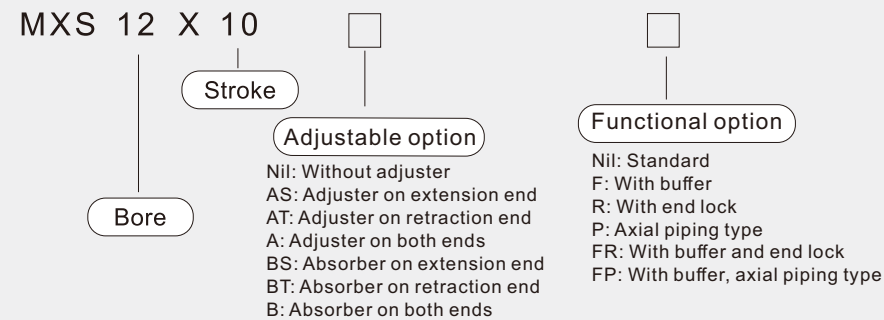


Stroke/Sign	A	B	C	D	E
25	101	65	50	50	35
50	126	90	50	75	45
75	151	115	75	100	45
100	176	140	100	125	70
125	201	140	100	150	95
150	226	140	100	175	100
175	251	140	100	200	100
200	276	140	100	225	100
250	326	140	100	275	100



MXS Series Slide Cylinder

Ordering Code MXS Series Slide Cylinder

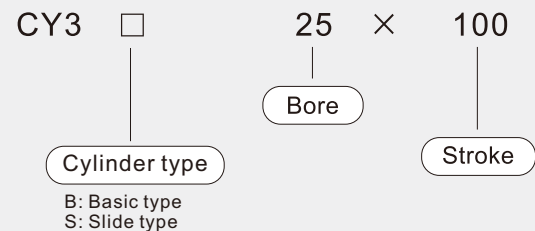


Specifications

Model	MXS 6	MXS 8	MXS 12	MXS 16	MXS 20	MXS 25
Bore (mm)	Φ6×2 (equal to Φ8)	Φ8×2 (equal to Φ11)	Φ12×2 (equal to Φ17)	Φ16×2 (equal to Φ22)	Φ20×2 (equal to Φ28)	Φ25×2 (equal to Φ35)
Working medium	Clean air (40μm filtration)					
Acting type	Double acting					
Max. working pressure	0.7MPa					
Min. working pressure	0.15MPa					
Working temperature	-10 to 60°C					
Speed of piston	50 to 500mm/s					
Lubrication	No					
Cushion type	Rubber cushion					
Port size	M3×0.5	M5×0.8			G1/8	

CY3 Series Rodless Cylinder

Ordering Code CY3 Series Rodless Cylinder

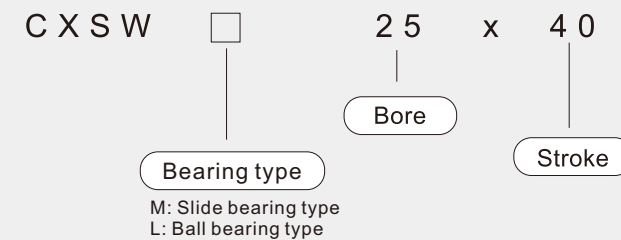


Bore (mm)	6	10	15	25	32	40	50	63
Acting type	Double acting							
Working medium	Clean air (40μm filtration)							
Working temperature	-5 to 60°C							

Bore (mm)	6	10	15	25	32	40	50	63
Pressure range	0.18 to 0.71MPa							
Guaranteed pressure	1.05MPa							
Speed range	50 to 400mm/s							
Cushion type	Rubber cushion							
Lubrication	No							
Port size	M5X0.8		G1/8		G1/4			

CXSW Series Double-shaft Cylinder

Ordering Code CXSW Series Double-shaft Cylinder

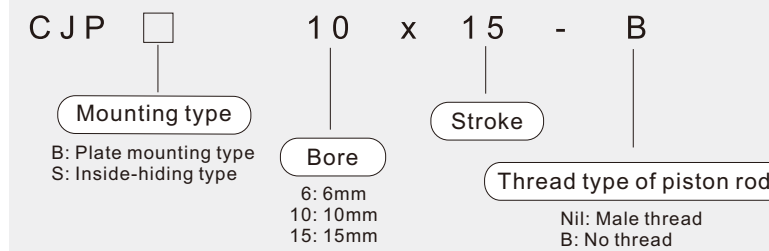


Specifications

Bore (mm)	6	10	15	20	25	32
Working medium	Clean air (40μm filtration)					
Acting type	Double acting					
Max. working pressure	0.7MPa					
Min. working pressure	0.15MPa			0.1MPa		
Cushion type	Rubber cushion					
Working temperature	-5 to 60℃					
Speed of piston	50 to 500mm/s					
Stroke adjustable range	0 to 10mm/s					
Port size	M5×0.8				G1/8	

CJP Series Needle Cylinder

Ordering Code CJP Series Needle Cylinder



Specifications

Bore (mm)	6	10	15
Working medium	Clean air (40μm filtration)		
Acting type	Single acting spring return		
Pressure range	0.2 to 0.7MPa	0.15 to 0.7MPa	
Max. pressure	1.05MPa		

Bore (mm)	6	10	15
Working temperature	-5 to 60°C		
Stroke tolerance	+1.0 0		
Port size	M5×0.8(Plate mounting type)		
Cushion type	No		

MSQ Series Rotary Table, Rack&Pinion Cylinder

Ordering Code MSQ Series Rotary Table, Rack&Pinion Cylinder

MSQ B 50 A

Basic Bore

A: With adjustable angle screw
R: With shock absorber



Specifications

Bore (mm)		10	20	30	50	70	100	200
Working medium		Clean air (40μm filtration)						
Working pressure range		With adjustable angle screw: 0.1 to 1.0MPa, With shock absorber: 0.1 to 0.6MPa						
Cushion type		Cushion rubber cushion(Standard)/Shock absorber(Optional)						
Allowed power	With adjustable angle screw	0.007J	0.025J	0.048J	0.081J	0.24J	0.32J	0.56J
	With shock absorber	0.039J	0.116J		0.294J	1.1J	1.6J	2.9J
Angle adjustable range		0 to 190°						
Steady swing time range		A	0.2 to 1.0s/90°			0.2 to 1.5s/90°	0.2 to 2.0s/90°	0.2 to 2.5s/90°
		R	0.2 to 0.7s/90°			0.2 to 1.0s/90°		
Piston diameter		Φ15	Φ18	Φ21	Φ25	Φ28	Φ32	Φ40
Port size		M5×0.8		G1/8				

RSQ Series Stopper Cylinder

Ordering Code RSQ Series Stopper Cylinder

RSQ B 50 X 15

Mounting type Bore Ating type Rod end type

B: Through hole
A: Both ends female thread

D: Double acting
B: Single acting with spring return
T: Single acting spring extend

Nil: Cylindrical type
K: Flat type
R: Roller type
L: Level type with cushion

Nil: Without magnet
D: With magnet



Specifications

Bore (mm)	20	32	40	50
Working medium	Clean air (40μm filtration)			
Acting type	Double acting, Single acting with spring return, Single acting spring extend			
Rod end type	Round bar, Flat bar, Roller	Round bar, Flat bar, Roller, Level, Lever roller type		
Max. working pressure	1.0MPa			
Working temperature	No magnet: -10 to 70℃ With magnet:-10 to 60℃			
Cushion type	Both ends rubber cushion			
Port size	G1/8			

MGP Series Three-shaft Cylinder

Ordering Code MGP Series Three-shaft Cylinder

MGP 25 x 40

Bearing type Bore Stroke

M: Slide bearing type
L: Ball bearing type



Specifications

Bore (mm)	12	16	20	25	32	40	50	63	80	100
Working medium	Clean air (40µm filtration)									
Acting type	Double acting									
Max. working pressure	1.5MPa									
Working pressure range	0.12 to 1.0MPa									
Bearing	Slide bearing/Ball bushing bearing									
Non-rotating accuacy	Slide bearing	± 0.08°	± 0.07°	± 0.06°	± 0.05°	± 0.04°				
	Ball bushing bearing	± 0.10°	± 0.09°	± 0.08°	± 0.06°	± 0.05°				
Port size	M5×0.8		G1/8			G1/4		G3/8		

MHZ Series Parallel Type Air Gripper

Ordering Code MHZ Series Style Air Cylinder

MHZ 2 25 D -

Finger Bore Acting type Dusty seal material

2: 2PCS

D: Double acting
S: Single acting (N. O.)
C: Single acting (N. C.)

Nil: CR
F: FKM
S: SI



Specifications

Bore (mm)		6	10	16	20	25	32	40
Working medium		Clean air (40µm filtration)						
Working temperature		-10 to 60°C						
Working pressure range (MPa)	Double acting	0.15 to 0.7	0.2 to 0.7	0.1 to 0.7			0.1 to 0.7	
	Single acting	0.3 to 0.7	0.35 to 0.7	0.25 to 0.7			0.25 to 0.7	
Repeatability		± 0.01					± 0.02	
Max. acting frequency		180c.p.m					60c.p.m	
Lubrication		Not required						
Port size		M3×0.5		M5×0.8				

MHL Series Parallel Style Wide Opening Air Cylinder

Ordering Code MHL Series Parallel Style Wide Opening Air Cylinder

M H L 2 - 2 5 D

Finger
2: 2PCS

Bore

Acting type
D: Double acting

Finger open/Close stroke

Bore(mm)	Φ10	Φ16	Φ20	Φ25	Φ32	Φ40
Nil	20	30	40	50	70	100
1	40	60	80	100	120	160
2	60	80	100	120	160	200



Specifications

Bore (mm)	10	16	20	25	32	40
Working medium	Clean air (40μm filtration)					
Max. working pressure	0.6MPa					
Min. working pressure	0.15MPa	0.1MPa				
Working temperature	-10 to 60℃					
Repeatability	±0.1mm					
Effective gripping force (N. M)	14	45	74	131	228	396
Port size	M5×0.8				G1/8	

MHT Series Angle Style Air Gripper Toggle Type

Ordering Code MHT Series Angle Style Air Gripper Toggle Type

M H T 2 - 3 2 D

Finger
2:2PCS

Bore

Acting type
D: Double acting



Specifications

Model	MHT2-32D	MHT2-40D	MHT2-50D	MHT2-63D
Bore (mm)	Φ32	Φ40	Φ50	Φ63
Working medium	Clean air (40μm filtration)			
Min. working pressure	0.6MPa			
Max. working pressure	0.1MPa			
Working temperature	-10 to 60°C			
Lubrication	Not required			
Finger open/Close angle	-3 to 28°	-3 to 27°	-2 to 23°	-2 to 23°
Effective gripping force (N. M)	12. 4	36. 0	63. 0	106

Special Cylinder

Special Cylinder

VPC have their new product development team, responsible for product design and development. For the R&D department set up a high level of structural engineer team. Each product as per the drawings to after repeated demonstration structural engineers, product managers, and customer's final confirmation. Before the product put into the market, we have a variety of performance testing, life testing, for this VPC has import a lot of test equipment, in order to confirm the product has a variety of reliable performance.

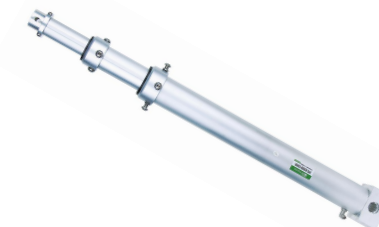
As long as you tell us your detail requirements. VPC promise purchase to customized products for you within 50 days.



VQAL32×50-50



VPC50×100-GB



VPC80×500-63×450



TN/CXS Series
Multy Force
Pneumatic Cylinder
Φ20~Φ 32



MA Series
Full Stainless Steel
Pneumatic Cylinder
Φ16~Φ50



SC Series
Full Stainless Steel
Pneumatic Cylinder
Φ32~Φ63

Cylinder Assembly Kits

Full Set Kits

DNC(ISO6431&VDMA24562) Bore Side: $\Phi 32$, $\Phi 40$, $\Phi 50$, $\Phi 63$, $\Phi 80$, $\Phi 100$, $\Phi 125$	MI(ISO6432) Bore Side: $\Phi 8$, $\Phi 10$, $\Phi 12$, $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$	MAL Bore Side: $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$, $\Phi 40$
SI(ISO6431) Bore Side: $\Phi 32$, $\Phi 40$, $\Phi 50$, $\Phi 63$, $\Phi 80$, $\Phi 100$, $\Phi 125$, $\Phi 160$, $\Phi 200$	SC(ISO6431) Bore Side: $\Phi 32$, $\Phi 40$, $\Phi 50$, $\Phi 63$, $\Phi 80$, $\Phi 100$, $\Phi 125$, $\Phi 160$, $\Phi 200$	MA Bore Side: $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$, $\Phi 40$

Tube&Rod

SDA Aluminum Tube Bore Side: $\Phi 12$, $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$, $\Phi 40$, $\Phi 50$, $\Phi 63$, $\Phi 80$, $\Phi 100$, $\Phi 125$	SC Aluminum Tube Bore Side: $\Phi 32$, $\Phi 40$, $\Phi 50$, $\Phi 63$, $\Phi 80$, $\Phi 100$, $\Phi 125$, $\Phi 160$, $\Phi 200$, $\Phi 250$	SI Aluminum Tube Bore Side: $\Phi 32$, $\Phi 40$, $\Phi 50$, $\Phi 63$, $\Phi 80$, $\Phi 100$, $\Phi 125$, $\Phi 160$, $\Phi 200$, $\Phi 250$
MA/MI Tube(ISO6432) Stainless Steel Tube Bore Side: $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$, $\Phi 40$	MAL Aluminum Tube Bore Side: $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$, $\Phi 40$	Piston Rod (45 Steel Chrome-plated) Diameter: $\Phi 4$, $\Phi 5$, $\Phi 6$, $\Phi 8$, $\Phi 10$, $\Phi 12$, $\Phi 16$, $\Phi 20$, $\Phi 25$, $\Phi 32$, $\Phi 40$, $\Phi 45$, $\Phi 50$, $\Phi 60$, $\Phi 70$, $\Phi 80$, ect.

Magnet Switches

Main Dimensions

Cylinder	Magnet Switches	Mounting	Clamp
	CSI-U 		 PAM - 63 Item Code Bore Size
	CSI-F 		 PI - 63 Item Code Bore Size
	CSI-S 		 BK Band
	CSI-M 		No Need Clamp
	CSI-J 		No Need Clamp
	CSI-G 		No Need Clamp
	CSI-J1 		No Need Clamp
	CSI-H 		No Need Clamp