

Tie Rod Type Cylinder / AL-Tube **GDC Series**



Standard / GDC _____ P.119
 $\phi 40 \sim \phi 150$



Double Rod Type / SGB _____ P.144
 $\phi 40 \sim \phi 150$



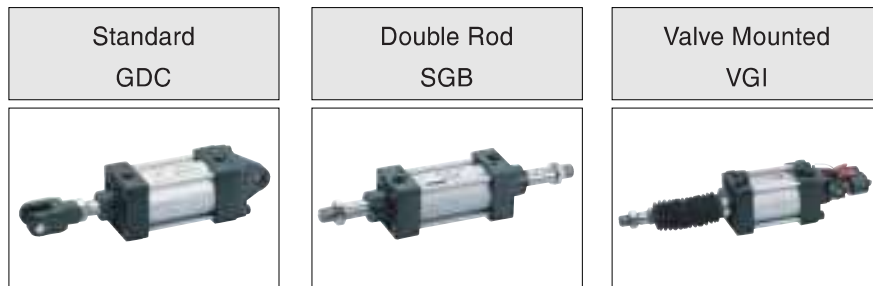
Valve Mounting Type / VG□ _____ P.160
 $\phi 50, \phi 63, \phi 80, \phi 100$

Order Made Type _____ P.167
Pin lock Cylinder, Non-Rotating Cylinder,
Tandem Cylinder, 3-Position Cylinder,
4-Position Cylinder, Adjustable Stroke Cylinder

Accessory _____ P.172

GDC Series

φ 40, φ 50, φ 63, φ 80, φ 100, φ 125, φ 150



Bore Size	GDC	SGB	VGI
φ 40	<input type="radio"/>	<input type="radio"/>	-
φ 50	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
φ 63	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
φ 80	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
φ 100	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
φ 125	<input type="radio"/>	<input type="radio"/>	-
φ 150	<input type="radio"/>	<input type="radio"/>	-

Cushion Type

Air Cushion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Mounting Type

Standard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trunnion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CA Clevis	<input type="radio"/>	<input type="radio"/>	-
CB Clevis	<input type="radio"/>	<input type="radio"/>	-

Switch Model

CL-D-A54	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Accessories

Standard : Rod nut, Mounting nut

Option : I Knuckle, Y Knuckle

Order-made cylinder

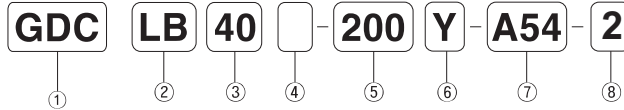
- Three-position cylinder
- Four-position cylinder
- Tandem cylinder
- Adjustable stroke cylinder

Tie Rod Type Cylinder(AL Tube)

GDC Series / Standard

φ40, φ50, φ63, φ80, φ100, φ125, φ150

ORDER KEY



1. Series

GDC	Tie rod type
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GDCN : φ125, non-magnetic type

3. Bore Size(mm)

40	φ40
50	φ50
63	φ63
80	φ80
100	φ100
125	φ125
150	φ150

6. Rod Option

Blank	No option
I	I Knuckle
Y	Y Knuckle
J	Bellows
C	Coil scraper

2. Mounting

Blank	Noe mounting
LB	Foot
FH	Head Flange
FC	Cap Flange
TH	Head Trunnion
TC	Cap Trunnion
TM	Center Trunnion
TDH	Head Trunnion Hole
TDC	Cap Trunnion Hole
TDM	Center Trunnion Hole
TSH	Head Trunnion Screw
TSC	Cap Trunnion Screw
TSM	Center Trunnion Screw
CA	CA Clevis
CB	CB clevis

4. Cylinder Type

Blank	Standard
P	Oilless

5. Cylinder Stroke(mm)

Refer to the Table of Standard stroke

7. Type of Switch

Blank	No switch
A54	CL-D-A54

8. Number of Switch

2	2 units
1	1 unit
n	n units

Model No. of Mounting

Bore Size(mm)	φ40	φ50	φ63	φ80	φ100	φ125	φ150
Foot	GLB40	GLB50	GLB63	GLB80	GLB100	GLB125	GLB150
Flange	GFH40	GFH50	GFH63	GFH80	GFH100	GFH125	GFH150
Trunnion	GTM40	GTM50	GTM63	GTM80	GTM100	GTM125	GTM150
Trunnion Hole	GTDM40	GTDM50	GTDM63	GTDM80	GTDM100	GTDM125	GTDM150
Tuunnion Screw	GTSM40	GTSM50	GTSM63	GTSM80	GTSM100	GTSM125	GTSM150
CA Clevis	GCA40	GCA50	GCA63	GCA80	GCA100	GCA125	GCA150
CB Clevis	GCB40	GCB50	GCB63	GCB80	GCB100	GCB125	GCB150

Standard(AL Tube)

Specification



Bore Size(mm)	Unit	φ40	φ50	φ63	φ80	φ100	φ125	φ150
Fluid		Air						
Pressure Range	MPa(bar)	0.1~0.9(1.0~9.0)						
Proof Pressure	MPa(bar)	1.5(15)						
Temperature Range	℃	5~60						
Piston Speed Range	mm/s	50~500						
Cushion		Air cushion						
Stroke Allowance		~250 : ₀ ^{+1.0} 251~1000 : ₀ ^{+1.5} , 1000V : ₀ ^{+2.0}						
Mounting		Foot, Flange, Clevis, Trunnion						

Standard Stroke

Bore Size (mm)	Standard Stroke (mm)														Max. Stroke
	25	50	75	100	125	150	175	200	250	300	350	400	450	500	
φ40	○	○	○	○	○	○	○	○	○	○	○	○	○	○	800
φ50	○	○	○	○	○	○	○	○	○	○	○	○	○	○	1,200
φ63	○	○	○	○	○	○	○	○	○	○	○	○	○	○	1,200
φ80	○	○	○	○	○	○	○	○	○	○	○	○	○	○	1,500
φ100	○	○	○	○	○	○	○	○	○	○	○	○	○	○	1,500
φ125	○	○	○	○	○	○	○	○	○	○	○	○	○	○	1,500
φ150	○	○	○	○	○	○	○	○	○	○	○	○	○	○	1,500

Theoretical Output

(Unit : N)

Bore Size (mm)	Rod dia (mm)	Direction of rod	Operation Pressure (MPa)							
			0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
φ40	φ16	Extended	251	377	502	628	754	879	1,005	1,130
		Retracted	211	317	422	528	633	739	844	950
φ50	φ20	Extended	393	589	785	981	1,178	1,374	1,570	1,766
		Retracted	330	495	659	824	989	1,154	1,319	1,484
φ63	φ20	Extended	623	935	1,246	1,558	1,869	2,181	2,493	2,804
		Retracted	560	840	1,121	1,401	1,681	1,961	2,241	2,521
φ80	φ25	Extended	1,005	1,507	2,010	2,512	3,014	3,517	4,019	4,522
		Retracted	907	1,360	1,813	2,267	2,720	3,173	3,627	4,080
φ100	φ30	Extended	1,570	2,355	3,140	3,925	4,710	5,495	6,280	7,065
		Retracted	1,429	2,143	2,857	3,572	4,286	5,000	5,715	6,429
φ125	φ24	Extended	2,453	3,680	4,906	6,133	7,359	8,586	9,813	11,039
		Retracted	2,261	3,391	4,522	5,652	6,782	7,913	9,043	10,174
φ150	φ40	Extended	3,533	5,299	7,065	8,831	10,598	12,364	14,130	15,896
		Retracted	3,281	4,922	6,563	8,203	9,844	11,485	13,125	14,766

Specification of Switch

Model No.	Reed type	Leed wire(1.5m)	CL-D-A54						
	Solid state type	Leed wire(1m)				CL-D-J591	CL-D-F591		
		Leed wire(3m)				CL-D-J593	CL-D-F593		
		Leed wire(5m)				CL-D-J595	CL-D-F595		
B contact							CL-D-B54		
Load voltage		DC24V	AC110V	AC220V	DC 24V	DC 24V	DC 24V	AC 110V	
Load current		5~100 mA	5~40 mA	5~20 mA	5~20 mA	0.1~40 mA	5~40 mA	5~20 mA	
Internal voltage drop		2.4V less			5V less	0.5V less	3V less	3V less	
Wiring method		2 wire			2 wire	3 wire(NPN)	2 wire		
Insulation resistance		50M Ω (500V MEGA)			100M Ω (500V MEGA)				
Temperature range		0 ~ 60 $^{\circ}$ C							
Protection grade		IP67(IEC stadard)							
Indicator lamp		Red LED (turn on at "ON")							
Internal circuit									
Application		Relay, PLC							

Min. Stroke with CL Type Switch

Model No.	Number of Switch	Except Trunnion type	Trunnion Type						
			ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100	ϕ 125	ϕ 150
CL-D-A54	2ea (both side)	10:(ϕ 40~100)	ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100	ϕ 125	ϕ 150
	1ea (same side)	20:(ϕ 125~150)	90	95	100	115	120	125	135
	n ea(same side)	$10+55 \frac{(n-2)}{2}$ ϕ 40~100 n=2,4,6,8...	$90+55 \frac{(n-2)}{2}$ n=4,8,12, 16...	$95+55 \frac{(n-2)}{2}$ n=4,8,12, 16...	$100+55 \frac{(n-2)}{2}$ n=4,8,12, 16...	$115+55 \frac{(n-2)}{2}$ n=4,8,12, 16...	$120+55 \frac{(n-2)}{2}$ n=4,8,12, 16...	$125+55 \frac{(n-2)}{2}$ n=4,8,12, 16...	$135+55 \frac{(n-2)}{2}$ n=4,8,12, 16...
		$20+55 \frac{(n-2)}{2}$ ϕ 125~150 n=2,4,6,8...							

Weight

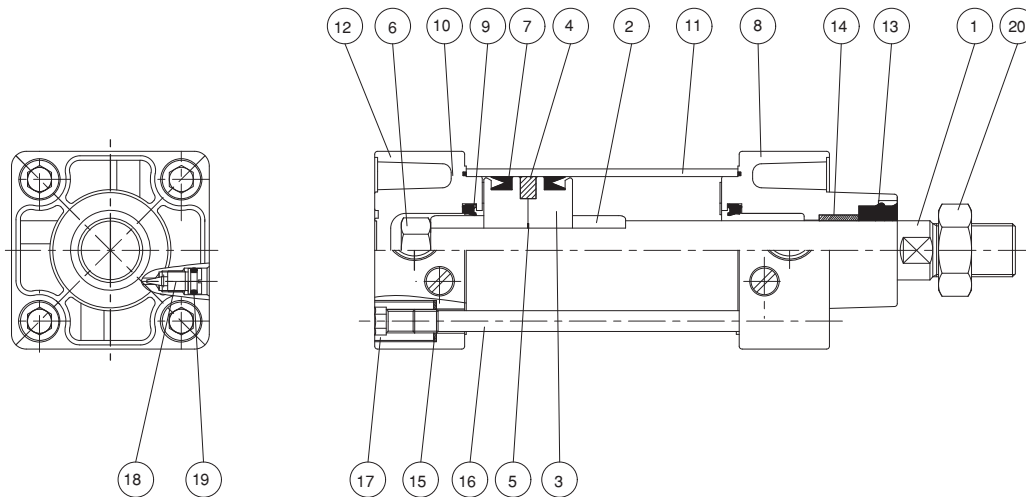
(Unit : kg)

GDC/ Standard		ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100
Basic		0.8	1.3	1.52	0.74	3.92
Foot		0.96	1.52	1.82	3.34	4.68
Flange		0.92	1.48	1.78	3.16	4.6
CA Clevis		1.14	1.84	2.38	4.32	6.34
CB Clevis		1.1	1.8	2.34	4.14	6.16
Trunnion		1.24	1.96	2.64	4.32	6.78
Add per 50 Stroke		0.18	0.24	0.3	0.44	0.6
Option	I Knuckle	0.16	0.24	0.24	0.52	0.72
	Y Knuckle	0.26	0.34	0.34	0.74	0.98

Standard(AL Tube)

Construction & Part List

Double Acting



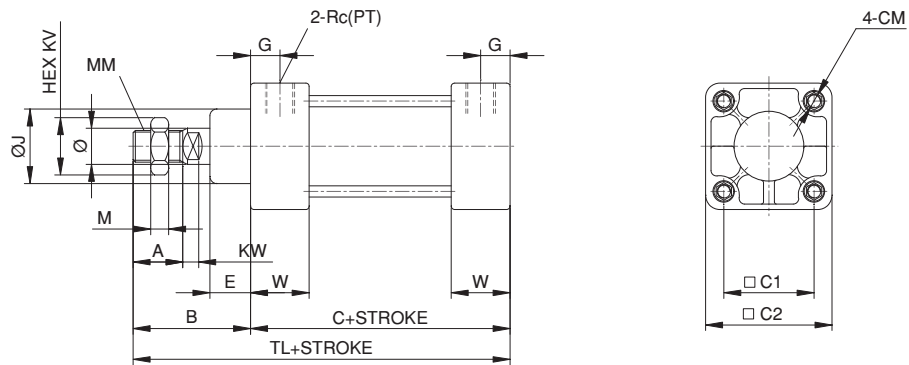
No	Part No.	Material
1	Piston Rod	Carbon Steel
2	Slip Ring	Carbon Steel
3	Piston	AL
4	Magnet	Plastic
5	O-Ring	NBR
6	Hex Nut	Carbon Steel
7	Piston Packing	NBR
8	Head Cover	AL
9	Cushion Packing	Urethan
10	O-Ring	NBR

No	Part No.	Material
11	Tube	AL
12	Rod Cover	AL
13	Rod Seal & Wiper	NBR
14	Rod Bush	-
15	Washer	Carbon Steel
16	Tie Rod	Carbon Steel
17	Nut	Carbon Steel
18	Cushion Needle	Carbon Steel
19	O-Ring	NBR
20	Hex Nut	Carbon Steel

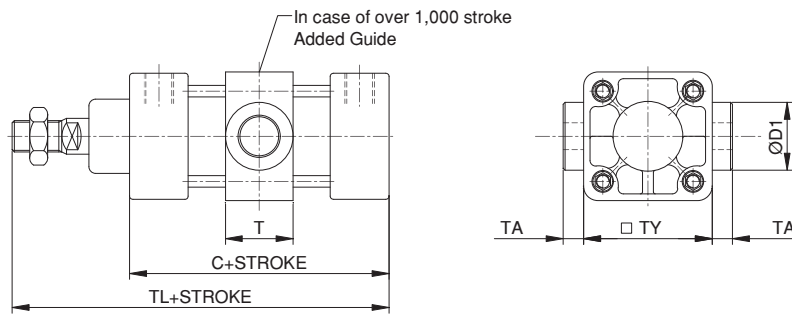
Dimension

Standard / $\phi 40 \sim \phi 100$

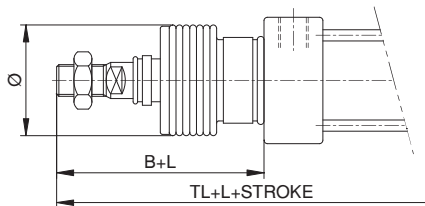
(Unit : mm)



With Guide



With Bellows



Ø	A	B	C		C1	C2	CM	ØD	ØD1	E	G	ØJ
			- 1000	1000 -								
40	22	52	90	-	40	56	M6x1.0	16	-	18	13	33
50	28	63	104	134	48	67	M8x1.25	20	30	23	13.5	40
63	28	63	104	134	59	78	M8x1.25	20	30	23	13.5	40
80	36	79	113	146	74	98	M12x1.75	25	40	28	15	45
100	45	95	124	162	90	116	M12x1.75	30	45	33	17	50

Ø	KV	KW	M	MM	Rc(PT)	T	TA	TL		TY	W
								- 1000	1000 -		
40	25	7	8	M14x1.5	1/4	-	-	142	-	57	26
50	31	10	11	M18x1.5	3/8	30	8.5	167	197	73	31
63	31	10	11	M18x1.5	3/8	35	9	167	197	86	31
80	37	11	13	M22x1.5	1/2	40	13.5	192	225	107	34
100	44	13	16	M26x1.5	1/2	45	10	219	257	130	36

With Bellows

Ø	B	TL	X	L										
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000	
40	52	142	49	40	70	100	130	160	-	-	-	-	-	
50	63	167	49	40	70	100	130	160	190	-	-	-	-	
63	63	167	49	40	70	100	130	160	190	-	-	-	-	
80	79	192	60	40	70	100	130	160	190	220	250	280	-	
100	95	219	60	40	70	100	130	160	190	220	250	280	310	

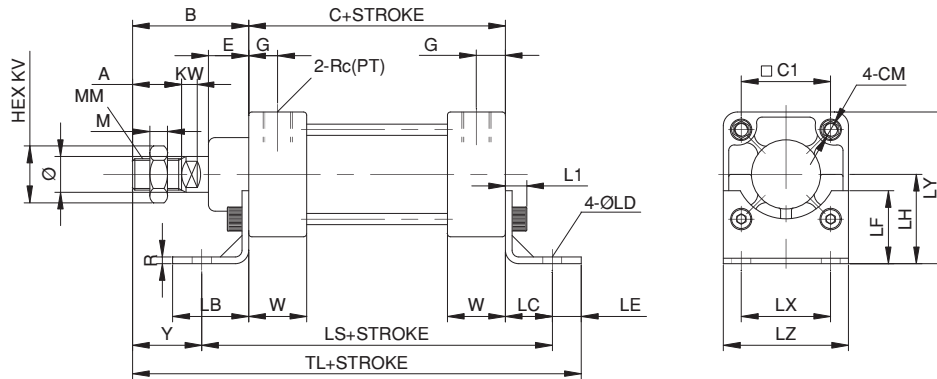
Standard(AL Tube)

Dimension

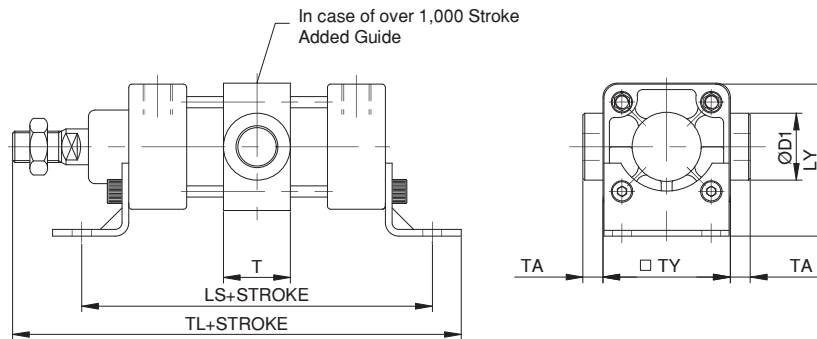
Standard-Foot mounting type / $\phi 40 \sim \phi 100$

(Unit : mm)

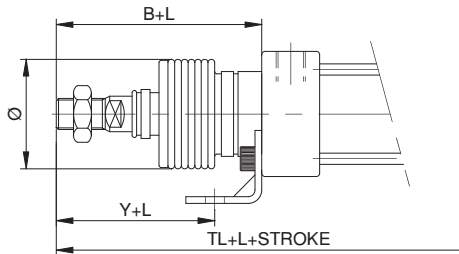
LB



With Guide



With Bellows



Ø	A	B	C		C1	CM	ØD	ØD1	E	G	KV	KW	L1	LB	LC	ØLD	LE	LF
			-1000	1000-														
40	22	52	90	-	40	M6x1.0	16	-	18	13	25	7	9	34	21	8.5	13	30
50	28	63	104	134	48	M8x1.25	20	30	23	13.5	31	10	11	38	23	10.5	15	30
63	28	63	104	134	59	M8x1.25	20	30	23	13.5	31	10	11.5	41	25	10.5	16	40
80	36	79	113	146	74	M12x1.75	25	40	28	15	37	11	16	50	34	13	16	45
100	45	95	124	162	90	M12x1.75	30	45	33	17	44	13	16	56	40	15	16	50

Ø	LH	LS		LX	LX	LY	LZ	M	MM	R	Rc(PT)	T	TA	TL		TY	W	Y
		-1000	1000-											-1000	1000-			
40	40	132	-	40	40	68	56	8	M14x1.5	3	1/4	-	-	176	-	57	26	31
50	45	150	180	45	45	78.5	67	11	M18x1.5	3	3/8	30	8.5	205	235	73	31	40
63	53	154	184	60	60	92	78	11	M18x1.5	3.5	3/8	35	9	208	238	86	31	38
80	63	181	214	71	71	112	98	13	M22x1.5	4	1/2	40	13.5	242	275	107	34	45
100	75	204	242	85	85	133	116	16	M26x1.5	4	1/2	45	10	275	313	130	36	55

With Bellows

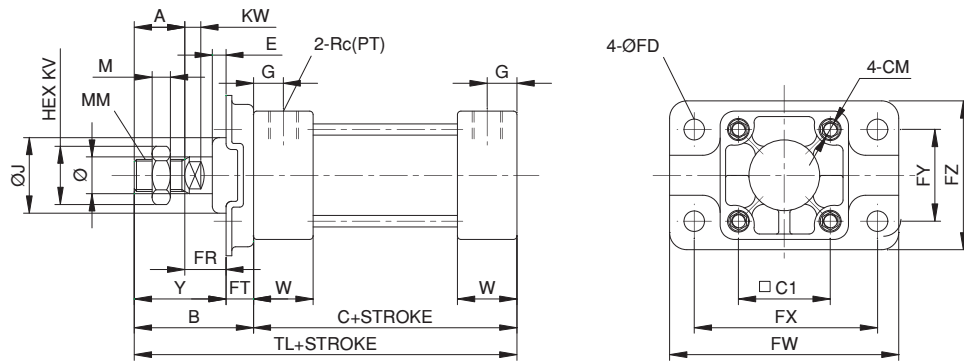
Ø	B	Y	TL	X	L													
					~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000				
40	52	31	176	49	40	70	100	130	160	-	-	-	-	-	-	-	-	-
50	63	40	205	49	40	70	100	130	160	190	-	-	-	-	-	-	-	-
63	63	38	208	49	40	70	100	130	160	190	-	-	-	-	-	-	-	-
80	79	45	242	60	40	70	100	130	160	190	220	250	280	-	-	-	-	-
100	95	55	275	60	40	70	100	130	160	190	220	250	280	310	-	-	-	-

Dimension

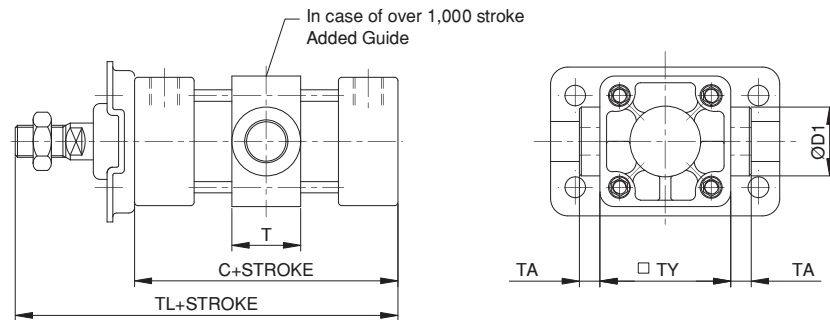
Standard - Flange mounting type / $\phi 40 \sim \phi 100$

(Unit : mm)

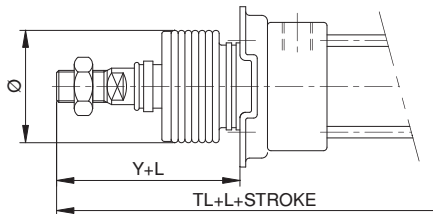
FH



With Guide



With Bellows



Ø	A	B	C		C1	CM	Ø	ØD1	E	ØFD	FR	FT	FW	FX	FY
			- 1000	1000 -											
40	22	52	90	-	40	M6x1.0	16	-	6	9	18	12	100	80	40
50	28	63	104	134	48	M8x1.25	20	30	9	11	21	14	112	90	45
63	28	63	104	134	59	M8x1.25	20	30	9	11	21	14	135	112	60
80	36	79	113	146	74	M12x1.75	25	40	10	13	25	18	160	132	71
100	45	95	124	162	90	M12x1.75	30	45	13	16	30	20	180	150	85

Ø	FZ	G	ØJ	KV	KW	M	MM	Rc(PT)	T	TA	TL		TY	W	Y
											- 1000	1000 -			
40	65	13	33	25	7	8	M14x1.5	1/4	-	-	142	-	57	26	40
50	78	13.5	40	31	10	11	M18x1.5	3/8	30	8.5	167	197	73	31	49
63	92	13.5	40	31	10	11	M18x1.5	3/8	35	9	167	197	86	31	49
80	114	15	45	37	11	13	M22x1.5	1/2	40	13.5	192	225	107	34	61
100	128	17	50	44	13	16	M26x1.5	1/2	45	10	219	257	130	36	75

With Bellows

Ø	Y	TL	X	L											
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000		
40	40	142	49	40	70	100	130	160	-	-	-	-	-	-	-
50	49	167	49	40	70	100	130	160	190	-	-	-	-	-	-
63	49	167	49	40	70	100	130	160	190	-	-	-	-	-	-
80	61	192	60	40	70	100	130	160	190	220	250	280	-	-	-
100	75	219	60	40	70	100	130	160	190	220	250	280	310	-	-

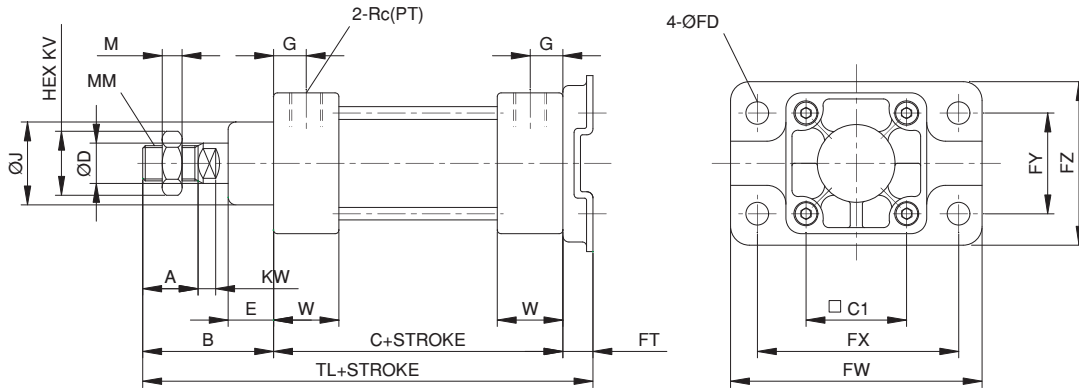
Standard(AL Tube)

Dimension

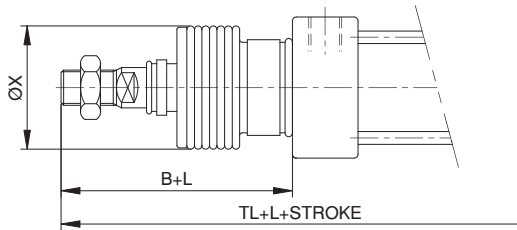
Standard - Flange mounting type / $\phi 40 \sim \phi 100$

(Unit : mm)

FC



With Bellows



Ø	A	B	C	C1	ØD	E	ØF	FT	FW	FX	FY
40	22	52	90	40	16	18	9	12	100	80	40
50	28	63	104	48	20	23	11	14	112	90	45
63	28	63	104	59	20	23	11	14	135	112	60
80	36	79	113	74	25	28	13	18	160	132	71
100	45	95	124	90	30	33	16	20	180	150	85

Ø	FZ	G	ØJ	KV	KW	M	MM	Rc(PT)	TL	W
40	65	13	33	25	7	8	M14x1.5	1/4	154	26
50	78	13.5	40	31	10	11	M18x1.5	3/8	181	31
63	92	13.5	40	31	10	11	M18x1.5	3/8	181	31
80	114	15	45	37	11	13	M22x1.5	1/2	210	34
100	128	17	50	44	13	16	M26x1.5	1/2	239	36

With Bellows

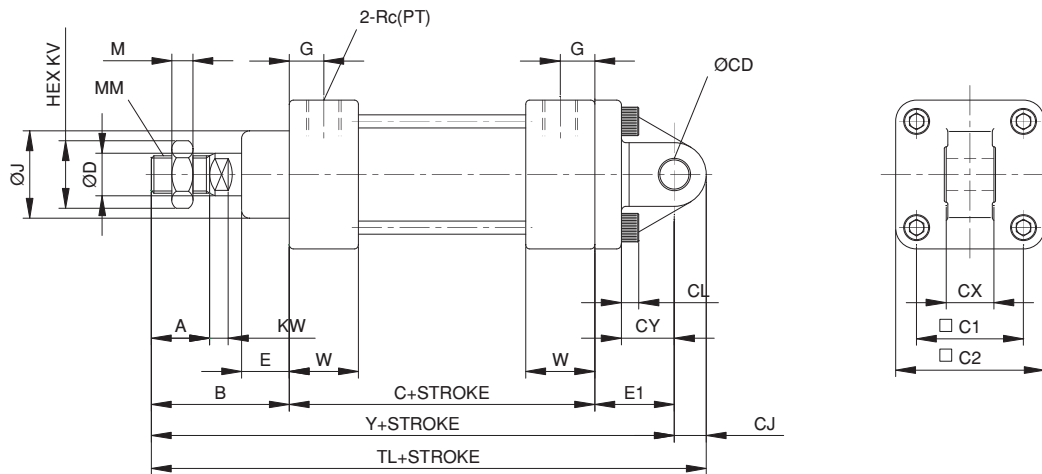
Ø	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
40	52	154	49	40	70	100	130	160	-	-	-	-	-
50	63	181	49	40	70	100	130	160	190	-	-	-	-
63	63	181	49	40	70	100	130	160	190	-	-	-	-
80	79	210	60	40	70	100	130	160	190	220	250	280	-
100	95	239	60	40	70	100	130	160	190	220	250	280	310

Dimension

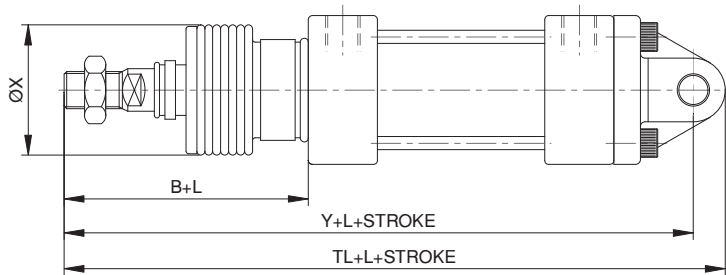
Standard - Clevis mounting type / $\phi 40 \sim \phi 100$

(Unit : mm)

CA



With Bellows



Ø	A	B	C	C1	C2	ØCD	CJ	CL	CX	CY	ØD	E
40	22	52	90	40	56	12.1	12	6	18	20	16	18
50	28	63	104	48	67	12.1	12	8	18	25	20	23
63	28	63	104	59	78	16.1	16	8	22	30	20	23
80	36	79	113	74	98	20.1	20	12	28	35	25	28
100	45	95	124	90	116	25.1	25	12	32	40	30	33

Ø	E1	G	ØJ	KV	KW	M	MM	Rc(PT)	TL	W	Y
40	30	13	33	25	7	8	M14x1.5	1/4	184	26	172
50	37	13.5	40	31	10	11	M18x1.5	3/8	216	31	204
63	44	13.5	40	31	10	11	M18x1.5	3/8	227	31	211
80	51	15	45	37	11	13	M22x1.5	1/2	263	34	243
100	58	17	50	44	13	16	M26x1.5	1/2	302	36	277

With Bellows

Ø	B	X	Y	TL	L									
					~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
40	52	49	172	184	40	70	100	130	160	-	-	-	-	-
50	63	49	204	216	40	70	100	130	160	190	-	-	-	-
63	63	49	211	227	40	70	100	130	160	190	-	-	-	-
80	79	60	243	263	40	70	100	130	160	190	220	250	280	-
100	95	60	277	302	40	70	100	130	160	190	220	250	280	310

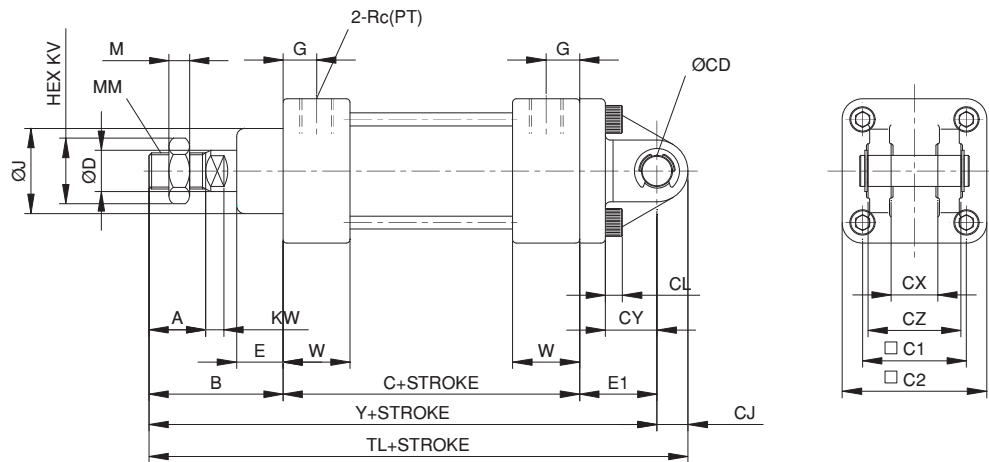
Standard(AL Tube)

Dimension

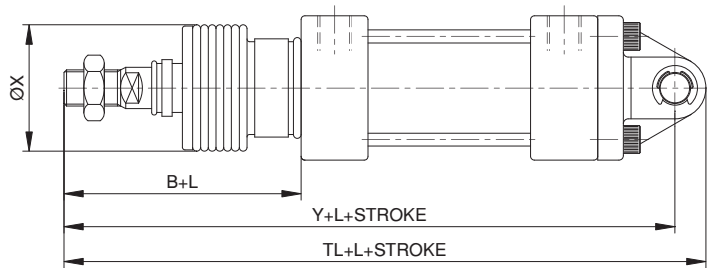
Standard - Clevis mounting type / $\phi 40 \sim \phi 100$

(Unit : mm)

CB



With Bellows



	A	B	C	C1	C2	ØCD	CJ	CL	CX	CY	CZ	ØD	E
40	22	52	90	40	56	12.1	12	6	18	20	36	16	18
50	28	63	104	48	67	12.1	12	8	18	25	36	20	23
63	28	63	104	59	78	16.1	16	8	22	30	44	20	23
80	36	79	113	74	98	20.1	20	12	28	35	56	25	28
100	45	95	124	90	116	25.1	25	12	32	40	64	30	33

	E1	G	ØJ	KV	KW	M	MM	Rc(PT)	TL	W	Y
40	30	13	33	25	7	8	M14x1.5	1/4	184	26	172
50	37	13.5	40	31	10	11	M18x1.5	3/8	216	31	204
63	44	13.5	40	31	10	11	M18x1.5	3/8	227	31	211
80	51	15	45	37	11	13	M22x1.5	1/2	263	34	243
100	58	17	50	44	13	16	M26x1.5	1/2	302	36	277

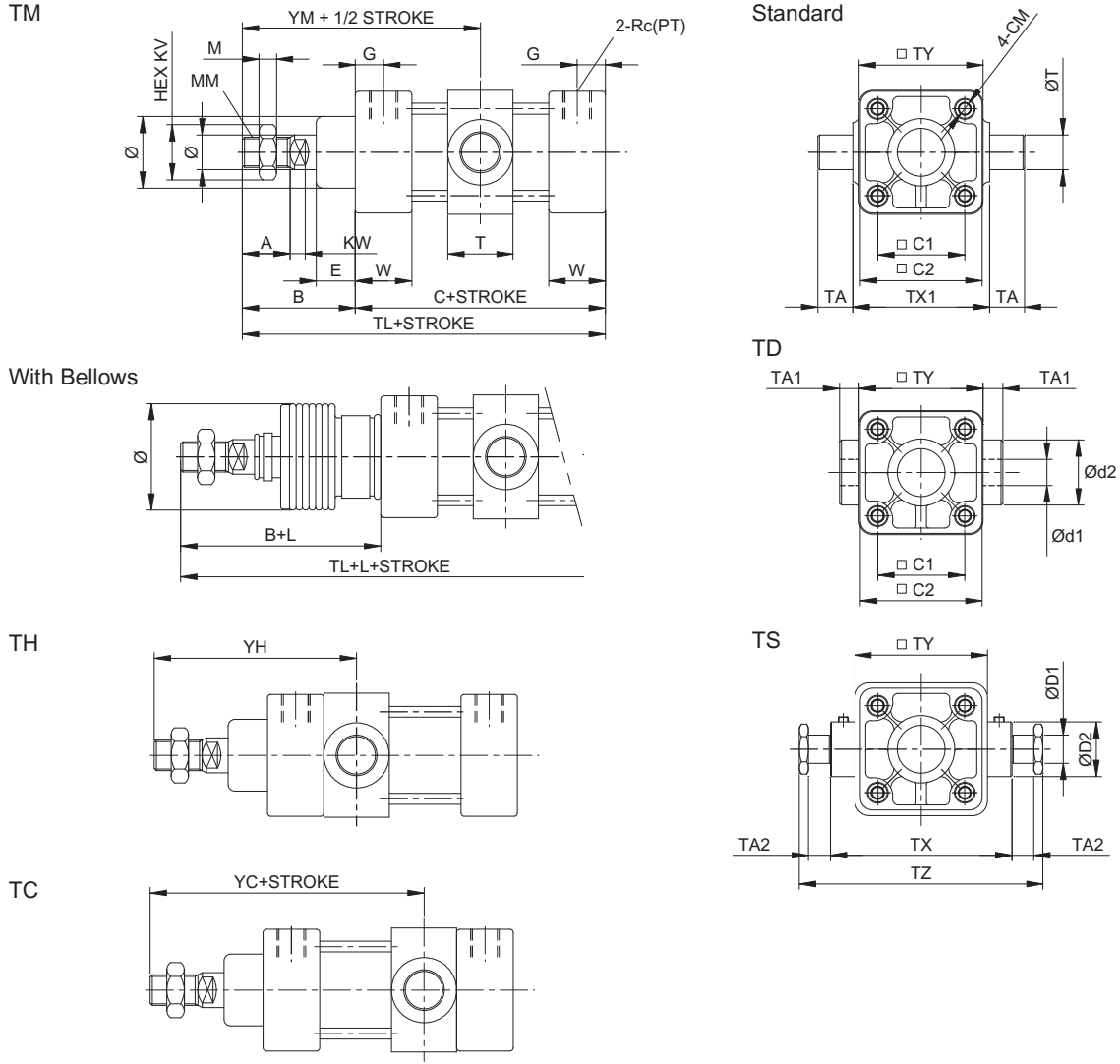
With Bellows

	B	X	Y	TL	L									
					~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
40	52	49	172	184	40	70	100	130	160	-	-	-	-	-
50	63	49	204	216	40	70	100	130	160	190	-	-	-	-
63	63	49	211	227	40	70	100	130	160	190	-	-	-	-
80	79	60	243	263	40	70	100	130	160	190	220	250	280	-
100	95	60	277	302	40	70	100	130	160	190	220	250	280	310

Dimension

Standard - Trunnion mounting type/ $\phi 40\sim\phi 100$

(Unit : mm)



Ø	C1	C2	T	TY	T type(Standard)			TD type			TS type					
					TA	ØT	TX1	Ød1	Ød2	TA1	ØD1	ØD2	TA2	TX	TZ	
40	40	56	30	57	16	16	63	-	-	-	-	-	-	-	-	-
50	48	67	30	73	18	18	80	12	30	8.5	15.5	30	12	100	134	
63	59	78	35	86	20	20	90	14	30	9	19.5	35	12	125	159	
80	74	98	40	107	25	25	112	20	40	13.5	25.5	40	12	140	176	
100	90	116	45	130	32	32	140	20	45	10	29.5	45	14	180	220	

Ø	A	B	C	CM	Ø	E	G	ØJ	KV	KW	M	MM	Rc(PT)	TL	W	YC	YH	YM
50	28	63	104	M8x1.25	20	23	13.5	40	31	10	11	M18x1.5	3/8	167	31	121	109	115
63	28	63	104	M8x1.25	20	23	13.5	40	31	10	11	M18xP1.5	3/8	167	31	118.5	111.5	115
80	36	79	113	M12x1.75	25	28	15	45	37	11	13	M22x1.5	1/2	192	34	138	133	135.5
100	45	95	124	M12x1.75	30	33	17	50	44	13	16	M26x1.5	1/2	219	36	160.5	153.5	157

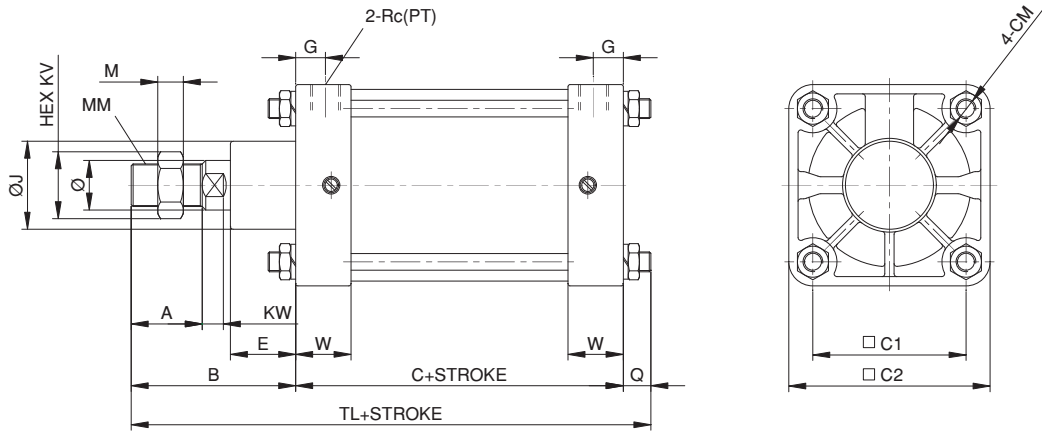
Ø	B	TL	X	L														
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000					
40	52	142	49	40	70	100	130	160	-	-	-	-	-	-	-	-	-	-
50	63	167	49	40	70	100	130	160	190	-	-	-	-	-	-	-	-	-
63	63	167	49	40	70	100	130	160	190	-	-	-	-	-	-	-	-	-
80	79	192	60	40	70	100	130	160	190	220	250	280	-	-	-	-	-	-
100	95	219	60	40	70	100	130	160	190	220	250	280	310	-	-	-	-	-

Standard(AL tube)

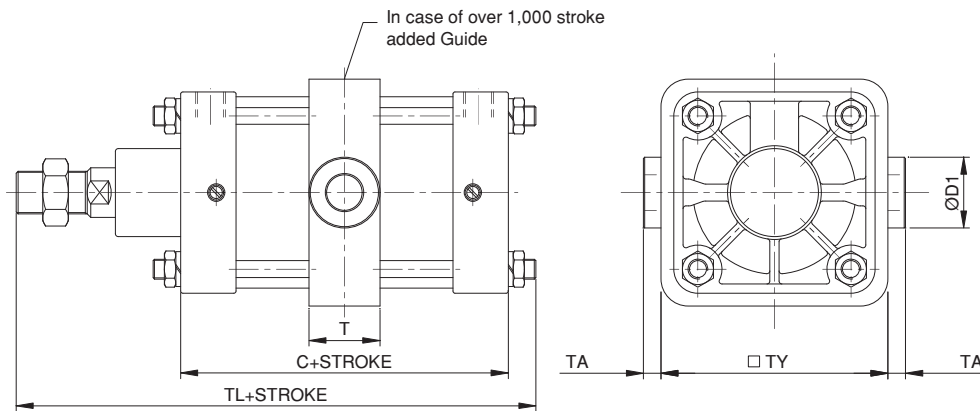
Dimension

Standard / $\phi 125$

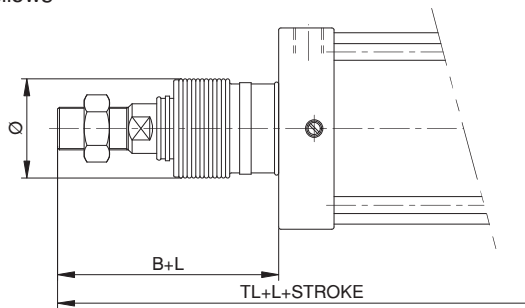
(Unit : mm)



With Guide



With Bellows



Ø	A	B	C				C1	C2	CM	ØD	ØD1	E	G	ØJ
			Without Magnet		With Magnet									
			-1000	1000 -	- 1000	1000 -								
125	50	116	131	166	138	180	108	142	M14x1.5	35	50	46	21	62

Ø	KV	KW	M	MM	Q	Rc(PT)	T	TL				TA	TY	W
								Without Magnet		With Magnet				
								- 1000	1000 -	- 1000	1000 -			
125	41	15	18	M30x1.5	19.5	1/2	50	266.5	301.5	273.5	315.5	12.5	160	39

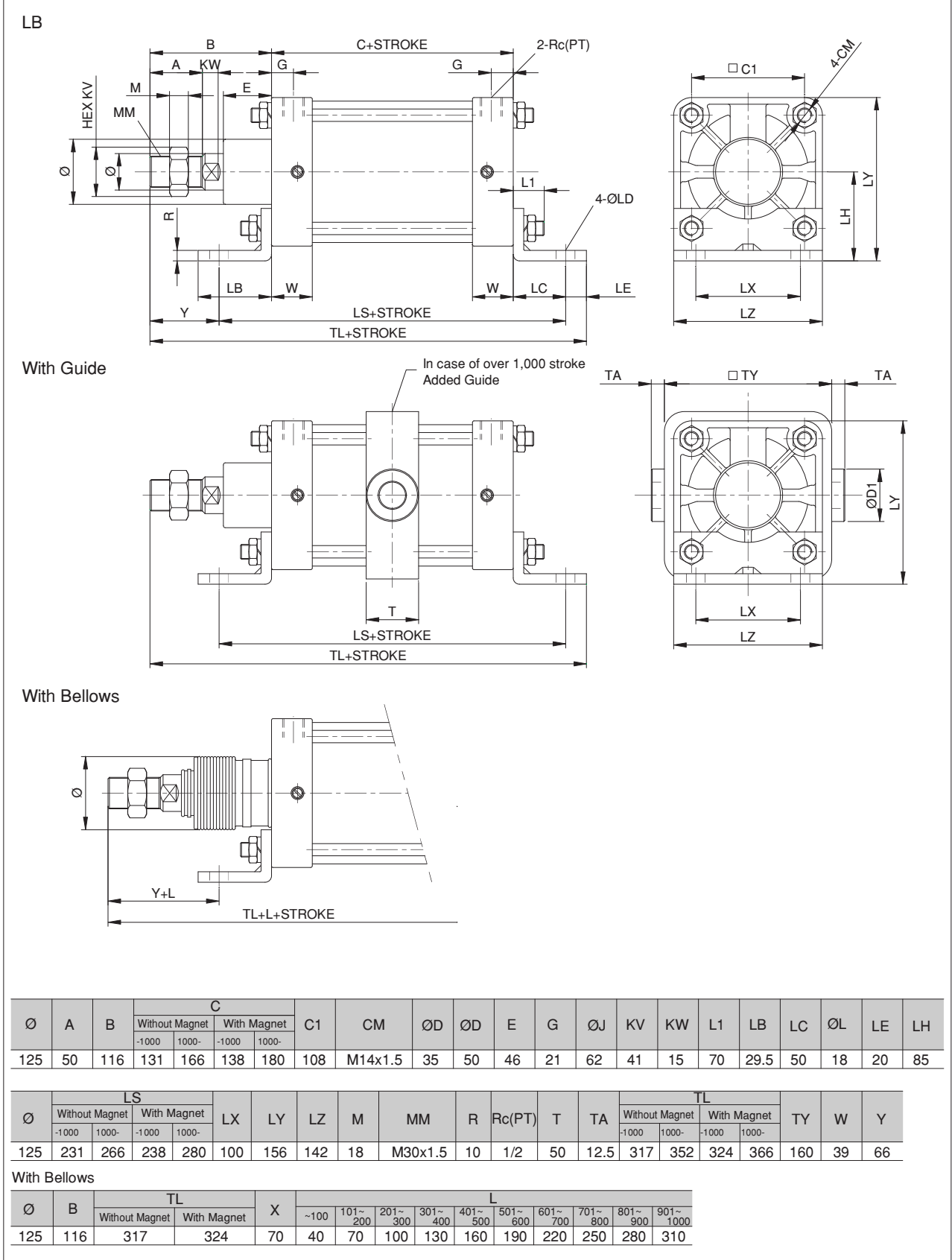
With Bellows

Ø	B	TL		X	L									
		Without Magnet	With Magnet		~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
125	116	266.5	273.5	70	40	70	100	130	160	190	220	250	280	310

Dimension

Standard-Foot mounting type/ $\phi 125$

(Unit : mm)



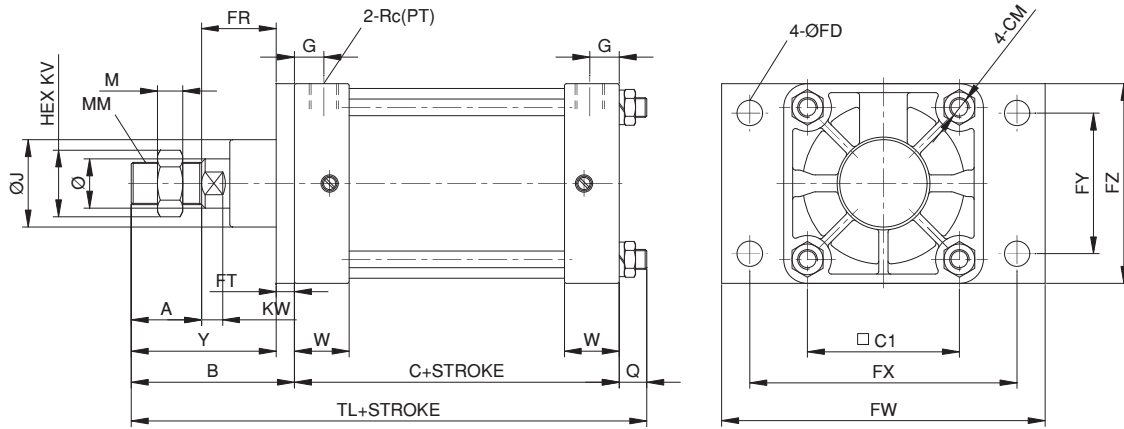
Standard(AL tube)

Dimension

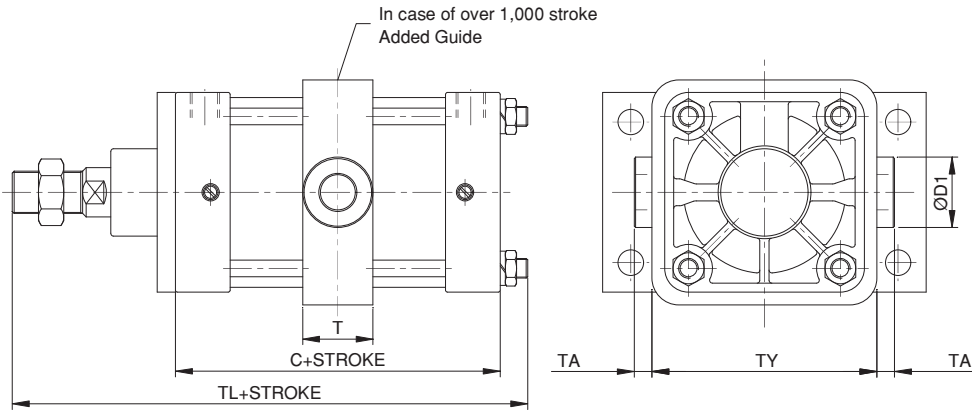
Standard - Flange mounting type / $\phi 125$

(Unit : mm)

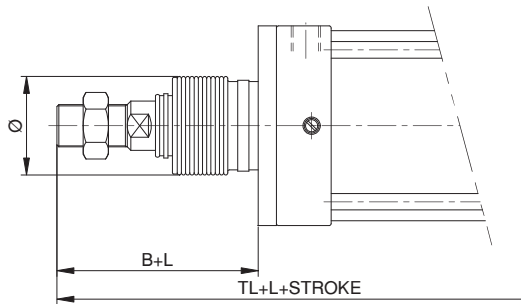
FH



With Guide



With Bellows



Ø	A	B	C				C1	CM	ØD	ØD	E	ØF	FR	FT	FW	FX	FY	FZ
			Without Magnet		With Magnet													
			-1000	1000 -	-1000	1000 -												
125	50	116	131	166	138	180	108	M14x1.5	35	50	46	18	53	13	230	190	100	142

Ø	G	ØJ	KV	KW	M	MM	Q	Rc(PT)	T	TA	TL				TY	W	Y
											Without Magnet		With Magnet				
											-1000	1000-	-1000	1000-			
125	21	62	41	15	18	M30x1.5	19.5	1/2	50	12.5	266.5	301.5	273.5	315.5	160	39	103

With Bellows

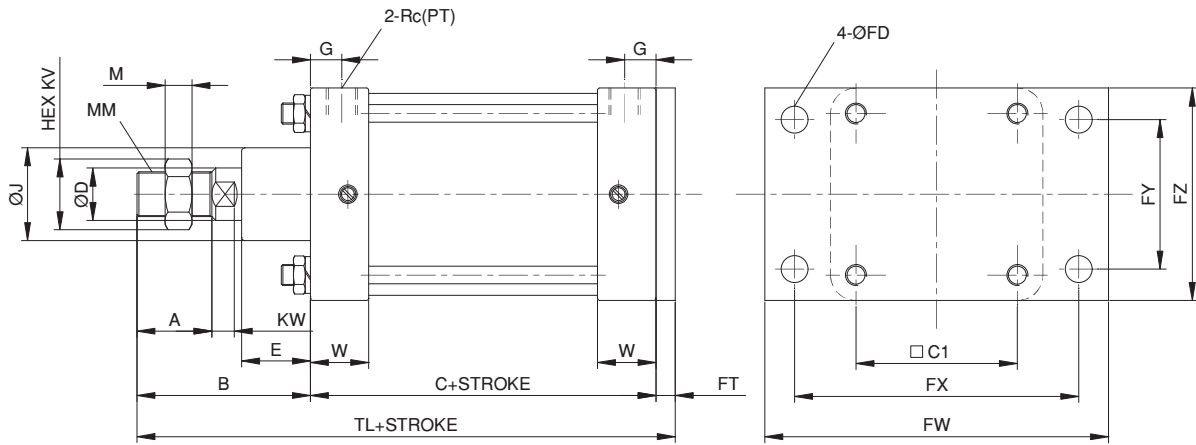
Ø	B	TL		X	L												
		Without Magnet	With Magnet														
		-1000	1000-		~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000			
125	116	266.5	273.5	70	40	70	100	130	160	190	220	250	280	310			

Dimension

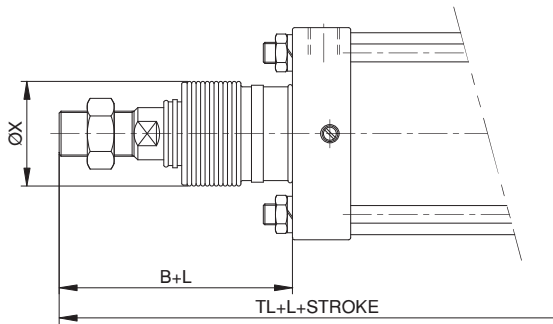
Standard - Flange mounting type / $\phi 125$

(Unit : mm)

FC



With Bellows



Ø	A	B	C		C1	ØD	E	ØFD	FT	FW	FX	FY
			Without Magnet	With Magnet								
125	50	116	131	138	108	35	46	18	13	230	190	100

Ø	FZ	G	ØJ	KV	KW	M	MM	Rc(PT)	TL		W
									Without Magnet	With Magnet	
125	142	21	62	41	15	18	M30x1.5	1/2	260	267	39

With Bellows

Ø	B	TL		X	L									
		Without Magnet	With Magnet		~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
125	116	260	267	70	40	70	100	130	160	190	220	250	280	310

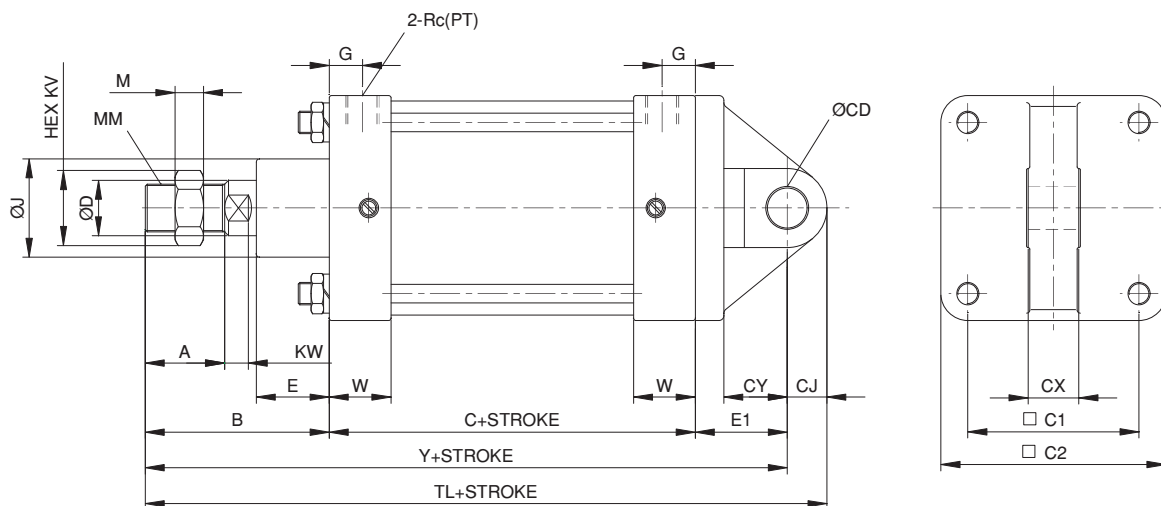
Standard(AL tube)

Dimension

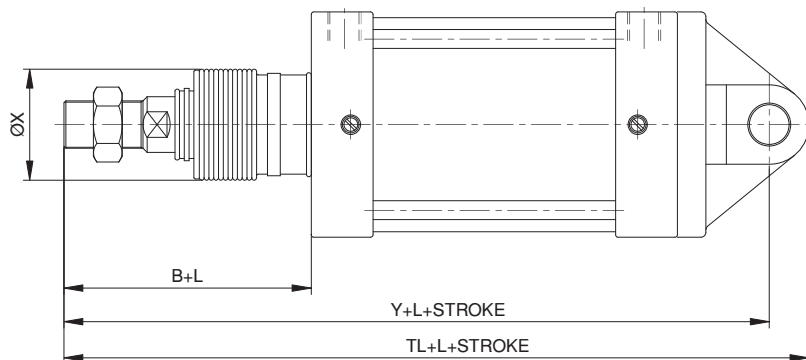
Standard-Clevis mounting type / $\phi 125$

(Unit : mm)

CA



With Bellows



	A	B	C		C1	C2	ϕCD	CJ	CX	CY	ϕD	E	E1	G
			Without Magnet	With Magnet										
125	50	116	131	138	108	142	25.1	25	32	40	35	46	58	21

	ϕ	KV	KW	M	MM	Rc(PT)	TL		W	Y	
							Without Magnet	With Magnet		Without Magnet	With Magnet
125	62	41	15	18	M30x1.5	1/2	330	337	39	305	312

With Bellows

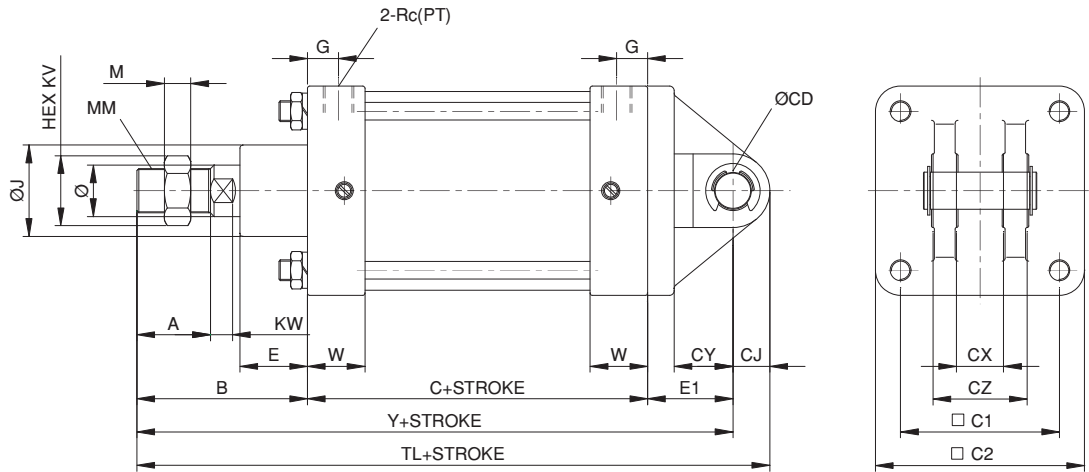
	B	TL		X	L									
		Without Magnet	With Magnet		-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000
125	116	330	337	70	40	70	100	130	160	190	220	250	280	310

Dimension

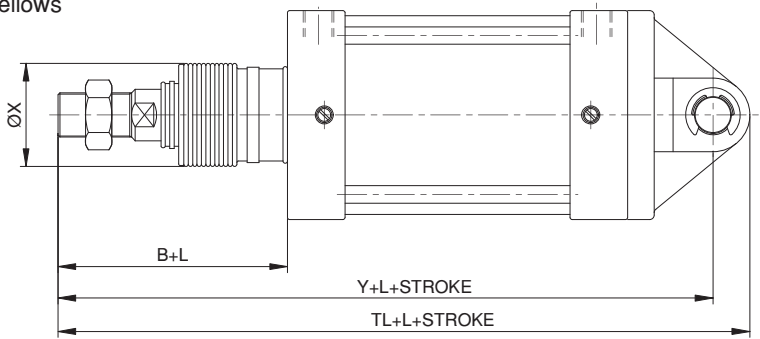
Standard-Clevis mounting type / $\phi 125$

(Unit : mm)

CB



With Bellows



	A	B	C		C1	C2	ØCD	CJ	CX	CY	CZ	ØD	E	E1	G
			Without Magnet	With Magnet											
125	50	116	131	138	108	142	25.1	25	32	40	64	35	46	58	21

	ØJ	KV	KW	M	MM	Rc(PT)	TL		W	Y	
							Without Magnet	With Magnet		Without Magnet	With Magnet
125	62	41	15	18	M30x1.5	1/2	330	337	39	305	312

With Bellows

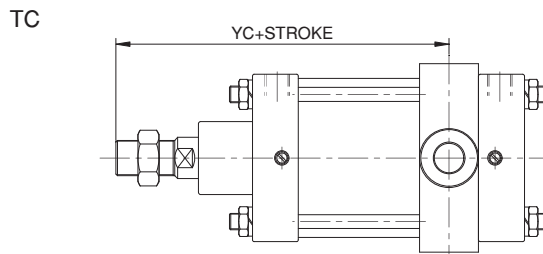
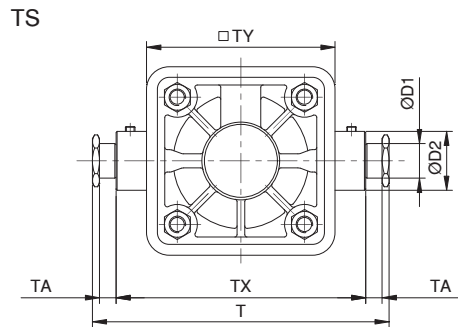
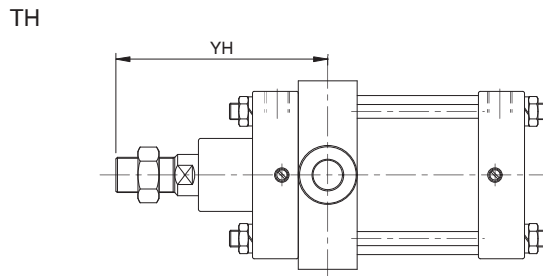
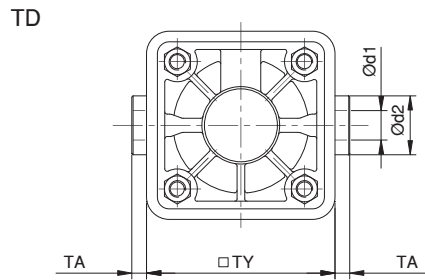
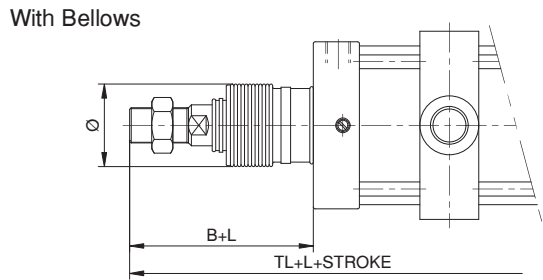
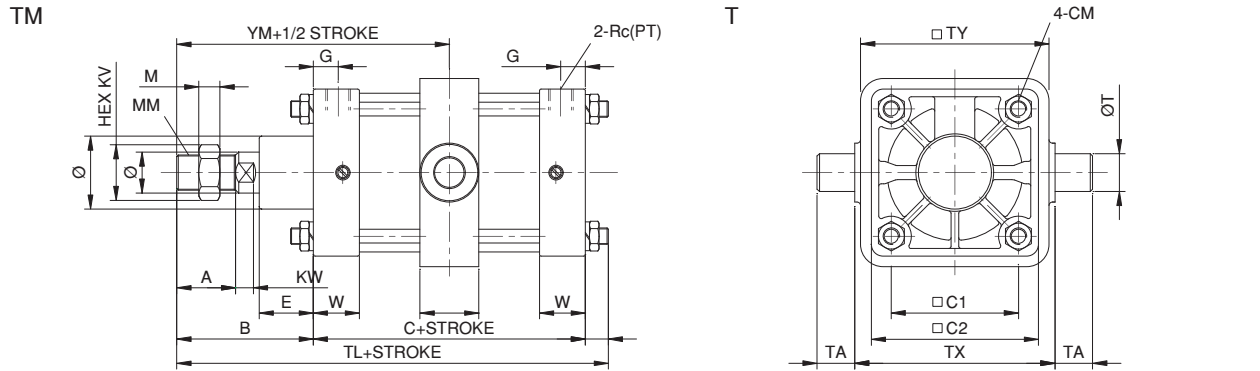
	B	TL		X	L									
		Without Magnet	With Magnet		~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
125	116	330	337	70	40	70	100	130	160	190	220	250	280	310

Standard(AL tube)

Dimension

Standard-Trunnion mounting type / $\phi 125$

(Unit : mm)



Ø	C1	C2	T	TY	T type(Standard)			TD type		
					TA	ØTD	TX1	Ød1	Ød2	TA1
125	108	142	50	160	32	32	170	25	50	12.5

Ø	TS type				
	ØD1	ØD2	TA2	TX	TZ
125	29.5	50	14	212	252

Ø	A	B	C		CM	ØD	E	G	ØJ	KV	KW	M	MM
			Without Magnet	With Magnet									
125	50	116	131	138	M14x1.5	35	46	21	62	41	15	18	M30x1.5

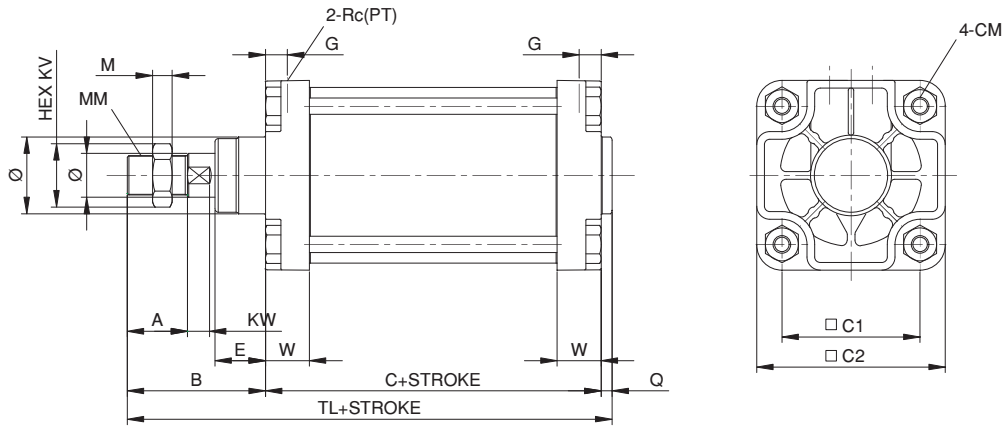
Ø	Rc(PT)	TL		W	YC		YH	YM	
		Without Magnet	With Magnet		Without Magnet	With Magnet		Without Magnet	With Magnet
125	1/2	266.5	273.5	39	183	190	180	181.5	185

Ø	B	TL		X	L									
		Without Magnet	With Magnet		~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
125	116	266.5	273.5	70	40	70	100	130	160	190	220	250	280	310

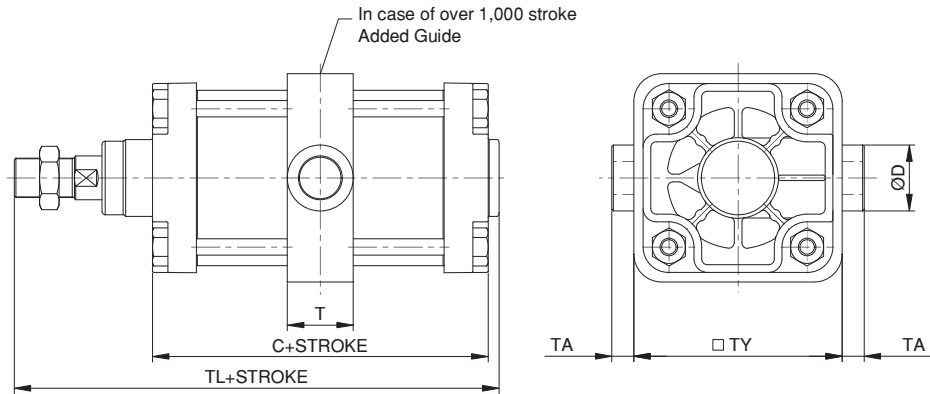
Dimension

Standard / $\phi 150$

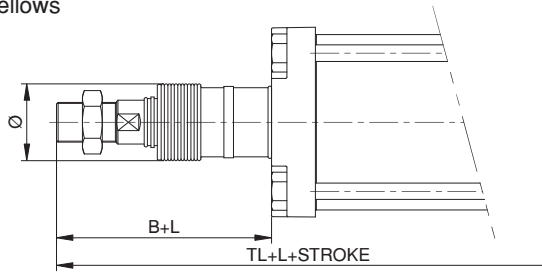
(Unit : mm)



With Guide



With Bellows



Ø	A	B	C		C1	C2	CM	Ø	ØD1	E	G	ØJ
			- 1000	1000 -								
150	55	126	156	203	126	173	M16x2.0	40	60	46	20	70

Ø	KV	KW	M	MM	Q	Rc(PT)	T	TA	TL		TY	W
									- 1000	1000 -		
150	50	20	18	M36x1.5	10	3/4	60	20	292	339	190	40

With Bellows

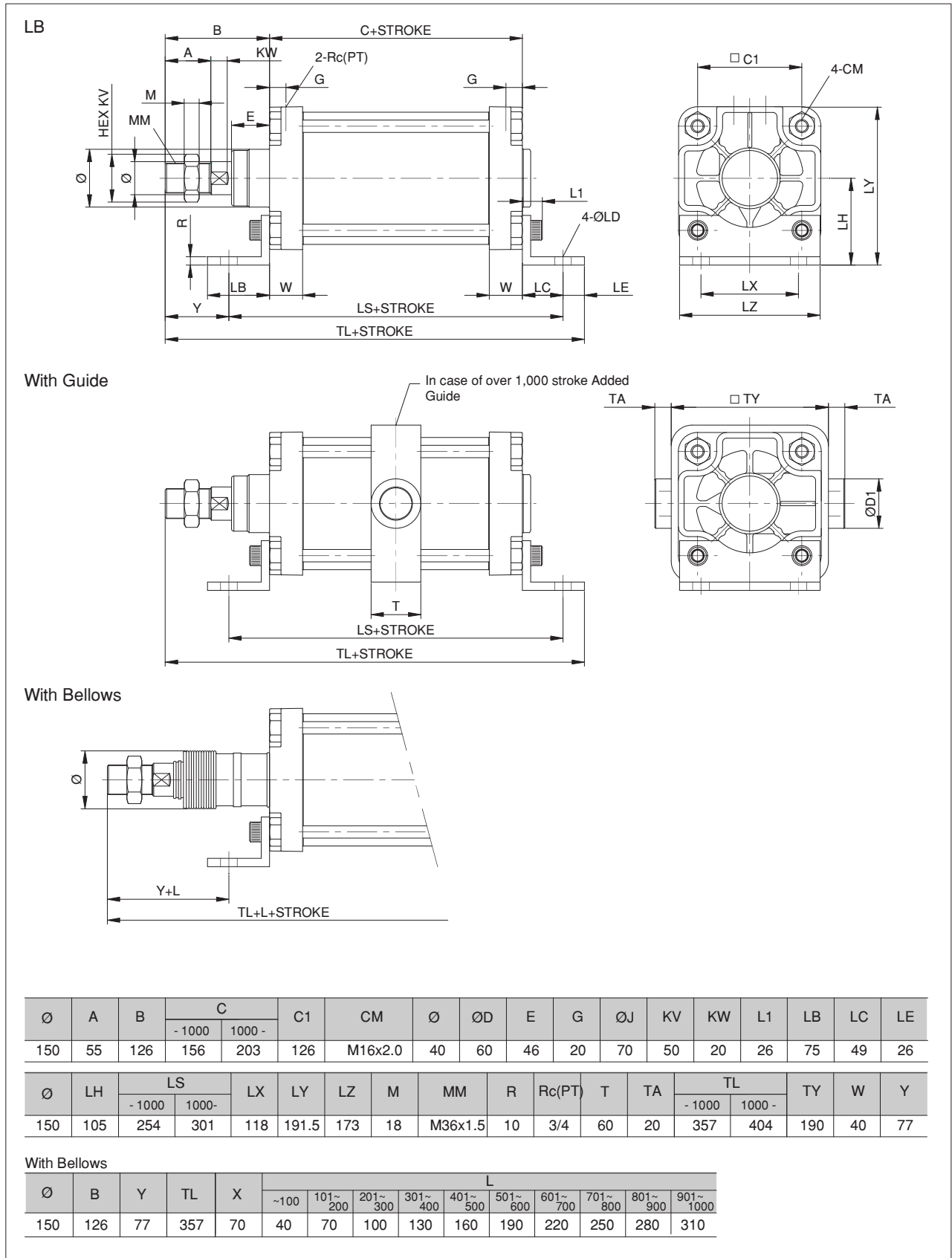
Ø	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
150	126	292	70	40	70	100	130	160	190	220	250	280	310

Standard(AL tube)

Dimension

Standard / $\phi 150$

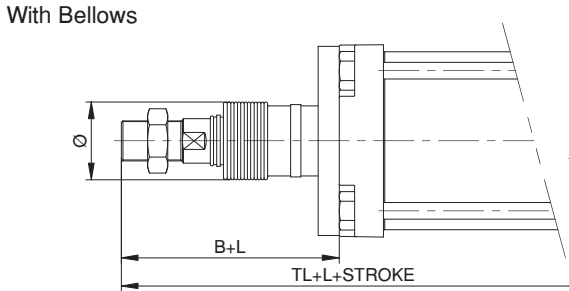
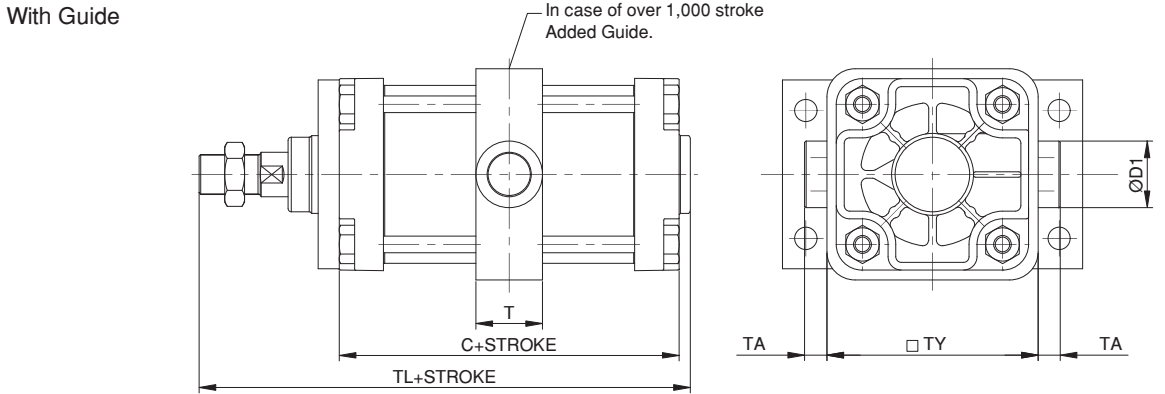
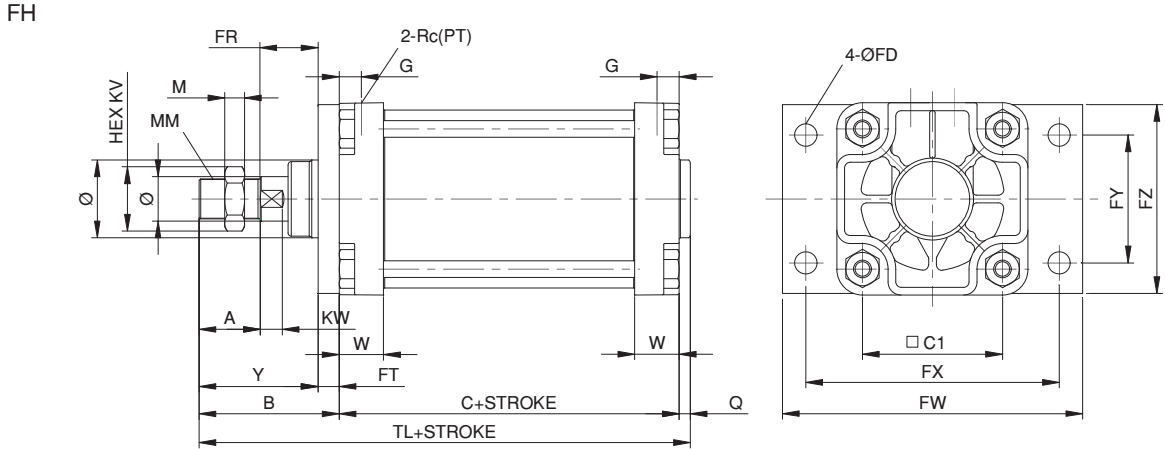
(Unit : mm)



Dimension

Standard - Flange mounting type / $\phi 150$

(Unit : mm)



Ø	A	B	C		C1	CM	ØD	ØD1	E	ØFD	FR	FT	FW	FX	FY	FZ
			- 1000	1000 -												
150	55	126	156	203	126	M16x2.0	40	60	46	20	52	19	270	228	115	170

Ø	G	ØJ	KV	KW	M	MM	Q	Rc(PT)	T	TA	TL		TY	W	Y
											- 1000	1000 -			
150	20	70	50	20	18	M36x1.5	10	3/4	60	20	292	339	190	40	107

With Bellows

Ø	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
150	126	292	70	40	70	100	130	160	190	220	250	280	310

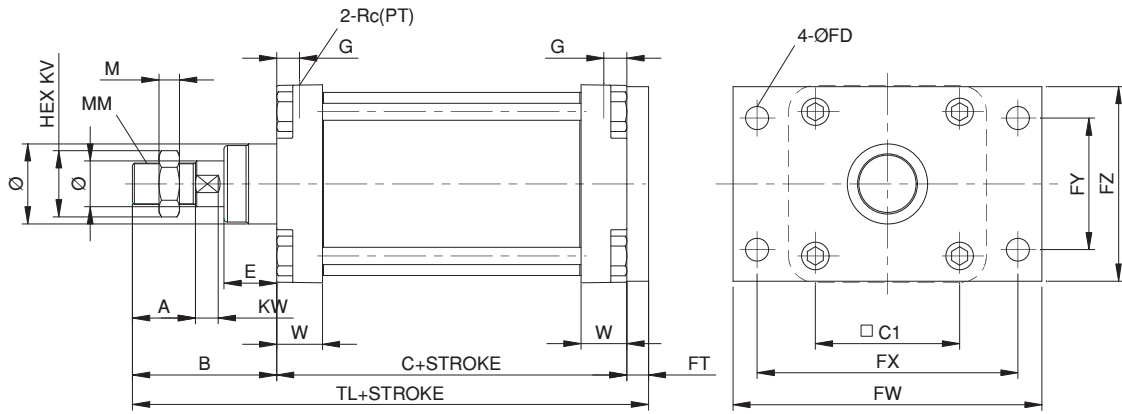
Standard(AL tube)

Dimension

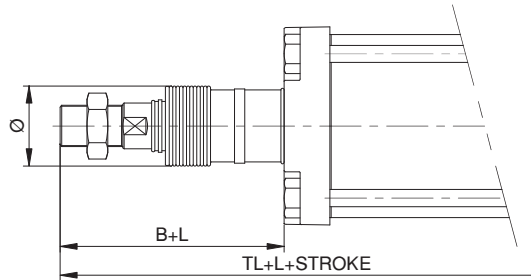
Standard - Flange mounting type / $\phi 150$

(Unit : mm)

FC



With Bellows



ϕ	A	B	C	C1	CM	ϕ D	E	ϕ F	FT	FW	FX
150	55	126	156	126	M16x2.0	40	46	20	19	270	228
ϕ	FY	FZ	G	ϕ	KV	KW	M	MM	Rc(PT)	TL	W
150	115	170	20	70	50	20	18	M36x1.5	3/4	301	40

With Bellows

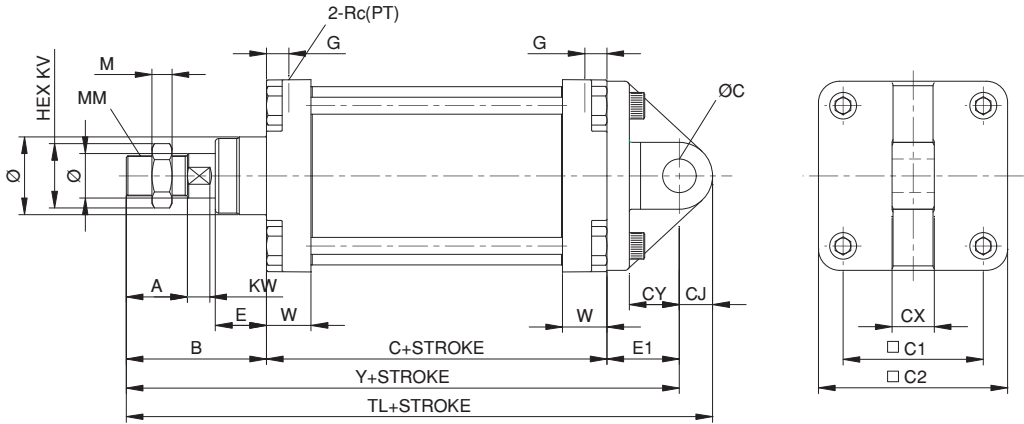
ϕ	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
150	126	301	70	40	70	100	130	160	190	220	250	280	310

Dimension

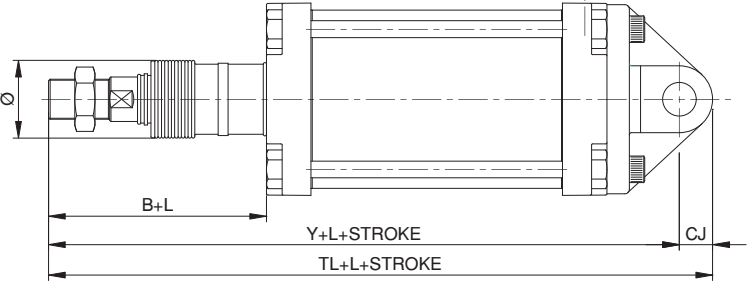
Standard - Clevis mounting type / $\phi 150$

(Unit : mm)

CA



With Bellows



Ø	A	B	C	C1	C2	ØCD	CJ	CX	CY	Ø	E	E1
150	55	126	156	126	173	30.1	30	38	45	40	46	65

Ø	G	ØJ	KV	KW	M	MM	Rc(PT)	TL	W	Y
150	20	70	50	20	18	M36x1.5	3/4	377	40	347

With Bellows

Ø	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
150	126	377	70	40	70	100	130	160	190	220	250	280	310

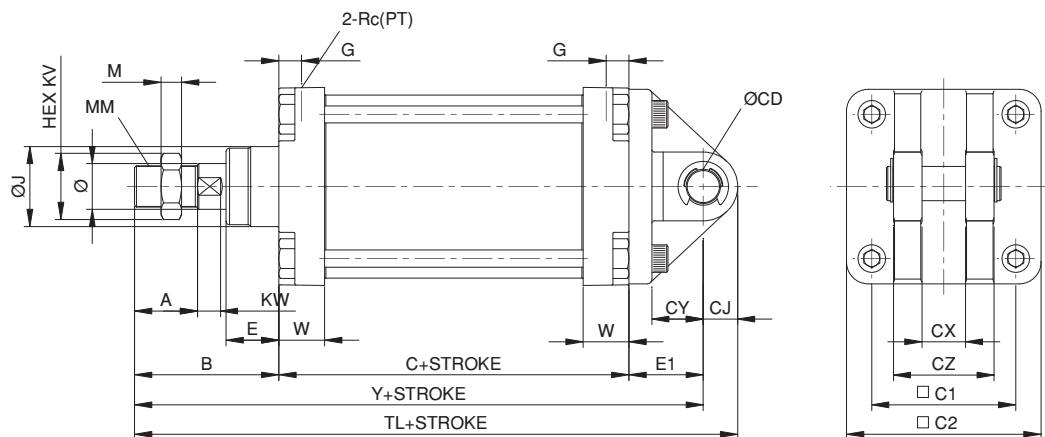
Standard(AL tube)

Dimension

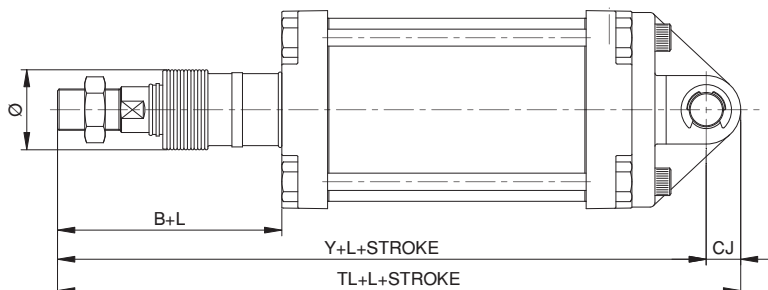
Standard-Clevis mounting type / $\phi 150$

(Unit : mm)

CB



With Bellows



ϕ	A	B	C	C1	C2	ϕ CD	CJ	CX	CY	CZ	ϕ	E
150	55	126	156	126	173	30.1	30	38	45	88	40	46

ϕ	E1	G	ϕ J	KV	KW	M	MM	Rc(PT)	TL	W	Y
150	65	20	70	50	20	18	M36x1.5	3/4	377	40	347

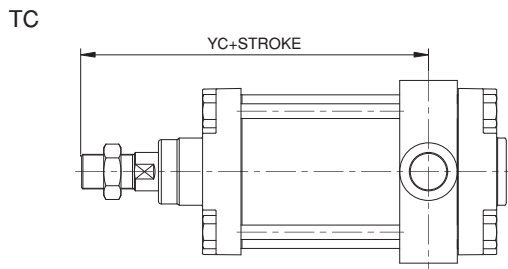
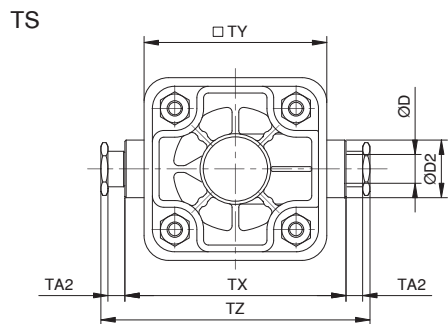
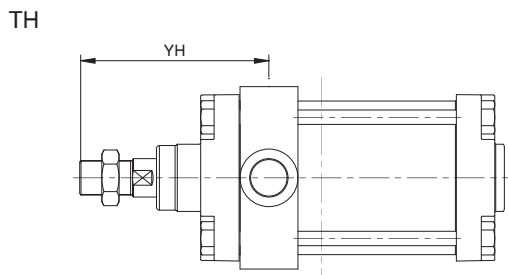
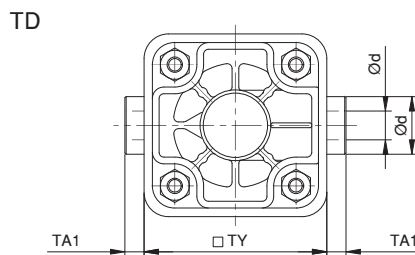
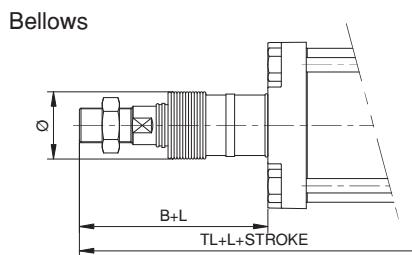
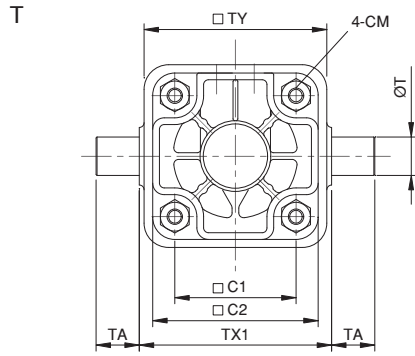
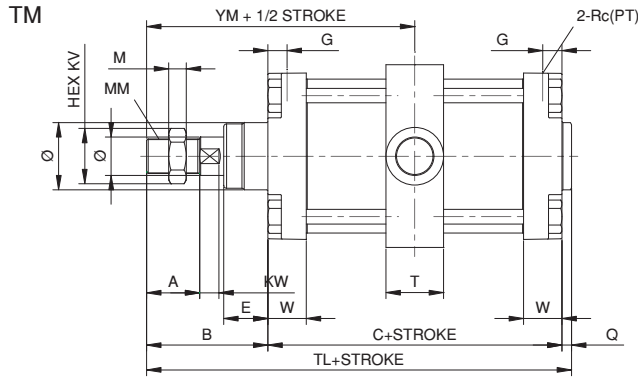
With Bellows

ϕ	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
150	126	377	70	40	70	100	130	160	190	220	250	280	310

Dimension

Standard-Trunnion mounting type / $\phi 150$

(Unit : mm)



ϕ	C1	C2	T	TY	T type(Standard)			TD type		
					TA	OT	TX1	$\phi d1$	$\phi d2$	TA1
150	126	173	60	190	45	40	200	30	60	12.5

ϕ	TS type				
	ϕD	ϕD	TA2	TX	TZ
150	39.5	60	17	247	303

ϕ	A	B	C	CM	ϕD	E	G	ϕ	KV	KW
150	55	126	156	M16x2.0	40	46	20	70	50	20

ϕ	M	MM	Q	Rc(PT)	TL	W	YC	YH	YM
150	18	M36x1.5	10	3/4	292	40	212	196	204

With Bellows

ϕ	B	TL	X	L									
				~100	101~200	201~300	301~400	401~500	501~600	601~700	701~800	801~900	901~1000
150	126	292	70	40	70	100	130	160	190	220	250	280	310