

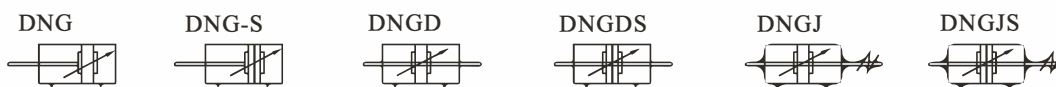
DNG Series



Product feature

1. ISO15552 (original ISO6431) standard cylinder.
2. The piston seal is composed of two Y-shape seals of single direction structure, which has compensation function, long service life and low start-up pressure.
3. DNG series cylinders are made of stainless steel material 304 & 316.
4. The buffer adjustment of cylinder is smooth and steady.
5. Cylinders and accessories for installation with several specifications are optional.
6. The seal material with high temperature resistance is adopted to guarantee the normal operation of cylinder at 150°C.

Symbol



Specification

Bore size(mm)	32	40	50	63	80	100	125	160	200	250	320
Acting type	Double acting										
Fluid	Air(to be filtered by 40μm filter element)										
Operating pressure	0.15~1.0MPa(22~145psi)(1.5~10.0bar)										
Proof pressure	1.5MPa(215psi)(15bar)										
Temperature	-20~70°C										
Speed range	30~800 mm/s										
Stroke tolerance	0 ~ 1000 ^{+1.0} ₀ 1001 ~ 2000 ^{+1.8} ₀										
Cushion type	Variable cushion										
Cushion stroke	20		25		30		32		40		50
Port size [Note1]	G1/8		G1/4		G3/8		G1/2		G3/4		G1

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

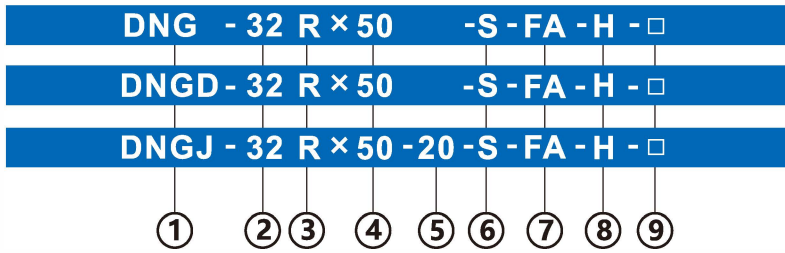
Standard Stroke

Bore size(mm)	Standard stroke	Max.std stroke	Max. stroke
32	25 50 75 100 125 150 175 200 250 300 350 400 450 500	1000	1500
40	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800	1200	1500
50	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	1500
63	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
80	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
100	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
125	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	1800
160	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
250	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
320	25 50 75 100 125 150 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

[Note] Consult us for non-standard stroke.

DNG Series

Ordering code



① Model

DNG: Double acting type

DNGD: Double rod type

DNGJ: Adjustable stroke type

② Bore size

32 40 50 63 80

100 125 160

200 250 320

③ Rod material

Blank: EU

R: DPR

④ Stroke

Refer to stroke table for details

⑤ Adjustable stroke

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

⑦ Mounting style

Mounting style	Adaptable series
Blank: No accessories	
LB: LB type	DNG
FA: FA type	DNGD
FTC: FTC type	DNGJ
TC: TC type	
FB: FB type	
CA: CA type	DNG
CB: CB type	
CR: CR type	

⑥ Magnet

Blank: Without magnet

S: With magnet

⑧ Seals material

Blank: NBR

H: Viton

T: TPU

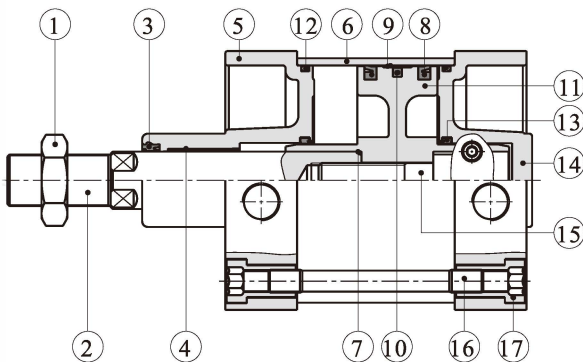
⑨ Thread type

Blank: G thread

PT: PT thread

[Note1] CR is used with CB, FTC. TC are used with TCM1,TCM2.

Inner structure and material of major parts



NO.	Item	Material
1	Rod nut	Stainless steel 304/316
2	Piston rod	Stainless steel 304/316
3	Front cover packing	NBR(SGC250)\TPU(Other)
4	Bushing	Wear resistant material
5	Front cover	Stainless Steel 304/316
6	pipe	Stainless Steel 304/316
7	O-ring	NBR
8	Piston Seal	NBR
9	Wear ring	Wear resistant material
10	Magnet	Rubber
11	Piston	Aluminum alloy
12	O-ring	NBR
13	Buffer gasket	NBR(SGC250)\TPU(Other)
14	Back cover	Stainless Steel 304/316
15	Screw	Stainless Steel 304/316
16	Tie-rod	Stainless steel 304/316
17	Tie-rod nut	Stainless steel 304/316

DNG Series

List for ordering code of accessories

Accessories Bore size	Mounting accessories							
	LB	FA/FB	CA	CB	CR	TC	FTC	TCM1
32	F-DNG32LB	F-DNG32FA	F-DNG32CA	F-DNG32CB	F-DNG32CR	F-DNG32TC	F-DNG32FTC	F-DNG32TCM1
40	F-DNG40LB	F-DNG40FA	F-DNG40CA	F-DNG40CB	F-DNG40CR	F-DNG40TC	F-DNG40FTC	F-DNG40TCM1
50	F-DNG50LB	F-DNG50FA	F-DNG50CA	F-DNG50CB	F-DNG50CR	F-DNG50TC	F-DNG50FTC	F-DNG40TCM1
63	F-DNG63LB	F-DNG63FA	F-DNG63CA	F-DNG63CB	F-DNG63CR	F-DNG63TC	F-DNG63FTC	F-DNG63TCM1
80	F-DNG80LB	F-DNG80FA	F-DNG80CA	F-DNG80CB	F-DNG80CR	F-DNG80TC	F-DNG80FTC	F-DNG63TCM1
100	F-DNG100LB	F-DNG100FA	F-DNG100CA	F-DNG100CB	F-DNG100CR	F-DNG100TC	F-DNG100FTC	F-DNG125TCM1
125	F-DNG125LB	F-DNG125FA	F-DNG125CA	F-DNG125CB	F-DNG125CR	F-DNG125TC	F-DNG125FTC	F-DNG125TCM1
160	F-DNG160LB	F-DNG160FA	-	F-DNG160CB	-	F-DNG160TC	F-DNG160FTC	F-DNG160TCM1
200	F-DNG200LB	F-DNG200FA	-	F-DNG200CB	-	F-DNG200TC	F-DNG200FTC	F-DNG200TCM1
250	F-DNG250LB	F-DNG250FA	-	F-DNG250CB	-	-	-	-
320	F-DNG320LB	F-DNG320FA	-	F-DNG320CB	-	-	-	-

Accessories Bore size	Knuckle				Sensor switch	
	I: I Knuckle	Y: Y Knuckle	F: F Knuckle	U: U Knuckle	CS1-G	DS1-G
32	F-M10X125I	F-M10X125Y	F-M10X125F	F-M10X125U	CS1-G	DS1-G
40	F-M12X125I	F-M12X125Y	F-M12X125F	F-M12X125U		
50	F-M16X150I	F-M16X150Y	F-M16X150F	F-M16X150U		
63	F-M16X150I	F-M16X150Y	F-M16X150F	F-M16X150U		
80	F-M20X150I	F-M20X150Y	F-M20X150F	F-M20X150U		
100	F-M20X150I	F-M20X150Y	F-M20X150F	F-M20X150U		
125	F-M27X200I	F-M27X200Y	F-M27X200F	F-M27X200U		
160	F-M36X200I	F-M36X200Y	F-M36X200F	F-M36X200U		
200	F-M36X200I	F-M36X200Y	F-M36X200F	F-M36X200U		
250	F-M42X200I	F-M42X200Y	F-M42X200F	F-M42X200U		
320	F-M42X200I	F-M42X200Y	F-M42X200F	F-M42X200U		

Accessory selection

Accessories Cylinder model	Mounting accessories										Knuckle				Sensor switch	
	LB	FA	FB	CA	CB	CR	TC	FTC	TCM1	I	Y	U	F	CMSE	DMSE	
DNG	Standard	●	●	●	●	●	●	●	●	●	●	●	●	×	×	
	With magnet	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
DNGD DNGJ	Standard	●	●	×	×	×	×	●	●	●	●	●	●	×	×	
	With magnet	●	●	×	×	×	×	●	●	●	●	●	●	●	●	

Material of accessories

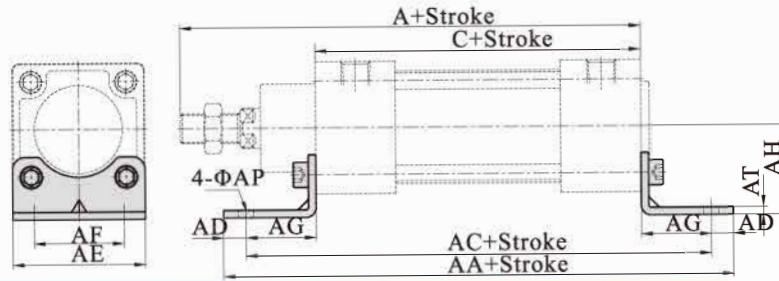
Accessories Bore size	Mounting accessories									Knuckle			
	LB	FA	FB	CA	CB	CR	FTC	TCM1	I	Y	F	U	
32~100	●	●	●	●	●	●	■	■	□	□	□	□	
125~320	■	■	■	■	■	■	■	■	□	□	□	□	

Material: stainless steel 304/316

DNG Series

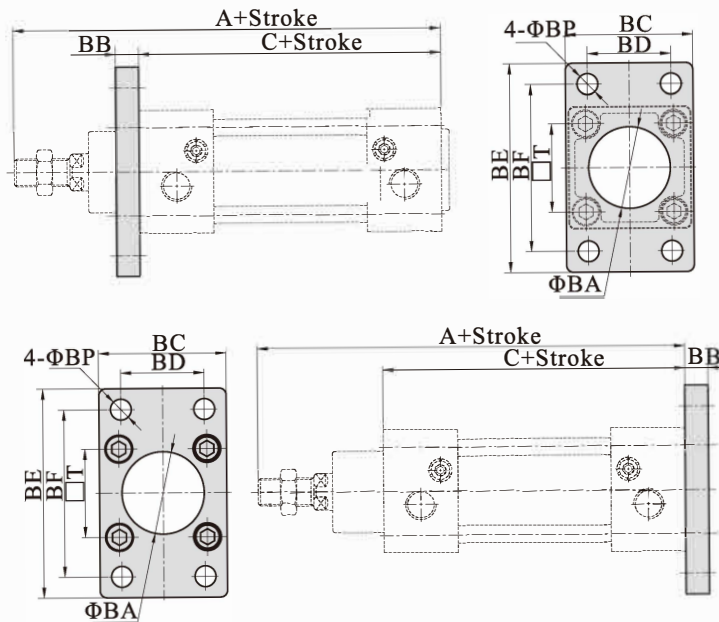
Accessories Dimensions

LB type



Bore size\Item	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	142	94	158	142	8	47	32	24	32	7	3
40	159	105	179	161	9	53	36	28	36	9	3
50	175	106	190	170	10	65	45	32	45	9	3
63	190	121	209	185	12	75	50	32	50	9	3
80	214	128	248	210	19	95	63	41	63	12.5	4
100	229	138	258	220	19	115	75	41	71	14.5	4
125	279	160	290	250	20	140	90	45	90	16.5	8
160	332	180	340	300	20	180	115	60	115	18.5	8
200	347	180	380	320	30	220	135	70	135	24	9
250	389	200	410	350	30	275	165	75	165	28	19
320	436	220	470	390	40	350	200	85	185	35	23

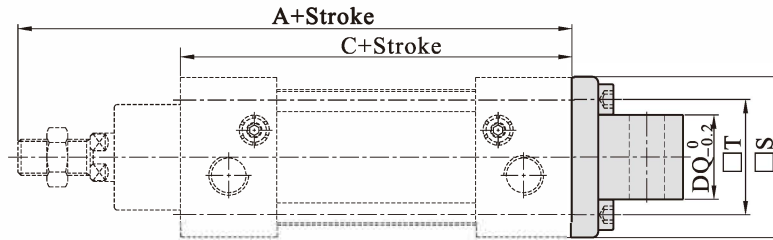
FA\FB type



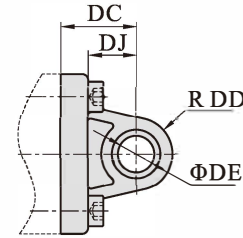
Bore size\Item	A	C	BA	BB	BC	BD	BE	BF	BP	T
32	142	94	30.5	10	47	32	80	64	7	32.5
40	159	105	35.5	10	53	36	90	72	9	38
50	175	106	40.5	12	65	45	108	90	9	46.5
63	190	121	45.5	12	75	50	118	100	9	56.5
80	214	128	45.5	16	95	63	150	126	12.5	72
100	229	138	55.5	16	115	75	176	150	14.5	89
125	279	160	60.5	20	139	90	218	180	16.5	110
160	332	180	65.5	20	180	115	280	230	18.5	140
200	347	180	75.5	25	220	135	320	270	24	175
250	389	200	90.5	25	270	165	390	330	26	220
320	436	220	110	30	349	200	470	400	33	270

DNG Series

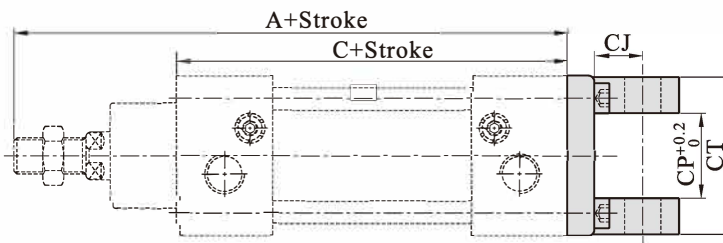
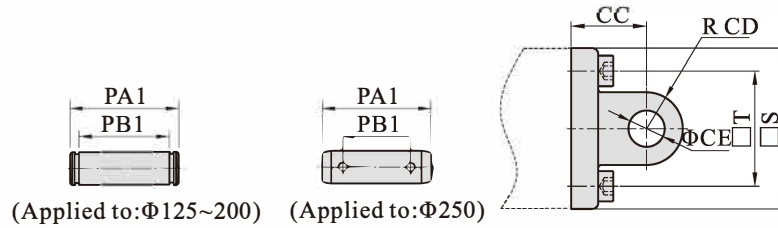
CA type



Bore size\Item	A	C	S	T	DC	DD	DE	DJ	DQ
32	142	94	46.5	32.5	22	10.5	10	13	25.8
40	159	105	54	38	25	12	12	16	27.8
50	175	106	64	46.5	27	12	12	17	31.7
63	190	121	75	56.5	32	15	16	22	39.7
80	214	128	93	72	36	15.5	16	22	49.7
100	229	138	110	89	41	20	20	27	59.7
125	279	160	134	110	50	24	25	33	69.7
160	332	180	180	140	55	30	30	35.5	89.7
200	347	180	220	175	60	30	30	37	89.7
250	389	200	270	220	70	35	40	46	110
320	436	220	350	270	80	45	45	52	120



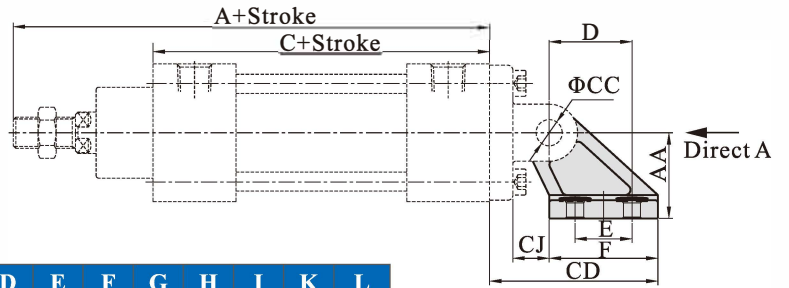
CB type



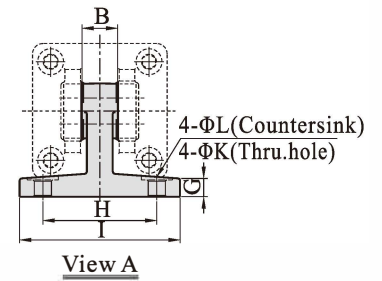
Bore size\Item	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
32	142	94	22	10.5	10	13	26	45	51	45.5	46.5	32.5
40	159	105	25	12	12	16	28	52	59	52.5	54	38
50	175	106	27	12	12	17	32	60	67	60.5	64	46.5
63	190	121	32	15	16	22	40	70	77	70.5	75	56.5
80	214	128	36	15.5	16	22	50	90	97	90.5	93	72
100	229	138	41	20	20	27	60	110	119	110.5	110	89
125	279	160	50	24	25	33	70	130	139	130.5	134	110
160	332	180	55	30	30	35.5	90	170	181	170.5	180	140
200	347	180	60	30	30	36	90	170	181	170.5	220	175
250	389	200	70	35	40	46	110	200	230	208	270	220
320	436	220	80	45	45	52	120	220	240	222	350	270

DNG Series

CR type

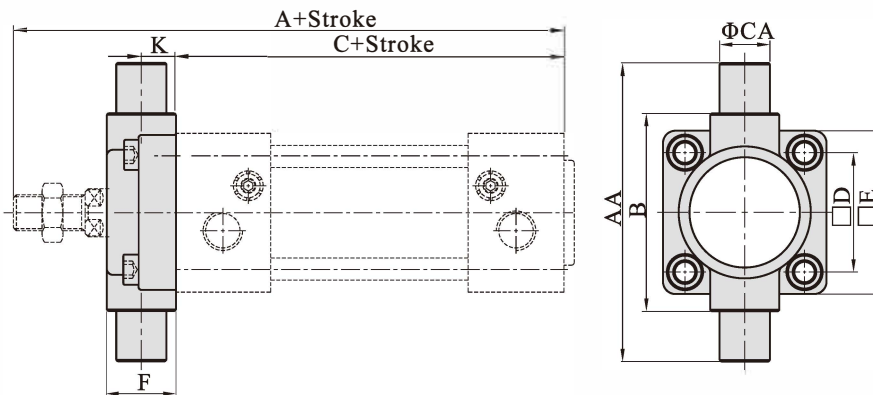


Bore size\Item	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	I	K	L
32	142	32	26	94	10	49	10	21	18	30	8	38	50	6.5	10.5
40	159	36	28	105	12	55	12	24	22	34	10	41	53	6.5	10.5
50	175	45	32	106	12	67	13	33	30	44	12	50	64	9	14
63	190	50	40	121	16	76	17	37	35	49	12	52	66	9	14
80	214	63	50	128	16	92.5	19.5	47	40	59	14	66	85	11	17
100	229	71	60	138	20	105.5	22.5	55	50	69	15	76	95	11	17
125	279	90	70	160	25	134	29	70	60	88	20	94	122	13.5	20
160	332	115	90	180	30	171	25	97	88	126	25	118	156	14	20
200	347	135	90	180	30	185	31	105	90	130	30	122	162	18	26



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

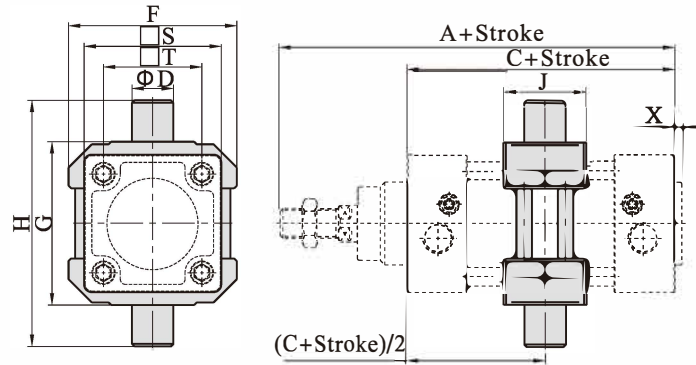
FTC type



Bore size\Item	A	C	AA	B	CA	D	E	F	K
32	142	94	74	50	12	32.5	46	19	10
40	159	105	95	63	16	38	52	21	10
50	175	106	107	75	16	46.5	64	26	12
63	190	121	130	90	20	56.5	74	28	12
80	214	128	150	110	20	72	94	31	16
100	229	138	182	132	25	89	114	35	16
125	279	160	210	160	25	110	139	43	20
160	332	180	264	200	32	140	179	56	20
200	347	180	314	250	32	175	218	64	20

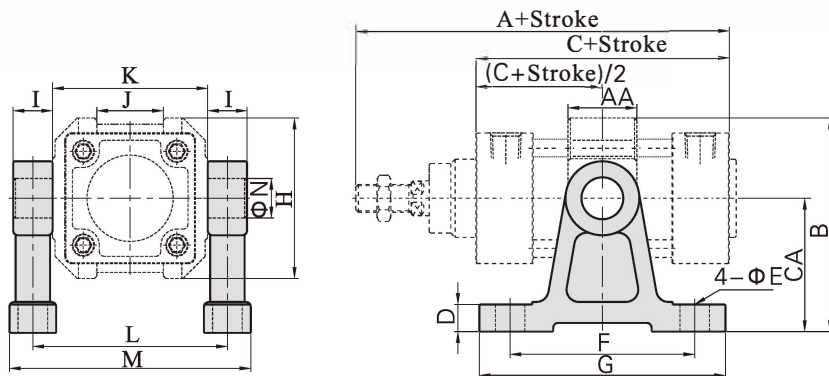
DNG Series

TC type



Bore size\Item	A	C	D	F	G	H	J	S	X	T
32	142	94	12	52	50	74	22	47	3	32.5
40	159	105	16	63	63	95	28	53	3.5	38
50	175	106	16	75	75	107	28	65	3.5	46.5
63	190	121	20	90	90	130	30	75	4	56.5
80	214	128	20	110	110	150	32	95	4	72
100	229	138	25	132	132	182	38	115	4	89
125	279	160	25	160	160	210	40	140	4	110
160	332	180	32	210	200	264	50	180	4	140
200	347	180	32	255	250	314	50	220	5	175
250										
320										

TCM1 type



Bore size\Item	A	AA	B	C	CA	D	E	F	G	H	I	J	K	L	M	N
32	142	22	66	94	40	11	9	60	80	52	12	20	50	62	77	12
40	159	28	86.5	105	54	11	12	75	100	65	16	27	63	79	98	16
50	175	28	91.5	106	54	11	12	75	100	75	16	31	75	91	110	16
63	190	30	115	121	70	11	12	85	110	90	20	42	90	110	133	20
80	214	32	126	128	70	11	12	85	110	112	20	54	110	130	153	20
100	229	38	157.5	138	90	19	18	115	155	135	25	68	132	157	185	25
125	279	40	175	160	90	19	18	115	155	170	25	80	160	185	213	25
160	332	50	215	180	110	24	22	140	190	210	32	100	200	232	267	32
200	347	50	262.5	180	135	27	22	150	200	255	32	125	250	282	317	32
250																
320																

[Note] The installation position of the accessories can not be adjusted arbitrarily.

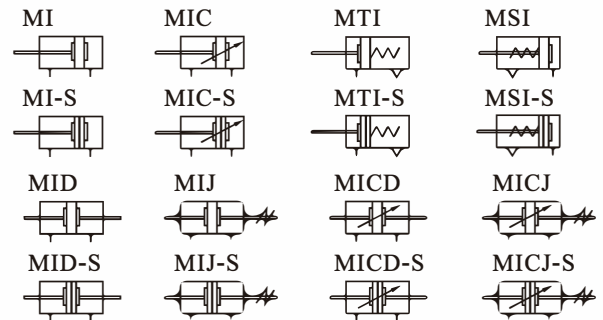
Stainless steel mini cylinder——MI Series **BITEBI**[®]



Product feature

1. In accordance with ISO6432 standard($\Phi 8\sim\Phi 25$).
2. Front and back cover owns fixed bumper pad which can reduce the impact of direction-change of the cylinder.
3. There are several mode of back cover, which makes the installation of cylinder more convenient.
4. Front and back cover and stainless steel block adopt riveted rolling packed structure to form a reliable connection.
5. Piston rod and cylinder body with the material of stainless steel make the cylinder adapt general working environment with corrosivity.
6. There are cylinders and accessories with several specifications for installation for your choice.

Symbol



Specification

Bore size(mm)		8	10	12	16	20	25	32	40
Acting type		Double acting, Single acting_Push, Single acting_Pull							
		-				Double acting with cushion			
Fluid		Air(to be filtered by 40 μ m filter element)							
Operating pressure	Double acting	0.15~1.0MPa(22~145psi)(1.5~10.0bar)							
	Single acting	0.2~1.0MPa(28~145psi)(2.0~10.0bar)							
Proof pressure		1.5MPa(215psi)(15bar)							
Temperature $^{\circ}$ C		-20~70							
Speed range mm/s		Double acting:30~800				Single acting:50~800			
Stroke tolerance		0~150 ^{+1,0}				>150 ^{+1,5}			
Cushion type		MIC Series: Variable cushion				Other series: Bumper			
Port size [Note1]		M5 \times 0.8				G1/8			G1/4

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

Standard Stroke

Bore size (mm)		Standard stroke (mm)													Max.std stroke	Max. stroke							
MI	8	10	15	20	25	30	40	50	60	75	80	100	125	150	150	200							
	10	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	200	200				
	12	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	250	250	500			
MI MIC	16	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	250	300	350	400	500	600
	20 25 32 40	450	500																			500	800
MID MIJ	8 10	10	15	20	25	30	40	50	60	75	80	100	100	-									
	12	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	200	-				
MID, MIJ MICD, MICJ	16 20 25	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	250	300	300	-		
	32 40	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	250	300	350	400	500	-
MSI MTI	8 10 12	10	15	20	25	30	40	50														-	-
	16	10	15	20	25	30	40	50	60	75	80	100										-	-
	20 25 32 40	10	15	20	25	30	40	50	60	75	80	100	125	150								-	-

[Note] Consult us for non-standard stroke.

Stainless steel mini cylinder——MI Series **BITEBI**[®]

Ordering code

MI	-	32	×	40	-	S	-	CA	-	FA	-	□		
MID	-	32	×	50	-	S	-	CA	-	FA	-	□		
MIJ	-	32	×	50	-	20	-	S	-	CA	-	FA	-	□

①
②
③
④
⑤
⑥
⑦
⑧

⑥ Back cover

Back cover	Series	Bore size
CA: Pivot type	MI MSI MTI	Φ8~Φ25
U: Perpendicular 90°		Φ8~Φ40
R: Axial air-in		Φ16~Φ40
CM: Round-end type	MIC	Φ16~Φ40
CA: Pivot type		Φ16~Φ25
U: Perpendicular 90°		Φ16~Φ40
CM: Round-end type	Others	Φ16~Φ40
No this code		

⑦ Mounting type

Mounting type	Series
Blank: No accessories	MI MIC MSI MTI
FA: FA type	
SDB: SDB type	
LB: LB type	
TC: TC type	
Blank: No accessories	MID MICD MIJ MICJ
FA: FA type	
LB: LB type	
TC: TC type	

⑧ Thread type

Blank: G thread
PT: PT thread

① Model

MI: Mini cylinder(Double acting)
MIC: Mini cylinder (Double acting with cushion)
MSI: Mini cylinder(Single acting_push)
MTI: Mini cylinder(Single acting_pull)
MID: Mini cylinder(Double rod)
MICD: Mini cylinder (Double rod with cushion)
MIJ: Mini cylinder(Adjustable stroke)
MICJ: Mini cylinder(Adjustable stroke with cushion)

② Bore size

Bore size	Series
8 10 12 16 20 25 32 40	MI
16 20 25 32 40	MIC
8 10 12 16 20 25 32 40	MSI
	MTI
	MID
16 20 25 32 40	MICD
8 10 12 16 20 25 32 40	MIJ
16 20 25 32 40	MICJ

③ Stroke

Refer to stroke table for details

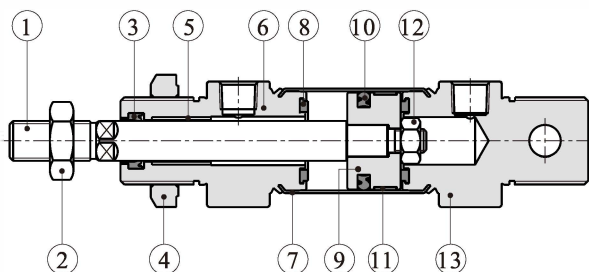
⑤ Magnet

Blank: Without magnet
S: With magnet

④ Adjustable stroke

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

Inner structure and material of major parts



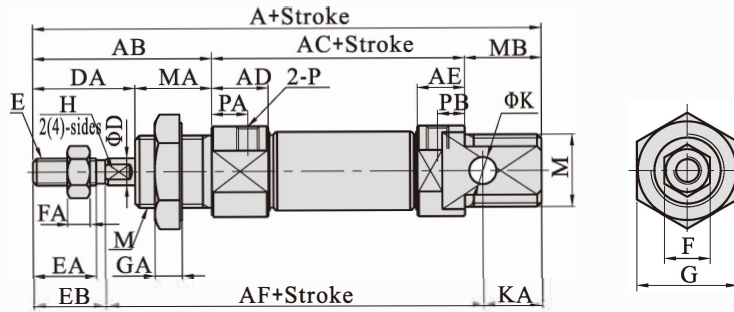
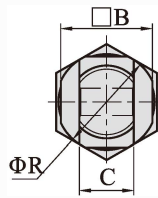
NO.	Item	Material
1	Rod	Stainless Steel 304/316
2	Rod nut	Stainless steel 304/316
3	Front cover packing	NBR
4	Front cover nut	Stainless steel 304/316
5	Bushing	Wear resistant material
6	Front cover	Stainless Steel 304/316
7	Barrel	Stainles Steel
8	Bumper	Rubber
9	Piston	Aluminum alloy
10	Piston seal	NBR
11	Wear ring	Wear resistant material
12	Nut	Stainless steel 304/316
13	Back cover	Stainless steel 304/316

Stainless steel mini cylinder——MI Series **BITEBI**[®]

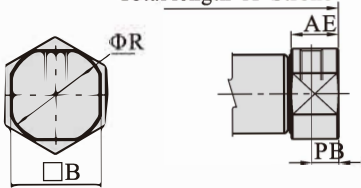
Dimensions

MI

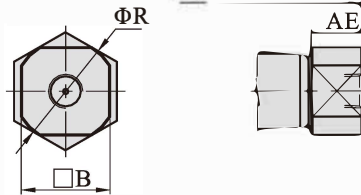
CA Type



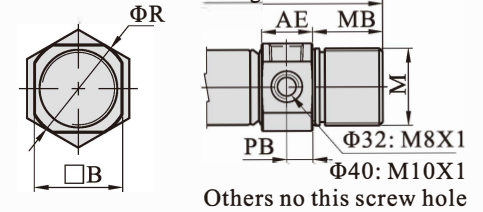
U Type



R Type



CM Type



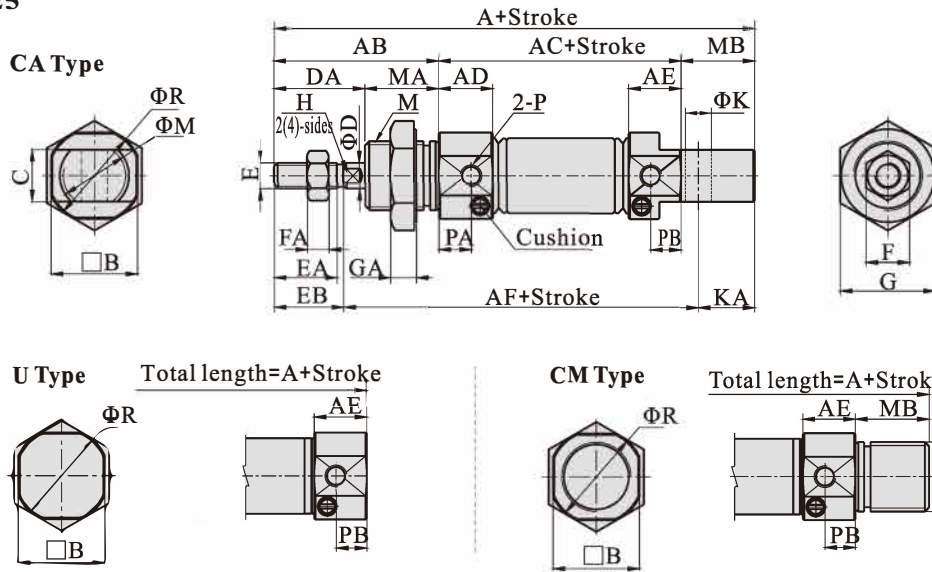
Bore size/Item	A				AB	AC	AD	AE		AF	B	C	D	DA	E	EA	EB	F	FA
	CA	U	R	CM				CA	U/R/CM										
8	86	74	-	-	28	46	11.5	9.5	9.5	64	15	8	4	16	M4×0.7	10.5	12	7	3
10	86	74	-	-	28	46	11.5	9.5	9.5	64	15	8	4	16	M4×0.7	10.5	12	7	3
12	105	88	-	-	38	50	12.5	10.5	10.5	75	18	12	6	21	M6×1.0	14.5	16	10	5
16	111	94	94	111	38	56	12.5	10.5	10.5	82	20	12	6	21	M6×1.0	14.5	16	10	5
20	126	106	106	126	44	62	14.5	14.5	14.5	95.5	25	16	8	24	M8×1.25	18	19.5	12	6
25	137	114.5	115	137	50	65	16	16	16	104.5	30	16	10	28	M10×1.25	20	21.5	17	6
32	-	125	126	140	58	-	16.5	-	16.5	-	34.5	-	12	28	M10×1.25	18.5	20	17	6
40	-	158	158	174	69	-	22	-	22	-	42.5	-	16	34	M12×1.25	22.5	24	17	7

Bore size/Item	G	GA	H	K	KA	M	MA	MB	P	PA	PB		R
											CA	U/CM	
8	17	6	-	4	10	M12×1.25	12	12	M5×0.8	7	5	5	17
10	17	6	-	4	10	M12×1.25	12	12	M5×0.8	7	5	5	17
12	22	6	5(2-Sides)	6	14	M16×1.5	17	17	M5×0.8	8	6	6	20
16	22	6	5(2-Sides)	6	13	M16×1.5	17	17	M5×0.8	8	6	6	22
20	29	7	6(2-Sides)	8	11	M22×1.5	20	20	G1/8	7.5	7.5	7.5	29
25	29	7	8(4-Sides)	8	11	M22×1.5	22	22	G1/8	8	8	8	33.5
32	36	7	10(4-Sides)	-	-	M30×1.5	30	14	G1/8	9	-	8/9	37.5
40	46	8	14(4-Sides)	-	-	M38×1.5	35	16	G1/4	12	-	11.5/12	46.5

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

Stainless steel mini cylinder——MI Series **BITEBI**[®]

MIC $\Phi 16\sim\Phi 25$

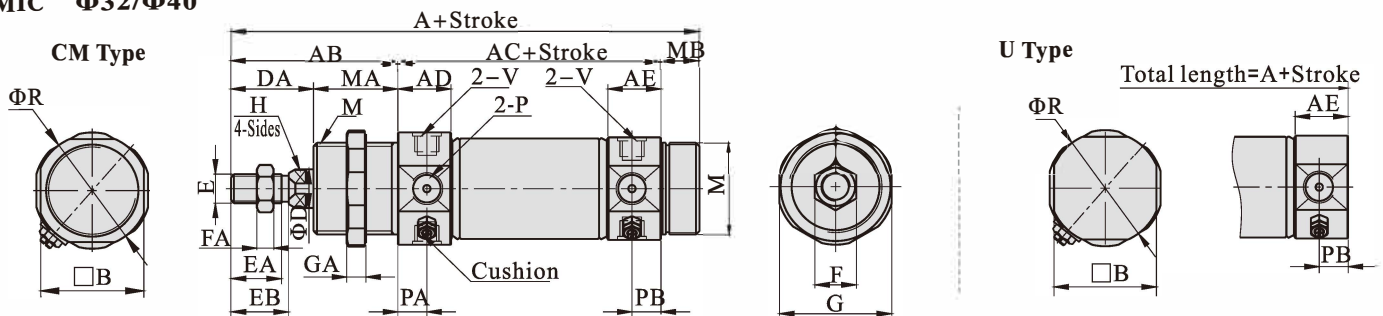


Bore size/Item	A		AB	AC	AD	AE		AF	B	C	D	DA	E	EA	EB	F	FA
	CA/CM	U				CA/CM	U										
16	111	94	38	56	12.5	12	12	82	20	12	6	21	M6×1.0	14.5	16	10	5
20	126	106	44	62	14.5	14.5	14.5	95.5	25	16	8	24	M8×1.25	18	19.5	12	6
25	137	113.5	50	65	16	16	14.5	104.5	30	16	10	28	M10×1.25	20	21.5	17	6

Bore size/Item	G	GA	H	K	KA	M	MA	MB	P	PA	PB	R
16	22	6	5(2-Sides)	6	13	M16×1.5	17	17	M5×0.8	7.5	7	22
20	29	7	6(2-Sides)	8	11	M22×1.5	20	20	G1/8	7.5	7.5	29
25	29	7	8(4-Sides)	8	11	M22×1.5	22	22	G1/8	8	8	33.5

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

MIC $\Phi 32/\Phi 40$



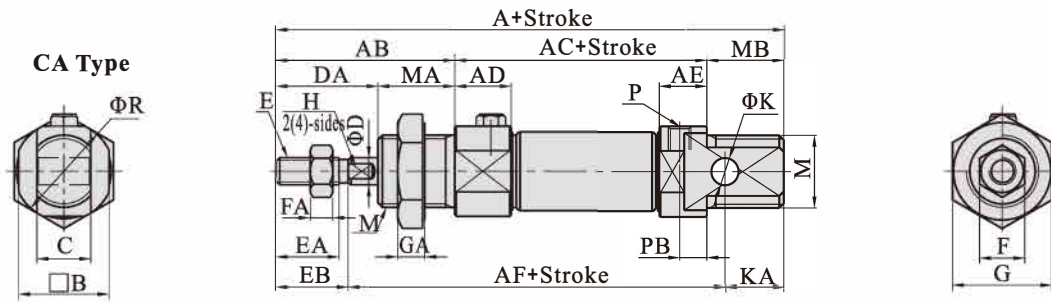
Bore size/Item	A		AB	AC	AD	AE		B	D	DA	E	EA	EB	F	FA	G	GA
	U	CM				U	CM										
32	124	140	58	68	16.5	14.5	16.5	34.5	12	28	M10×1.25	18.5	20	17	6	36	7
40	157.5	174	69	89	22	21.5	22	42.5	16	34	M12×1.25	22.5	24	17	7	46	8

Bore size/Item	H	M	MA	MB	P	PA	PB		R	V
							U	CM		
32	10(4-Sides)	M30×1.5	30	14	G1/8	9	7.5	9	37.5	M8X1
40	14(4-Sides)	M38×1.5	35	16	G1/4	12	11.5	12	46.5	M10X1

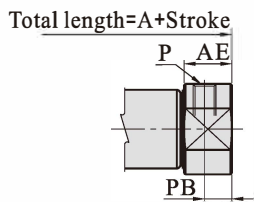
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

Stainless steel mini cylinder——MI Series **BITEBI**[®]

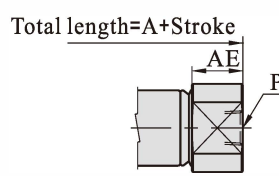
MSI



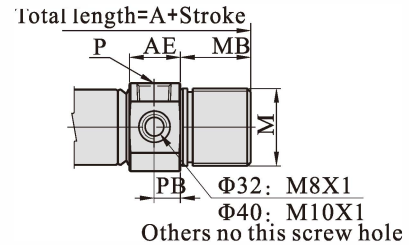
U Type



R Type



CM Type



Item	A												AB
	CA			U			R			CM			
Back cover	CA			U			R			CM			AB
Bore size\Stroke	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150	AB
8	111	-	-	99	-	-	-	-	-	-	-	-	28
10	111	-	-	99	-	-	-	-	-	-	-	-	28
12	130	-	-	113	-	-	-	-	-	-	-	-	38
16	136	161	-	119	144	-	119	144	-	136	161	-	38
20	151	176	201	131	156	181	131	156	181	151	176	201	44
25	162	187	212	139.5	164.5	189.5	140	165	190	162	187	212	50
32	-	-	-	150	175	200	151	176	201	165	190	215	58
40	-	-	-	183	208	233	183	208	233	199	224	249	69

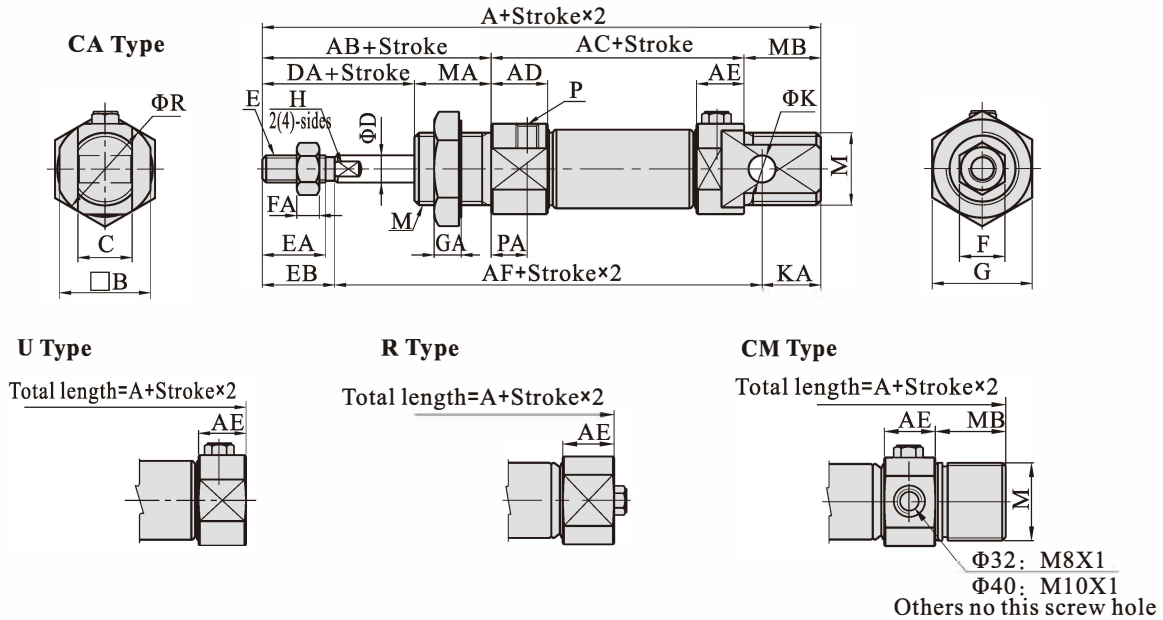
Item	AC			AD	AF			AE		B	C	D	DA	E
	Back cover	AC			AF			CA	U/R/CM					
Bore size\Stroke	0~50	51~100	101~150	0~50	51~100	101~150	-	-	-	-	-	-	-	
8	71	-	-	11.5	89	-	-	9.5	9.5	15	8	4	16	M4×0.7
10	71	-	-	11.5	89	-	-	9.5	9.5	15	8	4	16	M4×0.7
12	75	-	-	12.5	100	-	-	10.5	10.5	18	12	6	21	M6×1.0
16	81	106	-	12.5	107	132	-	10.5	10.5	20	12	6	21	M6×1.0
20	87	112	137	14.5	120.5	145.5	170.5	14.5	14.5	25	16	8	24	M8×1.25
25	90	115	140	16	129.5	154.5	179.5	16	16	30	16	10	28	M10×1.25
32	-	-	-	16.5	-	-	-	-	16.5	34.5	-	12	28	M10×1.25
40	-	-	-	22	-	-	-	-	22	42.5	-	16	34	M12×1.25

Bore size\Item	EA	EB	F	FA	G	GA	H	K	KA	M	MA	MB	P	PA	PB		R
															CA	U/CM	
8	10.5	12	7	3	17	6	-	4	10	M12×1.25	12	12	M5×0.8	7	5	5	17
10	10.5	12	7	3	17	6	-	4	10	M12×1.25	12	12	M5×0.8	7	5	5	17
12	14.5	16	10	5	22	6	5(2-Sides)	6	14	M16×1.5	17	17	M5×0.8	8	6	6	20
16	14.5	16	10	5	22	6	5(2-Sides)	6	13	M16×1.5	17	17	M5×0.8	8	6	6	22
20	18	19.5	12	6	29	7	6(2-Sides)	8	11	M22×1.5	20	20	G1/8	7.5	7.5	7.5	29
25	20	21.5	17	6	29	7	8(4-Sides)	8	11	M22×1.5	22	22	G1/8	8	8	8	33.5
32	18.5	20	17	6	36	7	10(4-Sides)	-	-	M30×1.5	30	14	G1/8	9	-	8/9	37.5
40	22.5	24	17	7	46	8	14(4-Sides)	-	-	M38×1.5	35	16	G1/4	12	-	11.5/12	46.5

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

Stainless steel mini cylinder——MI Series **BITEBI**[®]

MTI



Item	A												AB
	CA			U			R			CM			
Back cover	CA			U			R			CM			AB
Bore size\Stroke	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150	0~50	51~100	101~150	
8	111	-	-	99	-	-	-	-	-	-	-	-	28
10	111	-	-	99	-	-	-	-	-	-	-	-	28
12	130	-	-	113	-	-	-	-	-	-	-	-	38
16	136	161	-	119	144	-	119	144	-	136	161	-	38
20	151	176	201	131	156	181	131	156	181	151	176	201	44
25	162	187	212	139.5	164.5	189.5	140	165	190	162	187	212	50
32	-	-	-	150	175	200	151	176	201	165	190	215	58
40	-	-	-	183	208	233	183	208	233	199	224	249	69

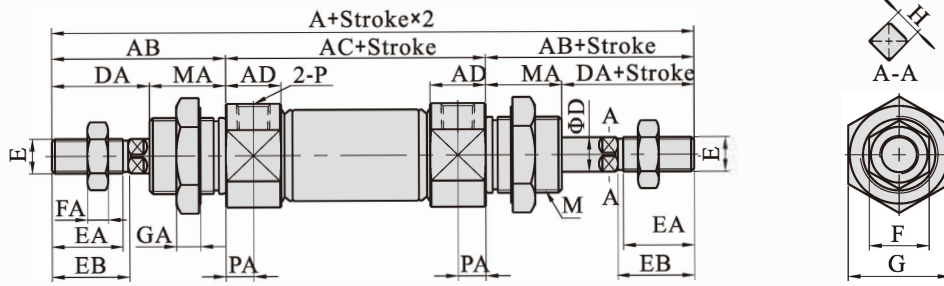
Item	AC			AD	AF			AE		B	C	D	DA	E
	Back cover	AC			AF			CA	U/R/CM					
Bore size\Stroke	0~50	51~100	101~150	0~50	51~100	101~150	-	-						
8	71	-	-	11.5	89	-	-	9.5	9.5	15	8	4	16	M4×0.7
10	71	-	-	11.5	89	-	-	9.5	9.5	15	8	4	16	M4×0.7
12	75	-	-	12.5	100	-	-	10.5	10.5	18	12	6	21	M6×1.0
16	81	106	-	12.5	107	132	-	10.5	10.5	20	12	6	21	M6×1.0
20	87	112	137	14.5	120.5	145.5	170.5	14.5	14.5	25	16	8	24	M8×1.25
25	90	115	140	16	129.5	154.5	179.5	16	16	30	16	10	28	M10×1.25
32	-	-	-	16.5	-	-	-	-	16.5	34.5	-	12	28	M10×1.25
40	-	-	-	22	-	-	-	-	22	42.5	-	16	34	M12×1.25

Bore size\Item	EA	EB	F	FA	G	GA	H	K	KA	M	MA	MB	P	PA	PB		R
															CA	U/CM	
8	10.5	12	7	3	17	6	-	4	10	M12×1.25	12	12	M5×0.8	7	5	5	17
10	10.5	12	7	3	17	6	-	4	10	M12×1.25	12	12	M5×0.8	7	5	5	17
12	14.5	16	10	5	22	6	5(2-Sides)	6	14	M16×1.5	17	17	M5×0.8	8	6	6	20
16	14.5	16	10	5	22	6	5(2-Sides)	6	13	M16×1.5	17	17	M5×0.8	8	6	6	22
20	18	19.5	12	6	29	7	6(2-Sides)	8	11	M22×1.5	20	20	G1/8	7.5	7.5	7.5	29
25	20	21.5	17	6	29	7	8(4-Sides)	8	11	M22×1.5	22	22	G1/8	8	8	8	33.5
32	18.5	20	17	6	36	7	10(4-Sides)	-	-	M30×1.5	30	14	G1/8	9	-	8/9	37.5
40	22.5	24	17	7	46	8	14(4-Sides)	-	-	M38×1.5	35	16	G1/4	12	-	11.5/12	46.5

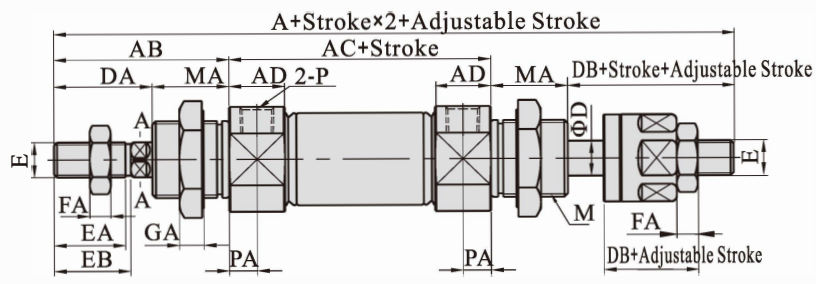
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

Stainless steel mini cylinder——MI Series **BITEBI**[®]

MID



MIJ



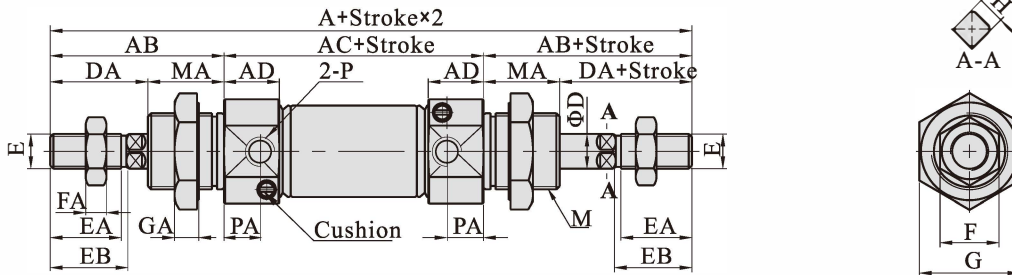
Bore size/Item	A(MID)	A(MIJ)	AB	AC	AD	D	DA	DB	E	EA	EB	F	FA	G	GA
8	104	103	28	48	11.5	4	16	15	M4×0.7	10.5	12	7	3	17	6
10	104	103	28	48	11.5	4	16	15	M4×0.7	10.5	12	7	3	17	6
12	128	128	38	52	12.5	6	21	21	M6×1.0	14.5	16	10	5	22	6
16	134	134	38	58	12.5	6	21	21	M6×1.0	14.5	16	10	5	22	6
20	150	151	44	62	14.5	8	24	25	M8×1.25	18	19.5	12	6	29	7
25	165	164	50	65	16	10	28	27	M10×1.25	20	21.5	17	6	29	7
32	184	183	58	68	16.5	12	28	27	M10×1.25	18.5	20	17	6	36	7
40	227	222	69	89	22	16	34	29	M12×1.25	22.5	24	17	7	46	8

Bore size/Item	H	M	MA	P	PA
8	-	M12×1.25	12	M5×0.8	7
10	-	M12×1.25	12	M5×0.8	7
12	5(2-Sides)	M16×1.5	17	M5×0.8	8
16	5(2-Sides)	M16×1.5	17	M5×0.8	8
20	6(2-Sides)	M22×1.5	20	G1/8	7.5
25	8(4-Sides)	M22×1.5	22	G1/8	8
32	10(4-Sides)	M30×1.5	30	G1/8	9
40	14(4-Sides)	M38×1.5	35	G1/4	12

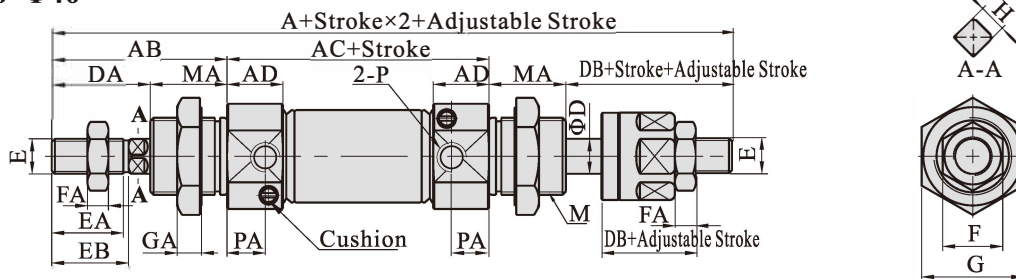
Remark: The dimensions of magnet type cylinder are the same as non-magnet type cylinder.

Stainless steel mini cylinder——MI Series **BITEBI**[®]

MICDΦ16~Φ40



MICJΦ16~Φ40



Bore size\Item	A(MICD)	A(MICJ)	AB	AC	AD	D	DA	DB	E	EA	EB	F	FA	G	GA
16	132.5	132.5	38	56.5	12.5	6	21	21	M6×1.0	14.5	16	10	5	22	6
20	150	151	44	62	14.5	8	24	25	M8×1.25	18	19.5	12	6	29	7
25	165	164	50	65	16	10	28	27	M10×1.25	20	21.5	17	6	29	7
32	184	183	58	68	16.5	12	28	27	M10×1.25	18.5	20	17	6	36	7
40	227	222	69	89	22	16	34	29	M12×1.25	22.5	24	17	7	46	8

Bore size\Item	H	M	MA	P	PA
16	5(2-Sides)	M16×1.5	17	M5×0.8	7.5
20	6(2-Sides)	M22×1.5	20	G1/8	7.5
25	8(4-Sides)	M22×1.5	22	G1/8	8
32	10(4-Sides)	M30×1.5	30	G1/8	9
40	14(4-Sides)	M38×1.5	35	G1/4	12

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

Stainless steel mini cylinder——MI Series **BITEBI**[®]

List for ordering code of accessories

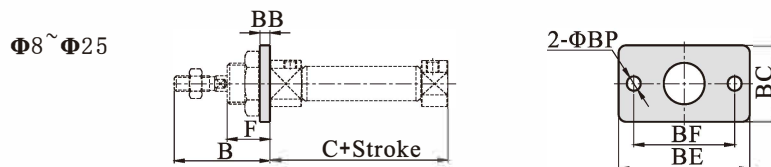
Accessories Bore size	Mounting accessories				Knuckle				Sensor switch	
	LB	FA	SDB	TC	I	Y	F	U	CS1-G	DS1-G
8	F-MI10LB	F-MI8FA	F-MI8SDB	F-MI10TC	F-M4X070I	F-M4X070Y	F-M4X070F	F-M4X070U	CS1-G	DS1-G
10										
12	F-MI12LB	F-MI12FA	F-MI12SDB	F-MI12TC	F-M6X100I	F-M6X100Y	F-M6X100F	F-M6X100U		
16										
20	F-MI20LB	F-MI20FA	F-MI20SDB	F-MI20TC	F-M8X125I	F-M8X125Y	F-M8X125F	F-M8X125U		
25					F-M10X125I	F-M10X125Y	F-M10X125F	F-M10X125U		
32	F-MI32LB	-	F-MI32SDB	F-MI32TC						
40	F-MI40LB	-	F-MI40SDB	F-MI40TC	F-M12X125I	F-M12X125Y	F-M12X125F	F-M12X125U		

Accessory selection

Cylinder model	Accessories	Mounting accessories				Knuckle				Sensor switch	
		LB	FA	SDB	TC	I	Y	U	F	CS1-G	DS1-G
MI MIC	Standard	●	●	●	●	●	●	●	●	×	×
	With magnet	●	●	●	●	●	●	●	●	●	●
MSI MTI	Standard	●	●	●	●	●	●	●	●	×	×
	With magnet	●	●	●	●	●	●	●	●	●	●
MID MICD	Standard	●	●	×	●	●	●	●	●	×	×
	With magnet	●	●	×	●	●	●	●	●	●	●
MIJ MICJ	Standard	●	●	×	●	●	●	●	●	×	×
	With magnet	●	●	×	●	●	●	●	●	●	●

Dimensions

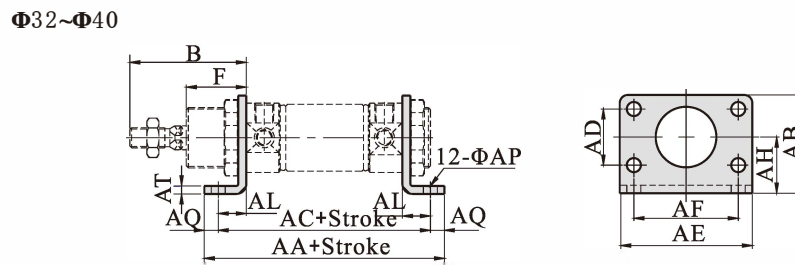
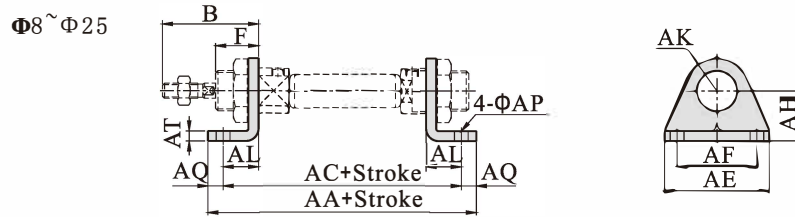
FA type



Bore size\Item	B	C	BB	BC	BE	BF	BP	F
8	28	46	2	22	40	30	4.5	12
10	28	46	2	22	40	30	4.5	12
12	38	50	3	26	52	40	5.5	17
16	38	56	3	26	52	40	5.5	17
20	44	62	3.5	38	64	50	7	20
25	50	65	3.5	38	64	50	7	22

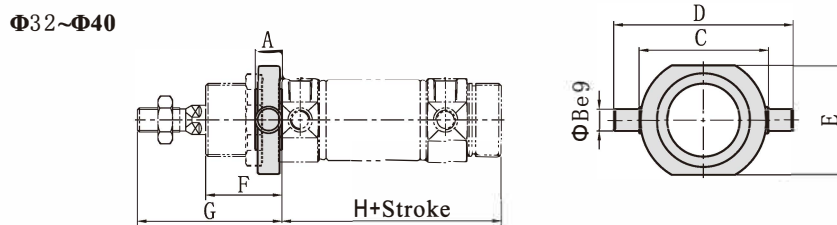
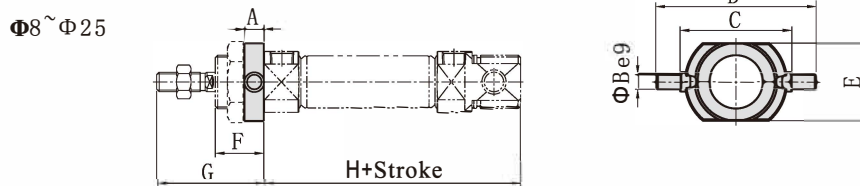
Stainless steel mini cylinder——MI Series **BITEBI**[®]

LB type



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

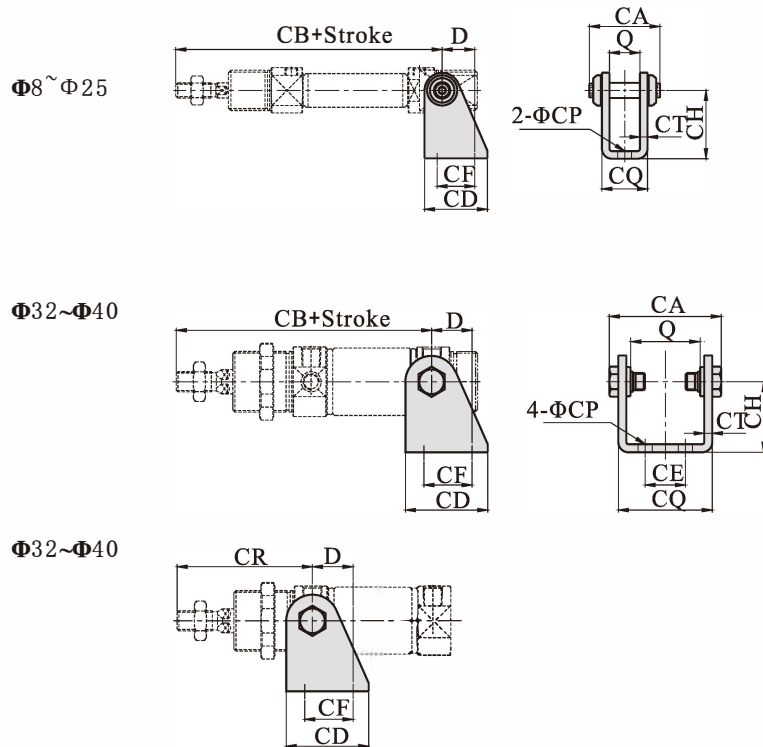
TC type



Bore size\Item	A	B	C	D	E	F	G	H
8	6	4	26	38	20	12	28	58
10	6	4	26	38	20	12	28	58
12	8	6	38	58	25	17	38	67
16	8	6	38	58	25	17	38	73
20	8	6	46	66	32	20	44	82
25	8	6	46	66	32	22	50	87
32	11	9	54	74	45	31.5	59.5	80.5
40	12	10	64	84	55	36.5	70.5	103.5

Stainless steel mini cylinder——MI Series **BITEBI**[®]

SDB type



Bore size\Item	D	Q	CA	CB	CD	CE	CF	CH	CP	CQ	CT	CR
8	11	8.1	16.4	76	20	-	12.5	24	4.5	12.1	2	-
10	11	8.1	16.4	76	20	-	12.5	24	4.5	12.1	2	-
12	13	12.1	26	91	25	-	15	27	5.5	16.1	2	-
16	13	12.1	26	98	25	-	15	27	5.5	16.1	2	-
20	16	16.1	35	115	32	-	20	30	7	21.1	2.5	-
25	16	16.1	35	126	32	-	20	30	7	21.1	2.5	-
32	20	34.6	53.6	117	41	20	24	35	7	44.6	3	67
40	27	42.6	65.6	146	52	28	30	40	9	54.6	3	81

[Note] SDB is attached with relevant PIN.