Parker
Pneumatic

Round Cylinder

PK1A Series

Round Cylinder / PK1A Series

Bore : Ø20, Ø25, Ø32, Ø40

Standard	Single Acing	Double Acting	Valve Mounting
			

Bore

Ø 20	○	○	○	○
Ø 25	○	○	○	○
Ø 32	○	○	○	○
Ø 40	○	○	○	○

Cushioning

Bumper Cushion	○	○	○	○
Air Cushion	○	-	○	○

Mounting

Standard	○	○	○	○
Foot Mounting	○	○	○	○
Head Flange	○	○	○	○
Cap Flange	○	○	-	-
Head Trunnion	○	○	○	○
Cap Trunnion	○	○	-	-
Single Clevis	○	○	-	-
Double Clevis	○	○	-	-
Integrated Clevis	○	○	-	-
Pivot Bracket for Clevis	○	○	-	-
Pivot Bracket for Trunnion	○	○	○	○

Sensor

CL-D-C73	○	○	○	○

Order Made Type Cylinder

• 3 Position Cylinder • 4 Position Cylinder • Tandem Cylinder • Adjustable Stroke Cylinder • Pin Lock Cylinder • None-Rotating Cylinder

Accessories

Standard : Rod Nut, Mounting Nut
Option : I Knuckle, Y Knuckle

Round Cylinder

PK1A Series / Standard

Ø20, Ø25, Ø32, Ø40

Order Key

PK1A	-	LB	40		-	200	A	-	Y	-	C73	1
①		②	③	④		⑤	⑥		⑦		⑧	⑨

1. Series
   Round Cylinder

2. Mounting

Blank	None
LB	Foot Bracket
FH	Head Flange
FC	Cap Flange
TH	Head Trunnion
TC	Cap Trunnion
CA	Single Clevis
CB	Double Clevis
CE	Integrated Clevis

3. Bore (mm)

20	Ø 20
25	Ø 25
32	Ø 32
40	Ø 40

4. Cylinder Option

None	Standard
F	High Temperature

5. Stroke
   Please refer to standard stroke table(Page 6).

6. Cushion

Blank	Bumper cushion
A	Air cushion

7. Rod Option

Blank	None
I	I knuckle
Y	Y knuckle
J	With Bellows

Note) When selecting more than one options, please enter letters in alphabetical ex) IJ, YJ

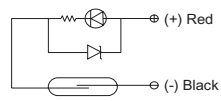
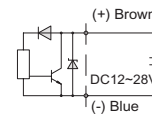
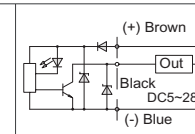
8. Sensor

Blank	No Sensor
C73	CL-D-C73 Sensor

9. Number of Sensor

Blank	Sensor 2ea
1	Sensor 2ea
n	Sensor "n"ea

Sensor

Model No.							
	Reed type	Leed wire(1.5m)	CL-D-C73				
	Solid state type	Leed wire(1m)				CL-D-H7B1	CL-D-H7A1
		Leed wire(3m)				CL-D-H7B3	CL-D-H7A3
		Leed wire(5m)				CL-D-H7B5	CL-D-H7A5
Load voltage			DC24V	AC110V	AC220V	DC 24V	DC 24V
Load current			5~40 mA	5~20 mA	5~12 mA	5~20 mA	0.1~40 mA
Internal voltage drop			3V less			5V less	0.5V less
Wiring method			2 wire			2 wire	3 wire(NPN)
Insulation resistance			50MΩ(500V MEGA)			100MΩ(500V MEGA)	
Temperature range			0 ~ 60℃				
Protection grade			IP67 (IEC standard)				
Indicatior lamp			Red LED (turn on at "ON")				
Internal circuit							
Application			Relay, PLC				

Round Cylinder

Bore : Ø20, Ø25, Ø32, Ø40

Pressure Range and Seal

Bore	Unit	Ø 20	Ø 25	Ø 32	Ø 40
Fluid		Air			
Operating Pressure Range	MPa(bar)	0.1~0.9(1.0~9.0)			
Proof Pressure	MPa(bar)	1.5(15.0)			
Operating Temperature	℃	5~60(High temperature type: 5~120)			
Piston Speed	mm/s	50~500			
Cushion		Bumper Cushion, Air cushion			
Stroke Tolerance	mm	+1.4 0			
Mounting		Foot, Flange, Trunnion, Integrated Clevis			
		Single Clevis, Double Clevis			

Weight Table

(Unit : kg)

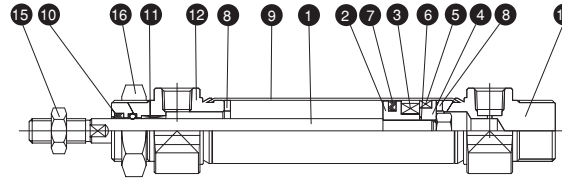
Bore		Ø 20	Ø 25	Ø 32	Ø 40
Basic Weight	Standard	0.14	0.24	0.31	0.56
	Foot	0.18	0.32	0.38	0.64
	Flange	0.18	0.34	0.40	0.66
	Integrated Clevis	0.14	0.24	0.30	0.54
	Single Clevis	0.19	0.30	0.37	0.69
	Double Clevis	0.19	0.31	0.37	0.73
	Trunnion	0.17	0.32	0.38	0.74
Additional weight per 50mm stroke		0.03	0.05	0.07	0.11
Option	Single Knuckle Joint	0.035		0.058	
	Double Knuckle Joint	0.045		0.074	

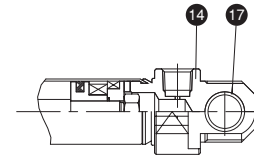
Standard Stroke

Bore (mm)	Standard Stroke(mm)										Max. Stroke
	25	50	75	100	125	150	175	200	250	300	
Ø 20	○	○	○	○	○	○	○	○	○	○	~700
Ø 25	○	○	○	○	○	○	○	○	○	○	~700
Ø 32	○	○	○	○	○	○	○	○	○	○	~700
Ø 40	○	○	○	○	○	○	○	○	○	○	~700

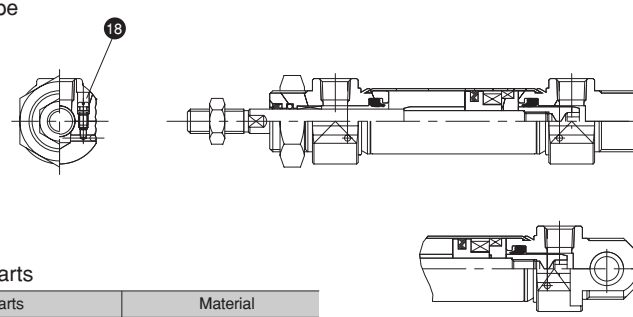
Constructions and Parts

Bumper Cushion Type





Air Cushion Type



Component Parts

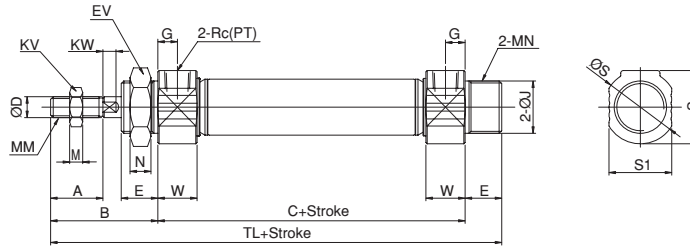
NO	Parts	Material
1	Piston Rod	Nickel Plated Carbon Steel
2	Piston	AL Alloy
3	Magnet	-
4	Magnet Cover	AL Alloy
5	Wearing	Plastic
6	O-Ring	NBR
7	Piston Seal	NBR
8	Cushion Seat	-
9	Tube	Stainless Steel
10	Rod Seal	NBR
11	Rod Bush	-
12	Rod Cover	AL Alloy
13	Head Cover	AL Alloy
14	Head Cover(CE type)	AL Alloy
15	Rod Nut	Nickel Plated Carbon Steel
16	Cover Nut	Nickel Plated Carbon Steel
17	CE Bush	Sintered Steel
18	Cushion Adjusting Needle	-

Dimension

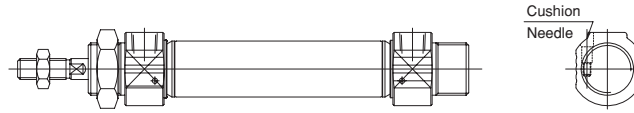
(Unit : mm)

Basic

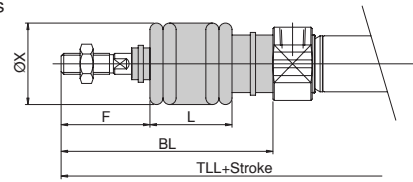
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	ØD	E	EV	G	ØJ	KV	KW	M	MM	MN	N
20	20	41	67.5	8	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8
25	20	46	68.5	10	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8
32	20	46	68.5	12	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8
40	24	52	83.5	16	18	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10

Bore	Rc(PT)	ØS	S	S1	W	TL	H	O	P	X	F					
20	1/8	28	28	24	15	122.5	22.5	7	6	30	35					
25	1/8	34	34	30	15	130.5	25	8	7	30	35					
32	1/8	40	40	36	15	130.5	28.5	8	7	30	35					
40	1/4	48	48	45	21	153.5	32.5	12	11	48	46					

With Bellows

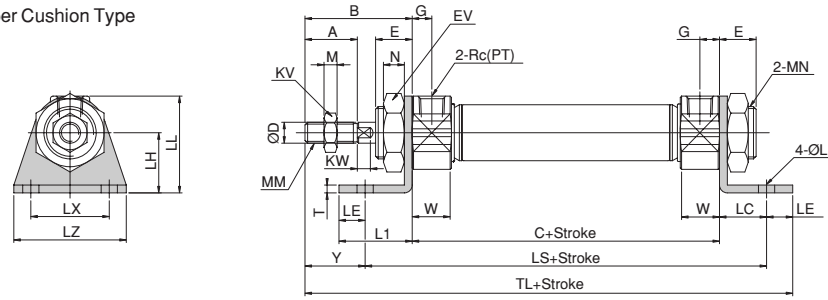
Bore	L					TLL					BL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	162.5	192.5	222.5	252.5	282.5	81	111	141	171	201
25	40	70	100	130	160	170.5	200.5	230.5	260.5	290.5	86	116	146	176	206
32	40	70	100	130	160	170.5	200.5	230.5	260.5	290.5	86	116	146	176	206
40	40	70	100	130	160	193.5	223.5	253.5	283.5	313.5	92	122	152	182	212

Dimension

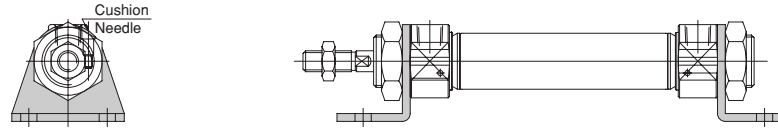
(Unit : mm)

Foot

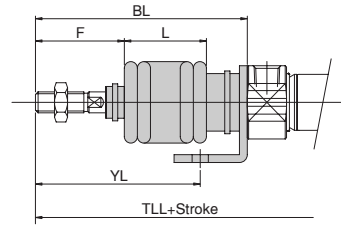
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	LL	L1	LC	ØLD	LE	LH	LS	LX	LZ	ØD	E	EV	G	KV	KW	M
20	20	41	67.5	38	28	18	6.2	10	23	103.5	30	43	8	14	26	7.5	13	5	5
25	20	46	68.5	48	35	23	7	12	30	114.5	46	62	10	16	32	7.5	17	6	6
32	20	46	68.5	50	35	23	7	12	30	114.5	46	62	12	16	32	7.5	17	6	6
40	24	52	83.5	54	36	24	7	12	30	131.5	46	62	16	18	41	10.5	22	7	8

Bore	MM	MN	N	Rc(PT)	T	W	Y	TL	X	F
20	M8X1.25	M20X1.5	8	1/8	3	15	23	136.5	30	35
25	M10X1.25	M26X1.5	8	1/8	3	15	23	149.5	30	35
32	M10X1.25	M26X1.5	8	1/8	3	15	23	149.5	30	35
40	M14X1.5	M32X1.5	10	1/4	3	21	28	171.5	48	46

With Bellows

Bore	L					BL					YL					TLL				
	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500
20	40	70	100	130	160	81	111	141	171	201	63	93	123	153	183	176.5	206.5	296.5	236.5	266.5
25	40	70	100	130	160	86	116	146	176	206	63	93	123	153	183	189.5	219.5	309.5	249.5	279.5
32	40	70	100	130	160	86	116	146	176	206	63	93	123	153	183	189.5	219.5	309.5	249.5	279.5
40	40	70	100	130	160	92	122	152	182	212	68	98	128	158	188	211.5	241.5	331.5	271.5	301.5

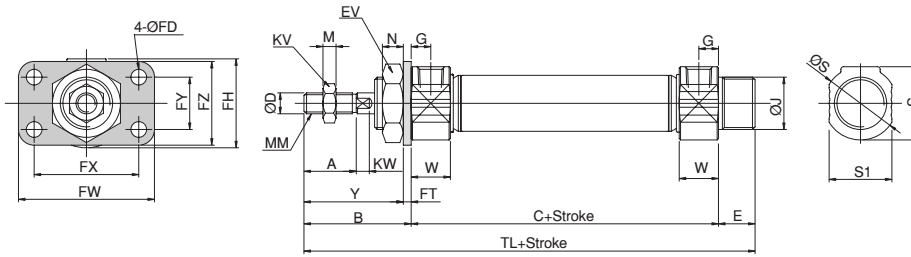
Round Cylinder

Dimension

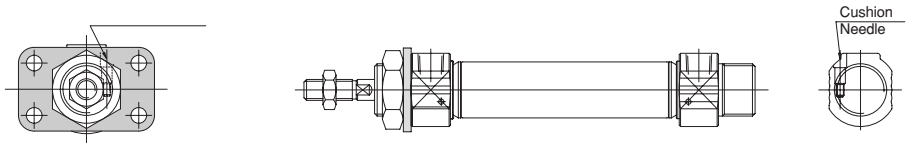
(Unit : mm)

Flange(Head Side)

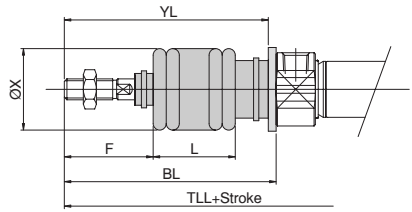
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	ØD	E	EV	ØFD	FH	FT	FW	FX	FY	FZ	G	ØJ	KV	KW	M
20	20	41	67.5	8	14	26	6	-	3	52	40	20	32	7.5	19.8	13	5	5
25	20	46	68.5	10	16	32	7	-	5	80	64	28	44	7.5	25.8	17	6	6
32	20	46	68.5	12	16	32	7	-	5	80	64	28	44	7.5	25.8	17	6	6
40	24	52	83.5	16	52	41	7	48	5	80	64	28	44	10.5	31.8	22	7	8

Bore	MM	MN	N	Rc(PT)	ØS	S	S1	W	Y	TL	X	F
20	M8X1.25	M20X1.5	8	1/8	28	28	24	15	38	122.5	30	35
25	M10X1.25	M26X1.5	8	1/8	34	34	30	15	41	130.5	30	35
32	M10X1.25	M26X1.5	8	1/8	40	40	36	15	41	130.5	30	35
40	M14X1.5	M32X1.5	10	1/4	48	48	45	21	47	153.5	48	46

With Bellows

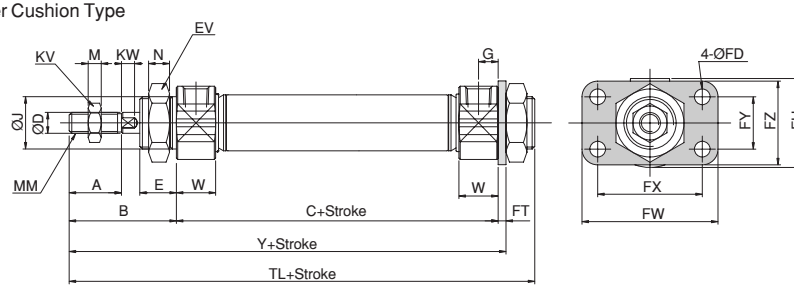
Bore	L					BL					YL					TLL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	81	111	141	171	201	78	108	138	168	198	162.5	192.5	222.5	252.5	282.5
25	40	70	100	130	160	86	116	146	176	206	81	111	141	171	201	170.5	203.5	230.5	260.5	290.5
32	40	70	100	130	160	86	116	146	176	206	81	111	141	171	201	170.5	203.5	230.5	260.5	290.5
40	40	70	100	130	160	92	122	152	182	212	87	119	147	177	207	193.5	223.5	253.5	283.5	313.5

Dimension

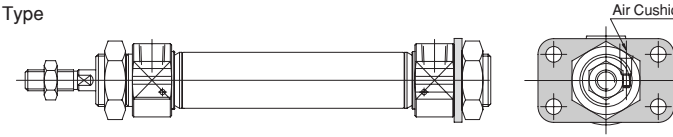
(Unit : mm)

Flange(Cap Side)

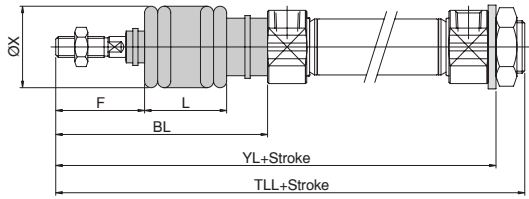
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	ØD	E	EV	F	ØFD	FH	FT	FW	FX	FY	FZ	G	ØJ	KV	KW
20	20	41	67.5	8	14	26	35	6	-	3	52	40	20	32	7.5	19.8	13	5
25	20	46	68.5	10	16	32	35	7	-	5	80	64	28	44	7.5	25.8	17	6
32	20	46	68.5	12	16	32	35	7	-	5	80	64	28	44	7.5	25.8	17	6
40	24	52	83.5	16	18	41	46	7	48	5	80	64	28	44	10.5	31.8	22	7

Bore	M	MM	MN	N	Rc(PT)	ØS	S	S1	TL	W	Y	X
20	5	M8X1.25	M20X1.5	8	1/8	28	28	24	122.5	15	111.5	30
25	6	M10X1.25	M26X1.5	8	1/8	34	34	30	130.5	15	119.5	30
32	6	M10X1.25	M26X1.5	8	1/8	40	40	36	130.5	15	119.5	30
40	8	M14X1.5	M32X1.5	10	1/4	48	48	45	153.5	21	140.5	48

With Bellows

Bore	L					BL					YL					TLL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	81	111	141	171	201	151.5	181.5	211.5	241.5	271.5	162.5	192.5	222.5	252.5	282.5
25	40	70	100	130	160	86	116	146	176	206	159.5	189.5	219.5	249.5	279.5	170.5	203.5	230.5	260.5	290.5
32	40	70	100	130	160	86	116	146	176	206	159.5	189.5	219.5	249.5	279.5	170.5	203.5	230.5	260.5	290.5
40	40	70	100	130	160	92	122	152	182	212	180.5	210.5	240.5	270.5	300.5	193.5	223.5	253.5	283.5	313.5

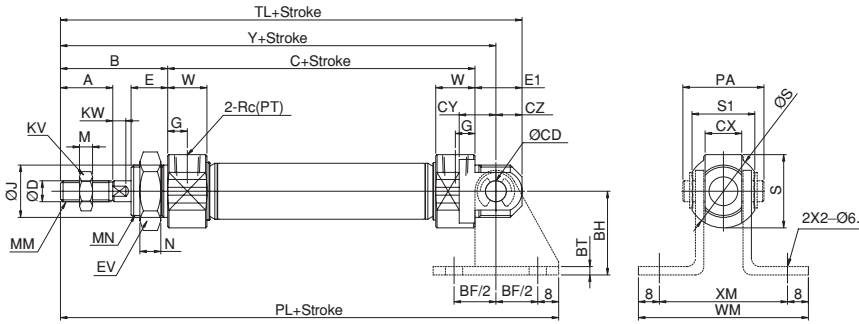
Round Cylinder

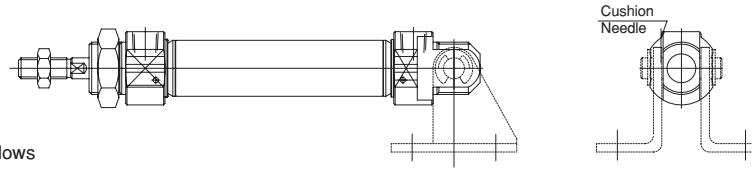
Dimension

(Unit : mm)

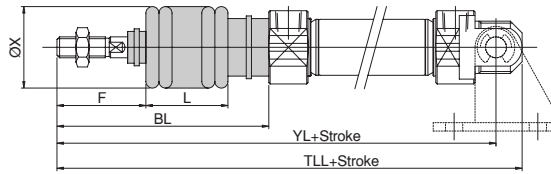
Integrated Clevis

Bumper Cushion Type





With Bellows



Bore	A	B	C	ØCD	CX	CY	CZ	ØD	E	E1	EV	G	ØJ	KV	KW	M	MM	MN
20	20	41	67.5	8	14	14	10	8	14	18	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5
25	20	46	68.5	10	16	14	11	10	16	20	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5
32	20	46	68.5	10	16	13	11	12	16	20	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5
40	24	52	83.5	12	18	17	13	16	18	24	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5

Bore	N	Rc(PT)	ØS	S	S1	TL	W	Y	F	ØX	BF	BH	BT	BY	ØCD	PA	WM	XM	PL
20	8	1/8	28	28	24	126.5	15	116.5	35	30	32	32	3.2	21.8	8	31	67	49	140.5
25	8	1/8	34	34	30	134.5	15	123.5	35	30	36	36	4	21	10	32	67	51	149.5
32	8	1/8	40	40	36	134.5	15	123.5	35	30	36	36	4	21	10	32	67	51	149.5
40	10	1/4	48	48	45	159.5	21	146.5	46	48	40	40	4	21	12	36	69	53	174.5

With Bellows

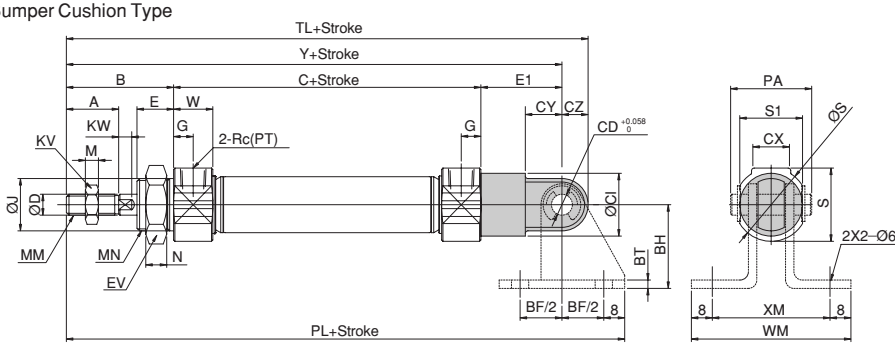
Bore	L					BL					YL					TLL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	81	111	141	171	201	156.5	186.5	216.5	246.5	276.5	166.5	196.5	226.5	256.5	286.5
25	40	70	100	130	160	86	116	146	176	206	163.5	193.5	223.5	253.5	283.5	174.5	204.5	234.5	264.5	294.5
32	40	70	100	130	160	86	116	146	176	206	163.5	193.5	223.5	253.5	283.5	174.5	204.5	234.5	264.5	294.5
40	40	70	100	130	160	92	122	152	182	212	186.5	216.5	246.5	276.5	306.5	199.5	229.5	259.5	289.5	319.5

Dimension

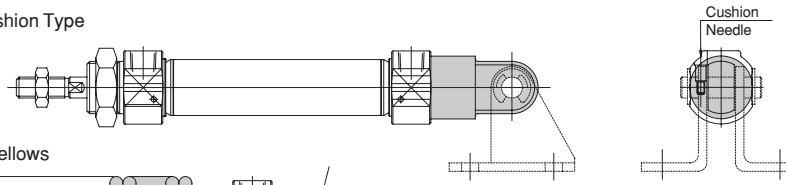
(Unit : mm)

Single Clevis

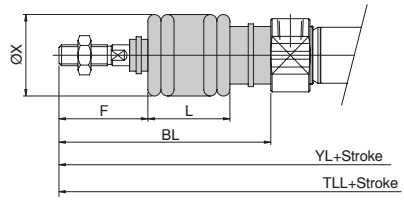
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	ØCD	ØCI	CX	CY	CZ	ØD	E	E1	EV	G	ØJ	KV	KW	M	MM	MN
20	20	41	67.5	8	24	10	14	10	8	14	31	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5
25	20	46	68.5	10	30	10	14	10	10	16	33	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5
32	20	46	68.5	10	30	10	14	10	12	16	33	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5
40	24	52	83.5	12	38	15	18	12	16	18	41	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5

Bore	N	Rc(PT)	ØS	S	S1	W	Y	TL	X	F	BF	BH	BT	BU	BY	ØCD	PA	WM	XM	PL
20	8	1/8	28	28	24	15	139.5	149.5	30	35	32	32	3.2	48	21.8	8	31	61	45	163.5
25	8	1/8	34	34	30	15	147.5	157.5	30	35	36	36	4	52	21	10	32	61	45	173.5
32	8	1/8	40	40	36	15	147.5	157.5	30	35	36	36	4	52	21	10	32	61	45	173.5
40	10	1/4	48	48	45	21	176.5	188.5	48	46	40	40	4	56	21	12	36	66	50	204.5

With Bellows

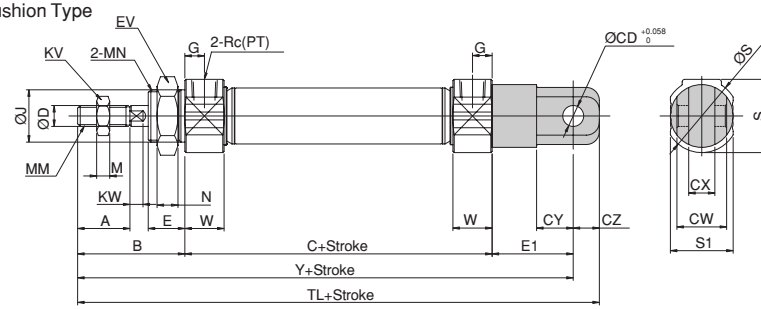
Bore	L					BL					YL					TLL				
	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500
20	40	70	100	130	160	81	111	141	171	201	179.5	209.5	239.5	269.5	299.5	189.5	219.5	249.5	279.5	309.5
25	40	70	100	130	160	86	116	146	176	206	187.5	217.5	247.5	277.5	307.5	197.5	227.5	257.5	287.5	317.5
32	40	70	100	130	160	86	116	146	176	206	187.5	217.5	247.5	277.5	307.5	197.5	227.5	257.5	287.5	317.5
40	40	70	100	130	160	92	122	152	182	212	216.5	246.5	276.5	306.5	336.5	228.5	258.5	288.5	318.5	348.5

Dimension

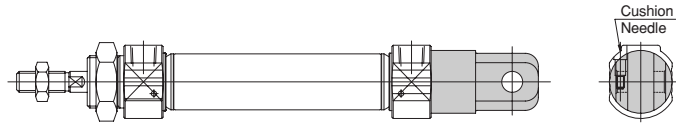
(Unit : mm)

Double Clevis

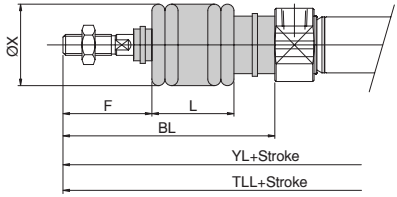
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	ØCD	CW	CX	CY	CZ	ØD	E	E1	EV	G	KV	KW	M
20	20	41	67.5	8	19	10	14	10	8	14	31	26	7.5	13	5	5
25	20	46	68.5	10	19	10	14	10	10	16	33	32	7.5	17	6	6
32	20	46	68.5	10	19	10	14	10	12	16	33	32	7.5	17	6	6
40	24	52	83.5	12	30	15	18	12	16	18	41	41	10.5	22	7	8

Bore	MM	MN	N	Rc(PT)	ØS	S	S1	W	Y	TL	X	F		
20	M8X1.25	M20X1.5	8	1/8	28	28	24	15	139.5	149.5	30	35		
25	M10X1.25	M26X1.5	8	1/8	34	34	30	15	147.5	157.5	30	35		
32	M10X1.25	M26X1.5	8	1/8	40	40	36	15	147.5	157.5	30	35		
40	M14X1.5	M32X1.5	10	1/4	48	48	45	21	176.5	188.5	48	46		

With Bellows

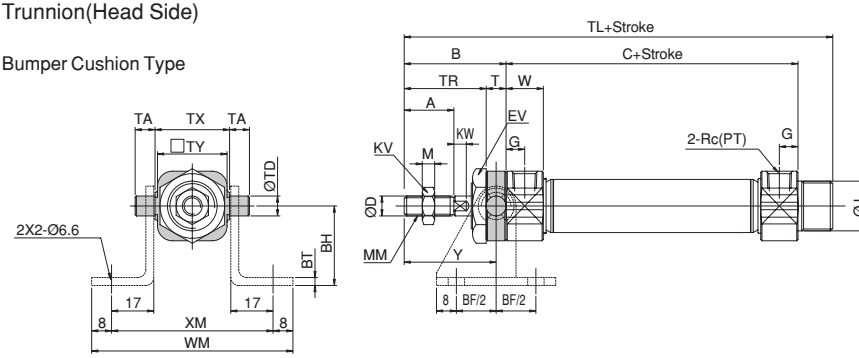
Bore	L					BL					YL					TLL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	81	111	141	171	201	179.5	209.5	239.5	269.5	299.5	189.5	219.5	249.5	279.5	309.5
25	40	70	100	130	160	86	116	146	176	206	187.5	217.5	247.5	277.5	307.5	197.5	227.5	257.5	287.5	317.5
32	40	70	100	130	160	86	116	146	176	206	187.5	217.5	247.5	277.5	307.5	197.5	227.5	257.5	287.5	317.5
40	40	70	100	130	160	92	122	152	182	212	216.5	246.5	276.5	306.5	336.5	228.5	258.5	288.5	318.5	348.5

Dimension

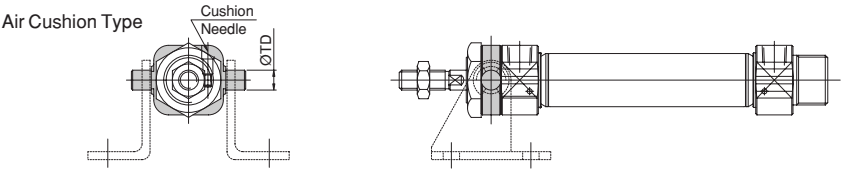
(Unit : mm)

Trunnion(Head Side)

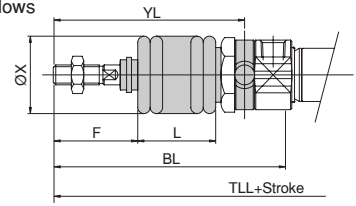
Bumper Cushion Type



Air Cushion Type



With Bellows



Bore	A	B	C	ØD	E	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)	T	TA	ØTD	TR
20	20	41	67.5	8	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8	1/8	8	8	8	33
25	20	46	68.5	10	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36
32	20	46	68.5	12	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36
40	24	52	83.5	16	52	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10	1/4	12	11.5	12	40

Bore	TX	TY	W	Y	TL	X	F	BF	BH	BT	BY	TD	WM	XM
20	30	28	15	37	122.5	30	35	32	32	3.2	21.8	8	81	65
25	40	38	15	41	130.5	30	35	36	36	4	21	10	91	75
32	40	38	15	41	130.5	30	35	36	36	4	21	10	91	75
40	53	52	21	46	153.5	48	46	40	40	4	21	12	104	88

With Bellows

Bore	L					BL					YL					TLL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	81	111	141	171	201	77	107	137	167	197	162.5	192.5	222.5	252.5	282.5
25	40	70	100	130	160	86	116	146	176	206	81	111	141	171	201	170.5	203.5	230.5	260.5	290.5
32	40	70	100	130	160	86	116	146	176	206	81	111	141	171	201	170.5	203.5	230.5	260.5	290.5
40	40	70	100	130	160	92	122	152	182	212	86	118	146	176	206	193.5	223.5	253.5	283.5	313.5

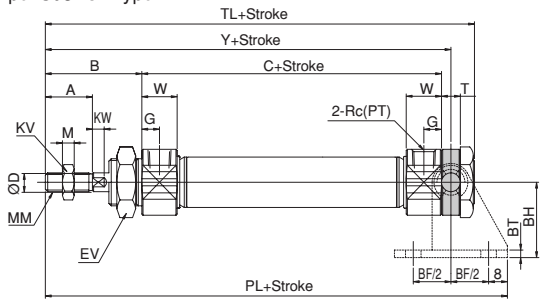
Round Cylinder

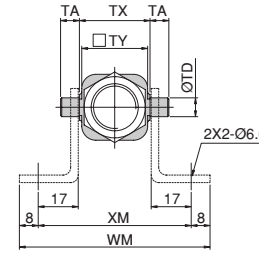
Dimension

(Unit : mm)

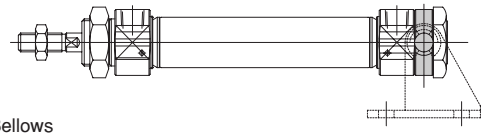
Trunnion(Cap Side)

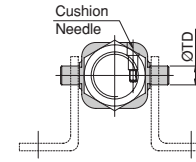
Bumper Cushion Type



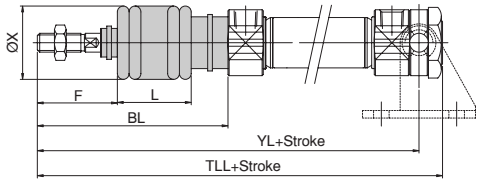


Air Cushion Type





With Bellows



Bore	A	B	C	E	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)	T	TA	ØTD	TR	TX
20	20	41	67.5	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8	1/8	8	8	8	33	30
25	20	46	68.5	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36	40
32	20	46	68.5	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36	40
40	24	52	83.5	52	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10	1/4	12	11.5	12	40	53

Bore	TY	W	Y	TL	X	F	BF	BH	BT	BY	ØTD	WM	XM	PL					
20	28	15	112.5	122.5	30	35	32	32	3.2	21.8	8	81	65	136.5					
25	38	15	119.5	130.5	30	35	36	36	4	21	10	91	75	145.5					
32	38	15	119.5	130.5	30	35	36	36	4	21	10	91	75	145.5					
40	52	21	141.5	153.5	48	46	40	40	4	21	12	104	88	169.5					

With Bellows

Bore	L					BL					YL					TLL				
	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500	–100	101 – 200	201 – 300	301 – 400	401 – 500
20	40	70	100	130	160	81	111	141	171	201	152.5	182.5	212.5	242.5	272.5	162.5	192.5	222.5	252.5	282.5
25	40	70	100	130	160	86	116	146	176	206	159.5	189.5	219.5	249.5	279.5	170.5	203.5	230.5	260.5	290.5
32	40	70	100	130	160	86	116	146	176	206	159.5	189.5	219.5	249.5	279.5	170.5	203.5	230.5	260.5	290.5
40	40	70	100	130	160	92	122	152	182	212	181.5	211.5	241.5	271.5	301.5	193.5	223.5	253.5	283.5	313.5

Round Cylinder

PK1A Series / Single Acting type

Ø20, Ø25, Ø32, Ø40

Order Key

PK1A - LB 40 - 200 S - Y - C73 1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

1. Series
Round Cylinder

2. Mounting

Blank	None
LB	Foot Bracket
FH	Head Flange
FC	Cap Flange
TH	Head Trunnion
TC	Cap Trunnion
CA	Single Clevis
CB	Double Clevis
CE	Integrated Clevis

3. Bore (mm)

20	Ø 20
25	Ø 25
32	Ø 32
40	Ø 40

4. Stroke
Please refer to standard stroke table(Page 18).

5. Stroke

S	Spring Return
T	Spring Extend

6. Rod Option

Blank	None
I	I knuckle
Y	Y knuckle
J	With Bellows

Note) When selecting more than one options, please enter letters in alphabetical ex) IJ, YJ

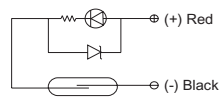
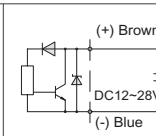
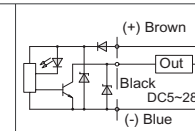
7. Sensor

Blank	No Sensor
C73	CL-D-C73 Sensor

8. Number of Sensor

Blank	Sensor 2ea
1	Sensor 2ea
n	Sensor "n"ea

Sensor

Model No.							
	Reed type	Leed wire(1.5m)	CL-D-C73				
	Solid state type	Leed wire(1m)				CL-D-H7B1	CL-D-H7A1
		Leed wire(3m)				CL-D-H7B3	CL-D-H7A3
		Leed wire(5m)				CL-D-H7B5	CL-D-H7A5
Load voltage			DC24V	AC110V	AC220V	DC 24V	DC 24V
Load current			5~40 mA	5~20 mA	5~12 mA	5~20 mA	0.1~40 mA
Internal voltage drop			3V less			5V less	0.5V less
Wiring method			2 wire			2 wire	3 wire(NPN)
Insulation resistance			50MΩ(500V MEGA)			100MΩ(500V MEGA)	
Temperature range			0 ~ 60℃				
Protection grade			IP67 (IEC standard)				
Indicatior lamp			Red LED (turn on at "ON")				
Internal circuit							
Application			Relay, PLC				

Round Cylinder

Bore : Ø20, Ø25, Ø32, Ø40

Specifications

Bore	Unit	Spring Return	Spring Extend
Fluid		Air	
Operating Pressure Range	MPa(bar)	01~0.9(1.0~9.0)	
Proof Pressure		1.5(15.0)	
Operating Temperature	℃	5~60	
Piston Speed	mm/s	50~750	
Cushion		Bumper Cushion	
Stroke Tolerance	mm	+1.4 0	
Mounting		Foot, Flange, Trunnion, Single Clevis Double Clevis, Integrated Clevis	

Standard Stroke

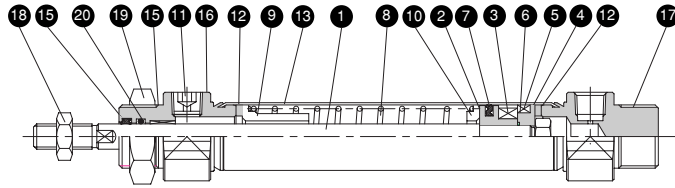
Bore (mm)	Standard Stroke (mm)								
	25	50	75	100	125	150	175	200	250
Ø 20	○	○	○	○	○	○			
Ø 25	○	○	○	○	○	○			
Ø 32	○	○	○	○	○	○	○	○	
Ø 40	○	○	○	○	○	○	○	○	○

Spring Tension

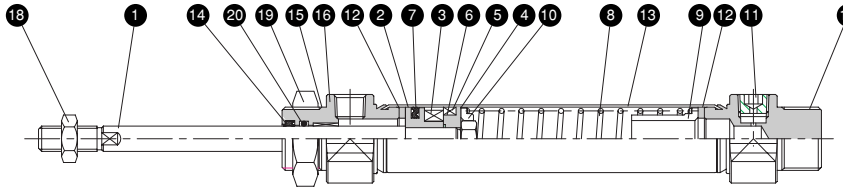
Bore (mm)	Load	Standard Stroke (mm)									
		25	50	75	100	125	150	175	200	225	250
Ø 20	at 0 Stroke	23.6	7.9	17.4	10.0	14.2	9.0	–	–	–	–
	at Max.Stroke	39.3						–	–	–	–
Ø 25	at 0 Stroke	30.8	14.0	24.6	17.1	21.0	16.0	–	–	–	–
	at Max.Stroke	47.0						–	–	–	–
Ø 32	at 0 Stroke	46.2	17.0	32.4	20.7	26.0	18.0	25.0	20.0	–	–
	at Max.Stroke	67.3								–	–
Ø 40	at 0 Stroke	51.0	25.0	37.4	24.4	32.0	24.0	30.0	24.0	29.0	24.0
	at Max.Stroke	76.8									

Constructions and Parts

Spring Return



Spring Extend



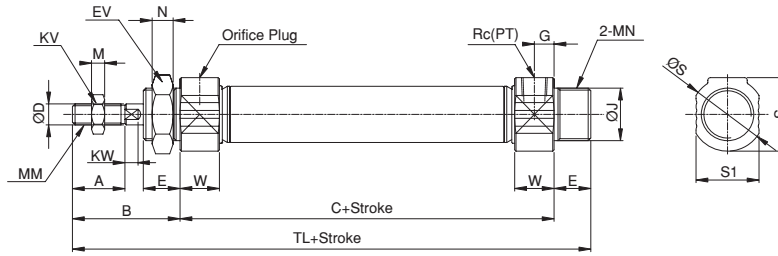
Part No.	Parts	Material
1	Piston Rod	Chrome Plate steel
2	Piston	AL alloy
3	Magnet	–
4	Magnet Cover	AL alloy
5	Wearing	Plastic
6	O – Ring	NBR
7	Piston Seal	NBR
8	Return Spring	–
7	Spring Guide	–
8	Spring Seat	–
11	Filter Plug	–
12	Cushion Seat	–
13	Tube	–
14	Rod Seal	–
15	Rod Bush	–
16	Rod Cover	AL alloy
17	Head Cover	AL alloy
18	Rod Nut	Nickel Plated Carbon steel
19	Cover Nut	Nickel Plated Carbon steel
20	O – Ring	NBR

Dimension

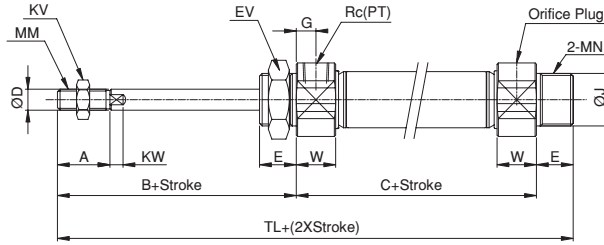
(Unit : mm)

Basic

Spring Return



Spring Extend



Bore	A	B	C	ØD	E	EV	G	ØJ	KV	M	MM	MN	N	Rc(PT)	ØS	S	S1	W
20	20	41	67.5	8	14	26	7.5	19.8	13	5	M8X1.25	M20X1.5	8	1/8	28	28	24	15
25	20	46	68.5	10	16	32	7.5	25.8	17	6	M10X1.25	M26X1.5	8	1/8	34	34	30	15
32	20	46	68.5	10	16	32	7.5	25.8	17	6	M10X1.25	M26X1.5	8	1/8	40	40	36	15
40	24	52	83.5	16	18	41	10.5	31.8	22	8	M14X1.5	M32X1.5	10	1/4	48	48	45	21

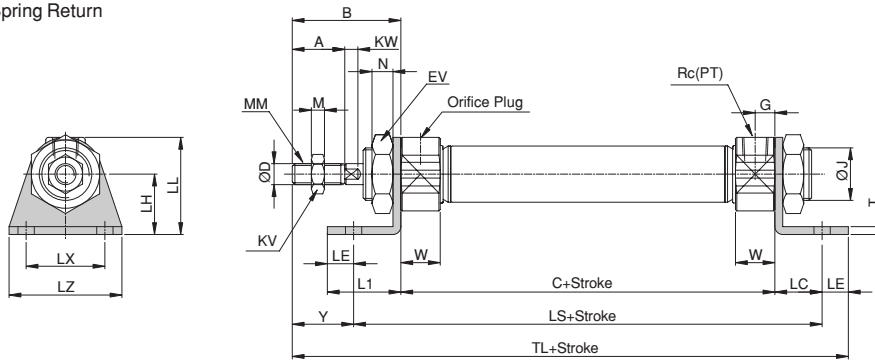
Dimension by Stroke

Stroke / Code / Bore	1~50		51~100		101~150		151~200		201~250							
	C	TL	C	TL	C	TL	C	TL	C	TL						
20	92.5	147.5	117.5	172.5	142.5	197.5	–	–	–	–						
25	93.5	155.5	118.5	180.5	143.5	205.5	–	–	–	–						
32	93.5	155.5	118.5	180.5	143.5	205.5	168.5	230.5	–	–						
40	108.5	178.5	133.5	203.5	158.5	228.5	183.5	253.5	208.5	278.5						

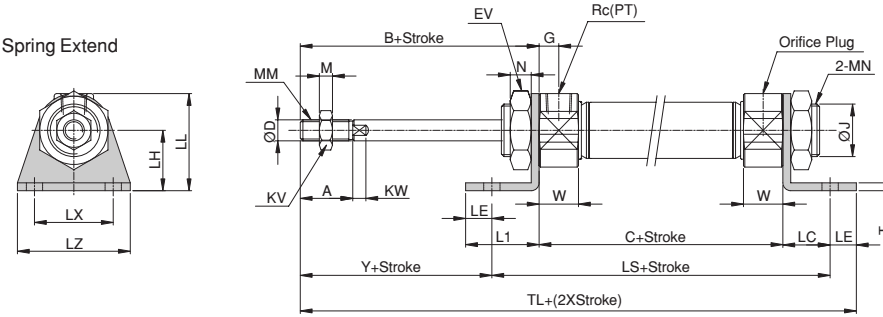
Dimension

Foot

Spring Return



Spring Extend



Bore	A	B	ØD	EV	G	KV	KW	LL	L1	LC	ØLD	LE	LH	LX	LZ	M	MM	MN
20	20	41	8	26	7.5	13	5	38	28	18	6.2	10	23	30	43	5	M8X1.25	M20X1.5
25	20	46	10	32	7.5	17	6	48	35	23	7	12	30	46	62	6	M10X1.25	M26X1.5
32	20	46	12	32	7.5	17	6	50	35	23	7	12	30	46	62	6	M10X1.25	M26X1.5
40	24	52	16	41	10.5	22	7	54	36	24	7	12	30	46	62	8	M14X1.5	M32X1.5

Bore	N	Rc(PT)	T	W	Y
20	8	1/8	3	15	23
25	8	1/8	3	15	23
32	8	1/8	3	15	23
40	10	1/4	3	21	28

Dimension by Stroke

Stroke / Code / Bore	1~50			51~100			101~150			151~200			201~250		
	C	LS	TL	C	LS	TL	C	LS	TL	C	LS	TL	C	LS	TL
20	92.5	128.5	161.5	117.5	153.5	186.5	142.5	178.5	211.5	–	–	–	–	–	–
25	93.5	139.5	174.5	118.5	164.5	199.5	143.5	189.5	224.5	–	–	–	–	–	–
32	93.5	139.5	174.5	118.5	164.5	199.5	143.5	189.5	224.5	168.5	214.5	249.5	–	–	–
40	108.5	156.5	196.5	133.5	181.5	221.5	158.5	206.5	246.5	183.5	231.5	271.5	208.5	256.5	296.5

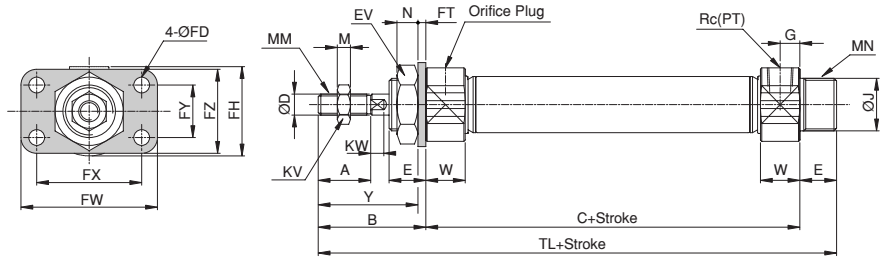
Round Cylinder

Dimension

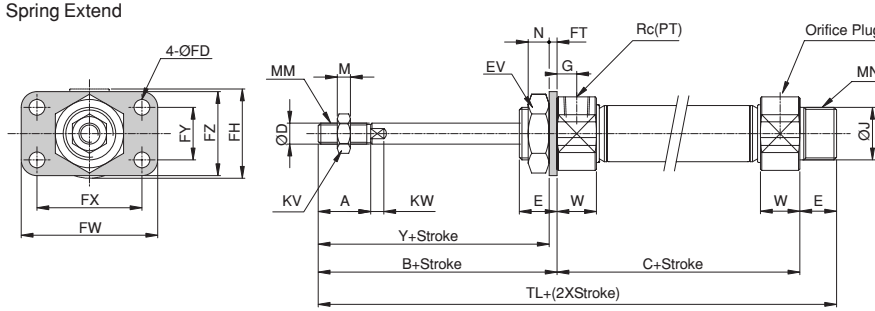
(Unit : mm)

Flange(Head Side)

Spring Return



Spring Extend



Bore	A	B	ØD	E	EV	ØFD	FH	FT	FW	FX	FY	FZ	G	ØJ	KV	KW	M	MM	MN
20	20	41	8	14	26	6	–	3	52	40	20	32	7.5	19.8	13	5	5	M8X1.25	M20X1.5
25	20	46	10	16	32	7	–	5	80	64	28	44	7.5	25.8	17	6	6	M10X1.25	M26X1.5
32	20	46	12	16	32	7	–	5	80	64	28	44	7.5	25.8	17	6	6	M10X1.25	M26X1.5
40	24	52	16	18	41	7	48	5	80	64	28	44	10.5	31.8	22	7	8	M14X1.5	M32X1.5

Bore	N	Rc(PT)	W	Y
20	8	1/8	15	38
25	8	1/8	15	41
32	8	1/8	15	41
40	10	1/4	21	47

Dimension by Stroke

Stroke / Code / Bore	1~50		51~100		101~150		151~200		201~250	
	C	TL	C	TL	C	TL	C	TL	C	TL
20	92.5	147.5	117.5	172.5	142.5	197.5	–	–	–	–
25	93.5	155.5	118.5	180.5	143.5	205.5	–	–	–	–
32	93.5	155.5	118.5	180.5	143.5	205.5	168.5	230.5	–	–
40	108.5	178.5	133.5	203.5	158.5	228.5	183.5	253.5	208.5	278.5

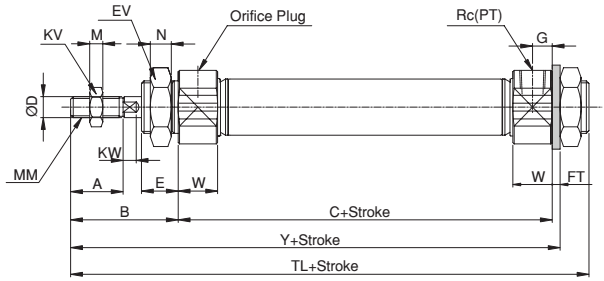
Dimension

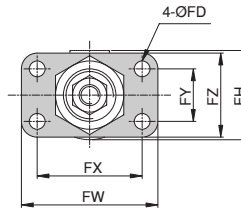
C+Stroke

(Unit : mm)

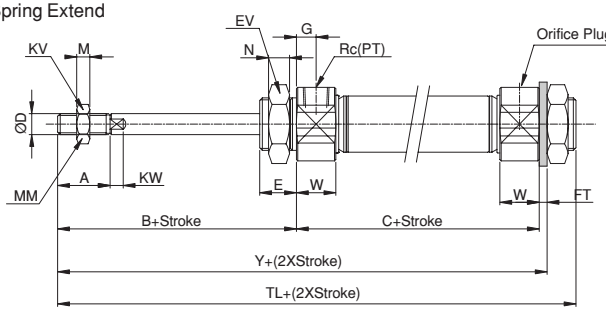
Flange(Cap Side)

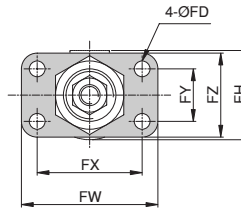
Spring Return





Spring Extend





Bore	A	B	ØD	E	EV	ØFD	FH	FT	FW	FX	FY	FZ	G	KV	KW	M	MM	MN	N
20	20	41	8	14	26	6	–	3	52	40	20	32	7.5	13	5	5	M8X1.25	M20X1.5	8
25	20	46	10	16	32	7	–	5	80	64	28	44	7.5	17	6	6	M10X1.25	M26X1.5	8
32	20	46	12	16	32	7	–	5	80	64	28	44	7.5	17	6	6	M10X1.25	M26X1.5	8
40	24	52	16	18	41	7	48	5	80	64	28	44	10.5	22	7	8	M14X1.5	M32X1.5	10

Bore	Rc(PT)	W
20	1/8	15
25	1/8	15
32	1/8	15
40	1/4	21

Dimension by Stroke

Stroke / Code / Bore	1~50			51~100			101~150			151~200			201~250		
	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL
20	92.5	136.5	147.5	117.5	161.5	172.5	142.5	186.5	197.5	–	–	–	–	–	–
25	93.5	144.5	155.5	118.5	169.5	180.5	143.5	194.5	205.5	–	–	–	–	–	–
32	93.5	144.5	155.5	118.5	169.5	180.5	143.5	194.5	205.5	168.5	219.5	230.5	–	–	–
40	108.5	165.5	178.5	133.5	190.5	203.5	158.5	215.5	228.5	183.5	240.5	253.5	208.5	265.5	278.5

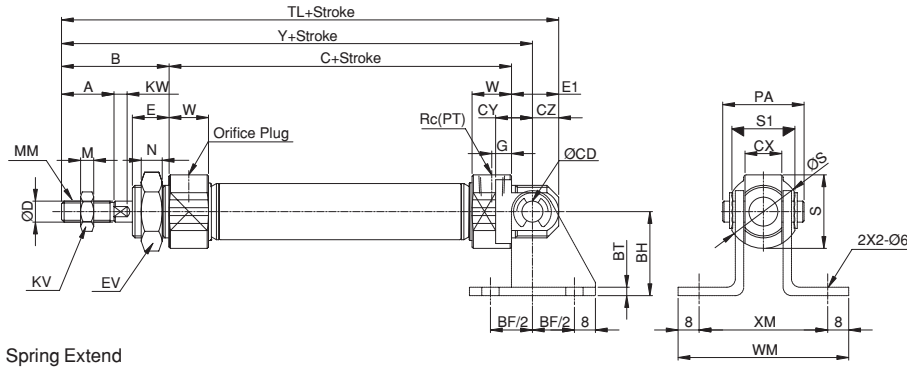
Round Cylinder

Dimension

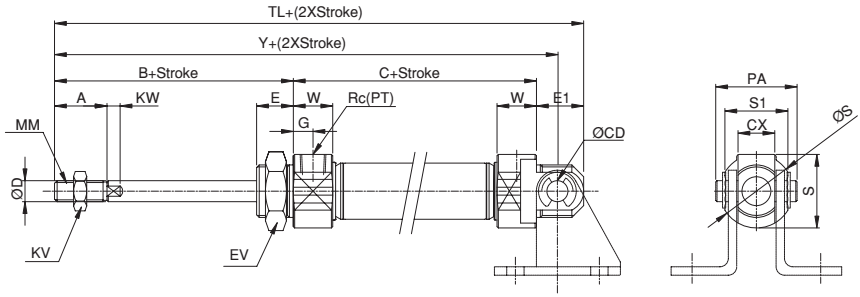
(Unit : mm)

Integrated Clevis

Spring Return



Spring Extend



Bore	A	B	ØCD	CX	CY	CZ	ØD	E	E1	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)
20	20	41	8	14	14	10	8	14	18	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8	1/8
25	20	46	10	16	14	11	10	16	20	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8
32	20	46	10	16	13	11	12	16	20	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8
40	24	52	12	18	17	13	16	18	24	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10	1/4

Bore	ØS	S	S1	W	BF	BH	BT	BY	ØCD	PA	WM	XM
20	28	28	24	15	32	32	3.2	21.8	8	31	67	49
25	34	34	30	15	36	36	4	21	10	32	67	51
32	40	40	36	15	36	36	4	21	10	32	67	51
40	48	48	45	21	40	40	4	21	12	36	69	53

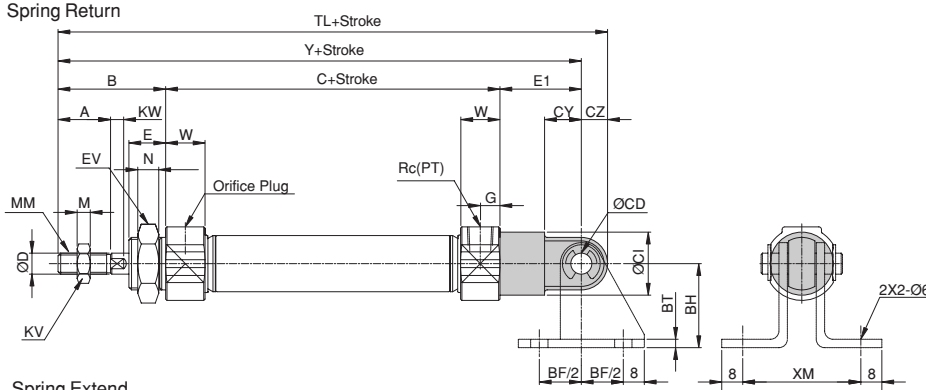
Dimension by Stroke

Stroke / Code / Bore	1~50			51~100			101~150			151~200			201~250		
	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL
20	92.5	131.5	151.5	117.5	166.5	176.5	142.5	191.5	201.5	–	–	–	–	–	–
25	93.5	148.5	159.5	118.5	173.5	184.5	143.5	198.5	209.5	–	–	–	–	–	–
32	93.5	148.5	159.5	118.5	173.5	184.5	143.5	198.5	209.5	168.5	223.5	234.5	–	–	–
40	108.5	171.5	184.5	133.5	196.5	209.5	158.5	221.5	234.5	183.5	246.5	259.5	208.5	271.5	284.5

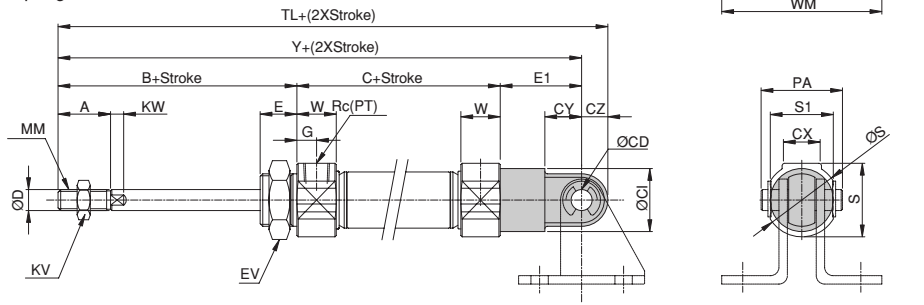
Dimension

Single Clevis

Spring Return



Spring Extend



Bore	A	B	ØCD	ØCI	CX	CY	CZ	ØD	E	E1	EV	G	ØJ	KV	KW	M	MM	MN	N
20	20	41	8	24	10	14	10	8	14	31	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8
25	20	46	10	30	10	14	10	10	16	33	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8
32	20	46	10	30	10	14	10	12	16	33	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8
40	24	52	12	38	15	18	12	16	18	41	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10

Bore	Rc(PT)	ØS	S	S1	W	BF	BH	BT	BY	ØCD	PA	WM	XM
20	1/8	28	28	24	15	32	32	3.2	21.8	8	31	61	45
25	1/8	34	34	30	15	36	36	4	21	10	32	61	45
32	1/8	40	40	36	15	36	36	4	21	10	32	61	45
40	1/4	48	48	45	21	40	40	4	21	12	36	66	50

Dimension by Stroke

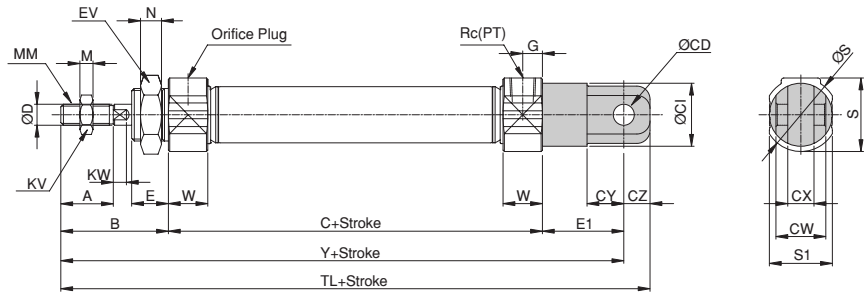
Stroke / Code / Bore	1~50			51~100			101~150			151~200			201~250		
	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL
20	92.5	164.5	174.5	117.5	189.5	199.5	142.5	214.5	224.5	–	–	–	–	–	–
25	93.5	172.5	182.5	118.5	197.5	207.5	143.5	222.5	232.5	–	–	–	–	–	–
32	93.5	172.5	182.5	118.5	197.5	207.5	143.5	222.5	235.5	168.5	247.5	257.5	–	–	–
40	108.5	201.5	213.5	133.5	226.5	238.5	158.5	251.5	263.5	183.5	276.5	288.5	208.5	301.5	313.5

Dimension

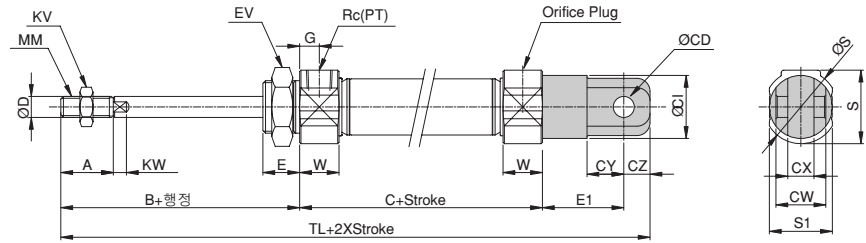
(Unit : mm)

Double Clevis

Spring Return



Spring Extend



Bore	A	B	ØCD	CW	CX	CY	CZ	ØD	E	E1	EV	G	KV	KW	M	MM	MN	N	Rc(PT)
20	20	41	8	19	10	14	10	8	14	31	26	7.5	13	5	5	M8X1.25	M20X1.5	8	1/8
25	20	46	10	19	10	14	10	10	16	33	32	7.5	17	6	6	M10X1.25	M26X1.5	8	1/8
32	20	46	10	19	10	14	10	12	16	33	32	7.5	17	6	6	M10X1.25	M26X1.5	8	1/8
40	24	52	12	30	15	18	12	16	18	41	41	10.5	22	7	8	M14X1.5	M32X1.5	10	1/4

Bore	ØS	S	S1	W
20	28	28	24	15
25	34	34	30	15
32	40	40	36	15
40	48	48	45	21

Dimension by Stroke

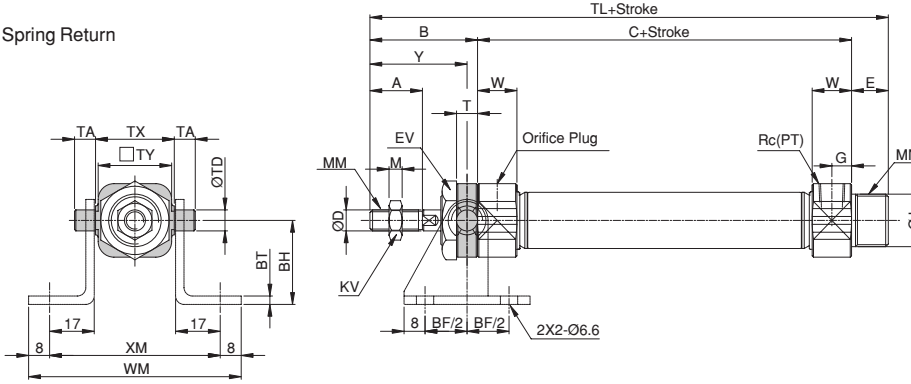
Stroke / Code / Bore	1~50			51~100			101~150			151~200			201~250		
	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL
20	92.5	164.5	174.5	117.5	189.5	199.5	142.5	214.5	224.5	–	–	–	–	–	–
25	93.5	172.5	182.5	118.5	197.5	207.5	143.5	222.5	232.5	–	–	–	–	–	–
32	93.5	172.5	182.5	118.5	197.5	207.5	143.5	222.5	235.5	168.5	247.5	257.5	–	–	–
40	108.5	201.5	213.5	133.5	226.5	238.5	158.5	251.5	263.5	183.5	276.5	288.5	208.5	301.5	313.5

Dimension

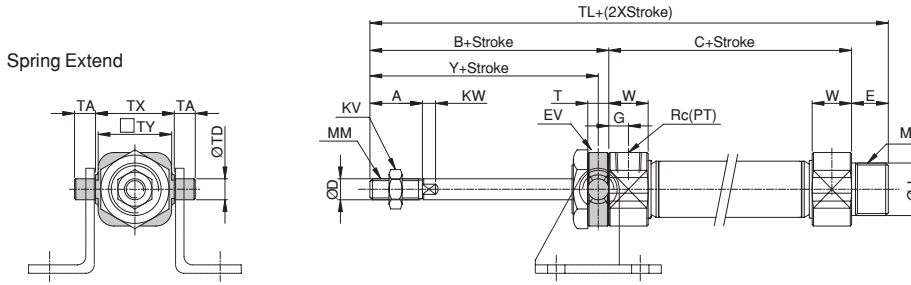
(Unit : mm)

Trunnion(Head Side)

Spring Return



Spring Extend



Bore	A	B	ØD	E	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)	T	TA	ØTD	TR	TX
20	20	41	8	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8	1/8	8	8	8	33	30
25	20	46	10	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36	40
32	20	46	12	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36	40
40	24	52	16	18	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10	1/4	12	11.5	12	40	53

Bore	TY	W	Y	BF	BH	BT	BY	ØTD	WM	XM
20	28	15	37	32	32	3.2	21.8	8	81	65
25	38	15	41	36	36	4	21	10	91	75
32	38	15	41	36	36	4	21	10	91	75
40	52	21	46	40	40	4	21	12	104	88

Dimension by Stroke

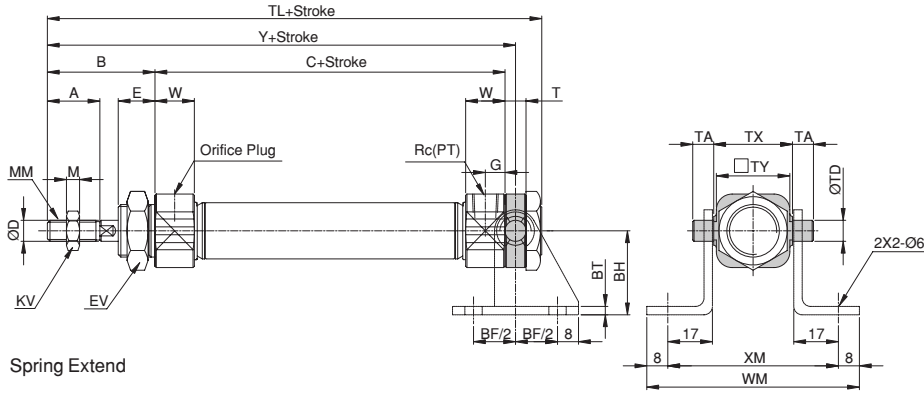
Stroke / Code / Bore	1~50		51~100		101~150		151~200		201~250	
	C	TL	C	TL	C	TL	C	TL	C	TL
20	92.5	147.5	117.5	172.5	142.5	197.5	–	–	–	–
25	93.5	155.5	118.5	180.5	143.5	205.5	–	–	–	–
32	93.5	155.5	118.5	180.5	143.5	205.5	168.5	230.5	–	–
40	108.5	178.5	133.5	203.5	158.5	228.5	183.5	253.5	208.5	278.5

Dimension

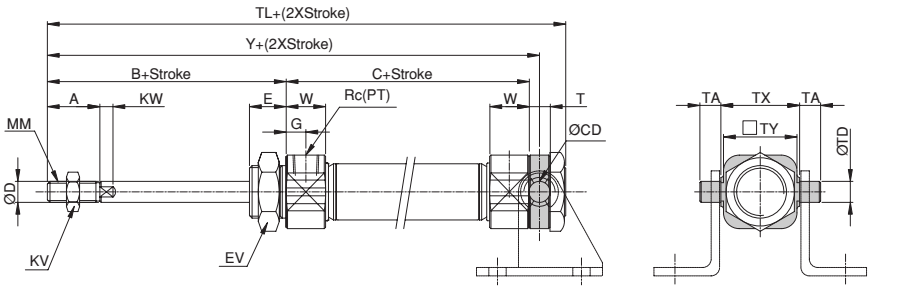
(Unit : mm)

Trunnion(Cap Side)

Spring Return



Spring Extend



Bore	A	B	ØD	E	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)	T	TA	ØTD	TR	TX
20	20	41	8	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8	1/8	8	8	8	33	30
25	20	46	10	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36	40
32	20	46	12	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36	40
40	24	52	16	18	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10	1/4	12	11.5	12	40	53

Bore	TY	W	BF	BH	BT	BY	ØTD	WM	XM										
20	28	15	32	32	3.2	21.8	8	81	65										
25	38	15	36	36	4	21	10	91	75										
32	38	15	36	36	4	21	10	91	75										
40	52	21	40	40	4	21	12	104	88										

Dimension by Stroke

Stroke / Code / Bore	1~50			51~100			101~150			151~200			201~250		
	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL	C	Y	TL
20	92.5	137.5	147.5	117.5	162.5	172.5	142.5	187.5	197.5	–	–	–	–	–	–
25	93.5	144.5	155.5	118.5	169.5	180.5	143.5	194.5	205.5	–	–	–	–	–	–
32	93.5	144.5	155.5	118.5	169.5	180.5	143.5	194.5	205.5	168.5	219.5	230.5	–	–	–
40	108.5	166.5	178.5	133.5	191.5	203.5	158.5	216.5	228.5	183.5	241.5	253.5	208.5	266.5	278.5

Round Cylinder

PK1A Series / Double Rod type

Ø20, Ø25, Ø32, Ø40

Order Key

PK1A	-	LB	40		-	200	A	SB	-	Y	-	C73	1
①		②	③	④		⑤	⑥	⑦		⑧		⑨	⑩

1. Series
Round Cylinder

2. Mounting

Blank	None
LB	Foot Bracket
FH	Flange(Cap Side)
TH	Trunnion(Head Side)

3. Bore(mm)

20	Ø 20
25	Ø 25
32	Ø 32
40	Ø 40

4. Seal Option

Blank	Standard
F	High Temperature

5. Stroke
Please refer to standard stroke table(Page 30).

6. Cushion

Blank	Bumper Cushion
A	Air Cushion

7. Acting

SB	Double Rod

8. Rod Option

Blank	None
I	I Knuckle
Y	Y Knuckle
J	With Bellows

Note) When selecting more than one options, please enter letters in alphabetical ex) IJ, YJ

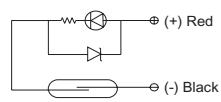
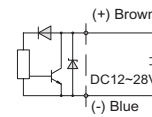
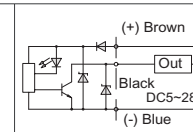
9. Sensor

Blank	No Sensor
C73	CL-D-C73 Sensor

10. Number of Sensor

Blank	Sensor 2 ea
1	Sensor 1 ea
n	Sensor "n" ea

Sensor

Model No.							
	Reed type	Leed wire(1.5m)	CL-D-C73				
	Solid state type	Leed wire(1m)				CL-D-H7B1	CL-D-H7A1
		Leed wire(3m)				CL-D-H7B3	CL-D-H7A3
		Leed wire(5m)				CL-D-H7B5	CL-D-H7A5
Load voltage			DC24V	AC110V	AC220V	DC 24V	DC 24V
Load current			5~40 mA	5~20 mA	5~12 mA	5~20 mA	0.1~40 mA
Internal voltage drop			3V less			5V less	0.5V less
Wiring method			2 wire			2 wire	3 wire(NPN)
Insulation resistance			50MΩ(500V MEGA)			100MΩ(500V MEGA)	
Temperature range			0 ~ 60℃				
Protection grade			IP67 (IEC standard)				
Indicatior lamp			Red LED (turn on at "ON")				
Internal circuit							
Application			Relay, PLC				

Round Cylinder

Bore : Ø20, Ø25, Ø32, Ø40

Specifications

Bore	Unit	Ø 20	Ø 25	Ø 32	Ø 40
Fluid		Air			
Operating Pressure Range	MPa(bar)	01~0.9(1.0~9.0)			
Proof Pressure		1.5(15.0)			
Operating Temperature	℃	5~60(High Temperature type : 5~120)			
Piston Speed	mm/s	50~500			
Cushion		Bumper Cushion, Air Cushion			
Stroke Tolerance	mm	+1.4 0			
Mounting		Foot, Flange, Trunnion			

Weight Table

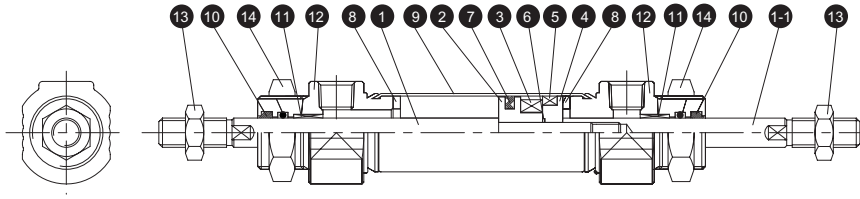
(Unit : kg)

Bore		Ø 20	Ø 25	Ø 32	Ø 40
Basic Weight	Standard	0.16	0.26	0.33	0.58
	Foot	0.20	0.34	0.40	0.66
	Flange	0.20	0.36	0.42	0.68
	Trunnion	0.19	0.34	0.40	0.76
Additional weight per 50mm stroke		0.05	0.07	0.09	0.13
Option	Single Knuckle Joint	0.04	0.04	0.04	0.06
	Double Knuckle Joint	0.05	0.05	0.05	0.07

Standard Stroke

Bore (mm)	Standard Stroke (mm)										Max. Stroke
	25	50	75	100	125	150	175	200	250	300	
Ø 20	○	○	○	○	○	○	○	○	○	○	~500
Ø 25	○	○	○	○	○	○	○	○	○	○	~500
Ø 32	○	○	○	○	○	○	○	○	○	○	~500
Ø 40	○	○	○	○	○	○	○	○	○	○	~500

Constructions and Parts



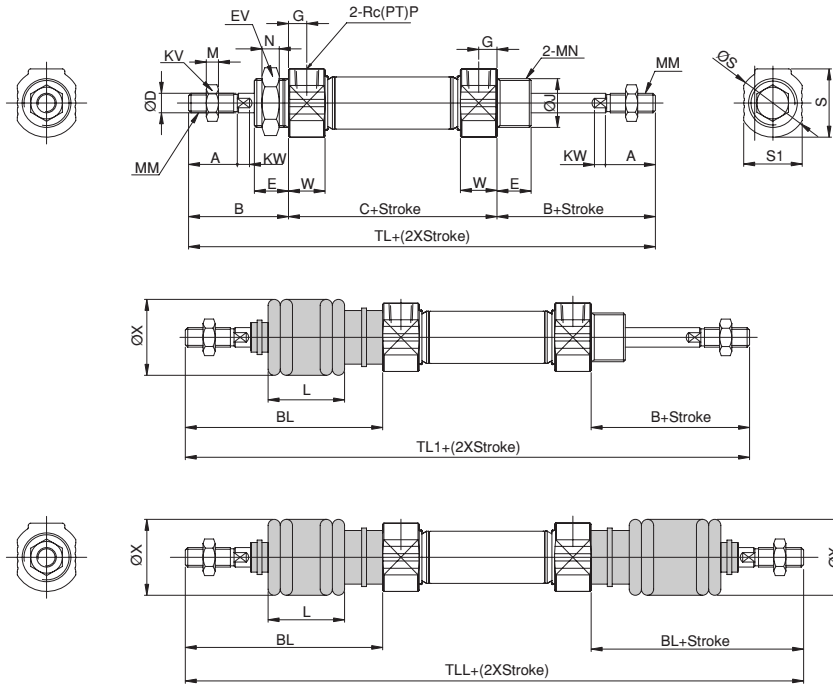
Component Parts

No.	Parts	Material
1	Piston Rod	Nickel Plated Carbon Steel
1-1	Piston Rod	Nickel Plated Carbon Steel
2	Piston	AL Alloy
3	Magnet	
4	Magnet Cover	AL Alloy
5	Wearing	Plastic
6	O-Ring	NBR
7	Piston Seal	NBR
8	Cushion Seat	Urethane
9	Tube	Stainless Steel
10	Rod Seal	
11	Rod Bush	NBR
12	Rod Cover	AL Alloy
13	Rod Nut	Carbon Steel
14	Cover Nut	Carbon Steel

Dimension

(Unit : mm)

Basic



Bore	A	B	C	ØD	E	EV	G	ØJ	KV	KW	M	MM	MN	N
20	20	41	67.5	8	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8
25	20	46	68.5	10	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8
32	20	46	68.5	12	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8
40	24	52	83.5	16	18	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10

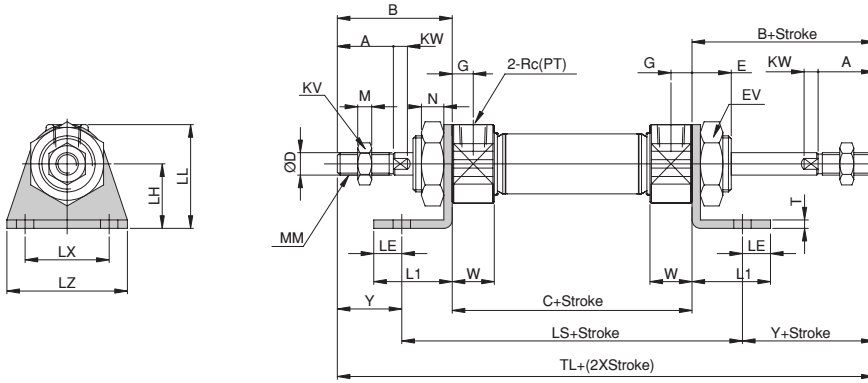
	Rc(PT)	ØS	S	S1	W	TL	F	X							
20	1/8	28	28	24	15	149.5	35	30							
25	1/8	34	34	30	15	160.5	35	30							
32	1/8	40	40	36	15	160.5	35	30							
40	1/4	48	48	45	21	187.5	46	48							

With Bellows

Bore	L					BL					TL1					TLL				
	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500	–100	101–200	201–300	301–400	401–500
20	40	70	100	130	160	81	111	141	171	201	189.5	259.5	289.5	319.5	349.5	229.5	259.5	289.5	319.5	349.5
25	40	70	100	130	160	86	116	146	176	206	200.5	270.5	300.5	330.5	360.5	240.5	270.5	300.5	330.5	360.5
32	40	70	100	130	160	86	116	146	176	206	240.5	270.5	300.5	330.5	360.5	240.5	270.5	300.5	330.5	360.5
40	40	70	100	130	160	92	122	152	182	212	267.5	297.5	327.5	357.5	387.5	267.5	297.5	327.5	357.5	387.5

Dimension

Foot

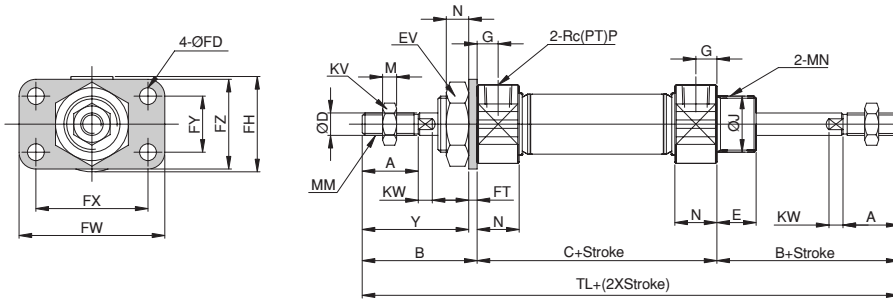


Bore	A	B	C	ØD	LL	L1	LC	ØLD	LE	LH	LS	LX	LZ	E	EV	G	KV	KW	M
20	20	41	67.5	8	38	28	18	6.2	10	23	103.5	30	43	14	26	7.5	13	5	5
25	20	46	68.5	10	48	35	23	7	12	30	114.5	46	62	16	32	7.5	17	6	6
32	20	46	68.5	12	50	35	23	7	12	30	114.5	46	62	16	32	7.5	17	6	6
40	24	52	83.5	16	54	36	24	7	12	30	131.5	46	62	18	41	10.5	22	7	8

Bore	MM	MN	N	Rc(PT)	T	W	Y	TL								
20	M8X1.25	M20X1.5	8	1/8	3	15	23	149.5								
25	M10X1.25	M26X1.5	8	1/8	3	15	23	160.5								
32	M10X1.25	M26X1.5	8	1/8	3	15	23	160.5								
40	M14X1.5	M32X1.5	10	1/4	3	21	28	187.5								

Dimension

Flange(Head Side)



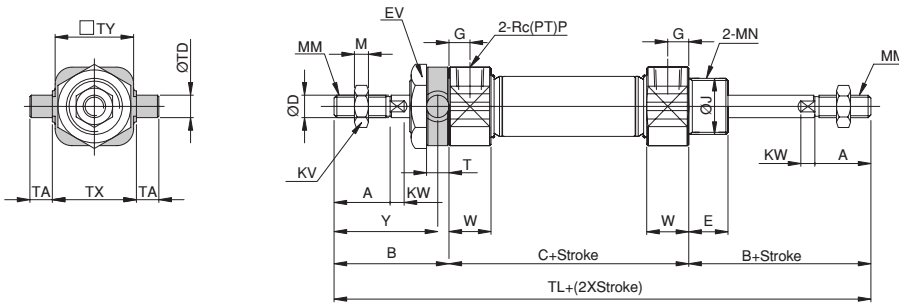
Bore	A	B	C	ØD	E	EV	ØFD	FH	FT	FW	FX	FY	FZ	G	ØJ	KV	KW	M
20	20	41	67.5	8	14	26	6	-	3	52	40	20	32	7.5	19.8	13	5	5
25	20	46	68.5	10	16	32	7	-	5	80	64	28	44	7.5	25.8	17	6	6
32	20	46	68.5	12	16	32	7	-	5	80	64	28	44	7.5	25.8	17	6	6
40	24	52	83.5	16	18	41	7	48	5	80	64	28	44	10.5	31.8	22	7	8

Bore	MM	MN	N	Rc(PT)	ØS	S	S1	W	Y	TL
20	M8X1.25	M20X1.5	8	1/8	28	28	24	15	38	149.5
25	M10X1.25	M26X1.5	8	1/8	34	34	30	15	41	160.5
32	M10X1.25	M26X1.5	8	1/8	40	40	36	15	41	160.5
40	M14X1.5	M32X1.5	10	1/4	48	48	45	21	47	187.5

Dimension

(Unit : mm)

Trunnion(Head Side)



Bore	A	B	C	ØD	E	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)	T	TA	ØTD	TR
20	20	41	67.5	8	14	26	7.5	19.8	13	5	5	M8X1.25	M20X1.5	8	1/8	8	8	8	33
25	20	46	68.5	10	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36
32	20	46	68.5	12	16	32	7.5	25.8	17	6	6	M10X1.25	M26X1.5	8	1/8	10	12	10	36
40	24	52	83.5	16	18	41	10.5	31.8	22	7	8	M14X1.5	M32X1.5	10	1/4	12	11.5	12	40

Bore	TX	TY	W	Y	TL
20	30	28	15	37	149.5
25	40	38	15	41	160.5
32	40	38	15	41	160.5
40	53	52	21	46	187.5

Round Cylinder

PK1A Series / Valve mounted type

Ø20, Ø25, Ø32, Ø40

Order Key

PK1A - LB 40 - 200 VI 1 - Y - C73 1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

1. Series
Round Cylinder

2. Mounting

Blank	None
LB	Foot Bracket
FH	Flange(Head Side)
TH	Trunnion(Head Side)

3. Bore (mm)

20	Ø 20
25	Ø 25
32	Ø 32
40	Ø 40

4. Stroke
Please refer to standard stroke table(Page 37).

5. Acting

VI	Spring Return
VO	Spring Extend

6. Valve Voltage

1	AC110V
2	AC220V
3	DC24V

7. Rod Option

Blank	None
I	I Knuckle
Y	Y Knuckle
J	With Bellows

Note) When selecting more than one options, please enter letters in alphabetical ex) IJ, YJ

8. Sensor

Blank	No Sensor
C73	CL–D–C73 Sensor

9. Number of Sensor

Blank	Sensor 2 ea
1	Sensor 1 ea
n	Sensor "n" ea

Sensor

Item \ Part No.	CL-D-C73		
Voltage	DC 24V	AC110V	AC220V
Current Range	5~100mA	5~40mA	5~20mA
Internal Voltage Drop.	Less than 2.4V		
Indicator Lamp	Diode turns red when Sensor "ON"		
Application	Relay, Sequence, Controller		

Bore : Ø20, Ø25, Ø32, Ø40

Specifications

Item	Unit	Ø 20	Ø 25	Ø 32	Ø 40
Fluid		Air			
Operating Pressure Range	MPa(bar)	01~0.9(1.0~9.0)			
Proof Pressure		1.5(15.0)			
Operating Temperature	℃	5~60			
Piston Speed	mm/s	50~500			
Cushion		Bumper Cushion			
Stroke Tolerance	mm	+1.4 0			
Mounting		Foot, Flange, Trunnion			

Valve Specifications

Mounted Valve		MPa(bar)	AV520−8
Operating Pressure Range		mm^2	01~0.9(1.0~9.0)
Effective Area			5~62.1(0.12Cv)
Power Consumption	AC110V	VA	13
	AC220V		17
	DC24V	W	7.5
Wire			Lead Wire

Weight Table

(Unit : kg)

Item		Ø 20	Ø 25	Ø 32	Ø 40
Basic Weight	Standard	0.14	0.24	0.31	0.56
	Foot	0.18	0.32	0.38	0.64
	Flange	0.18	0.34	0.40	0.66
	Trunnion	0.17	0.32	0.38	0.74
Additional weight per 50mm stroke		0.03	0.05	0.07	0.11
Valve Weight		0.46			
Option	Single Knuckle Joint	0.035		0.058	
	Double Knuckle Joint	0.045		0.074	

Standard Stroke

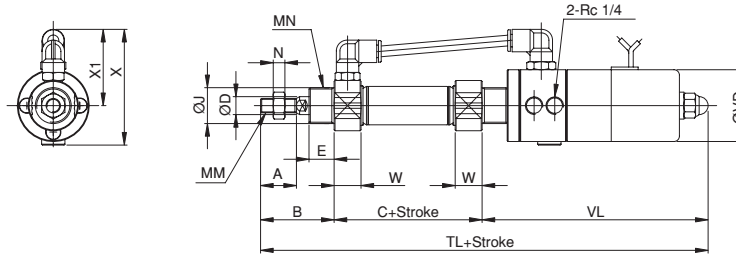
Bore (mm)	Standard Stroke (mm)										Max. Stroke
	25	50	75	100	125	150	175	200	250	300	
Ø 20	○	○	○	○	○	○	○	○	○	○	~500
Ø 25	○	○	○	○	○	○	○	○	○	○	~500
Ø 32	○	○	○	○	○	○	○	○	○	○	~500
Ø 40	○	○	○	○	○	○	○	○	○	○	~500

Round Cylinder

Dimension

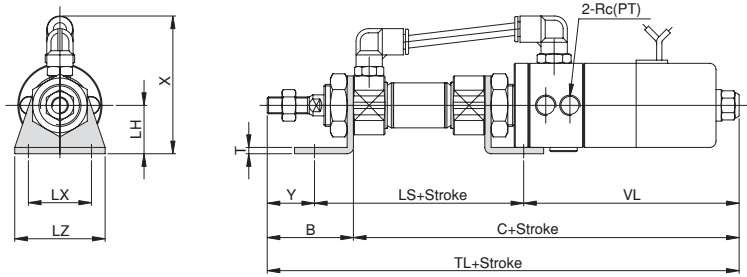
(Unit : mm)

Basic



Bore	A	B	C	ØD	E	J	MM	MN	N	ØVD	VL	W	X	X1	TL
20	20	41	67.5	8	14	19.8	M8XP1.25	M20X1.5	5	40	124	15	78	59	232.5
25	20	46	68.5	10	16	25.8	M10XP1.25	M26X1.5	6	40	126	15	78	59	240.5
32	20	46	68.5	12	16	25.8	M10XP1.25	M26X1.5	6	40	126	15	78	59	240.5
40	24	52	83.5	16	18	31.8	M14XP1.5	M32X1.5	8	40	128	21	82	59	263.5

Foot

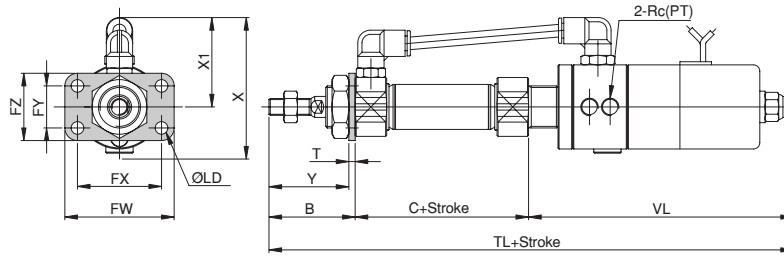


Bore	B	C	LH	LX	LZ	LS	Rc(PT)	VL	X	Y	TL
20	41	191.5	23	30	43	103.5	1/4	106	82	23	232.5
25	46	194.5	30	46	62	114.5	1/4	103	89	23	240.5
32	46	194.5	30	46	62	114.5	1/4	103	89	23	240.5
40	52	211.5	30	46	62	131.5	1/4	104	89	28	263.5

Dimension

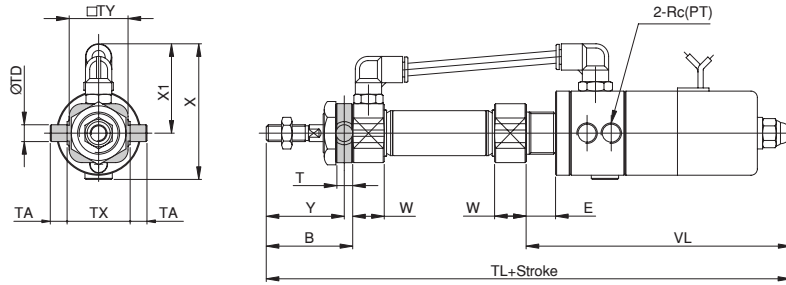
(Unit : mm)

Flange(Head Side)



Bore	B	C	FD	FW	FX	FY	FZ	Rc(PT)	T	VL	X	X1	Y	TL
20	41	67.5	6	52	40	20	32	1/4	3	124	78	59	38	232.5
25	46	68.5	7	80	64	28	44	1/4	5	126	78	59	41	240.5
32	46	68.5	7	80	64	28	44	1/4	5	126	78	59	41	240.5
40	52	83.5	7	80	64	28	44	1/4	5	128	82	59	47	263.5

Trunnion(Head Side)



Bore	E	Rc(PT)	T	TA	TD	TX	TY	VL	W	X	X1	Y	TL
20	14	1/4	8	8	8	30	28	124	15	78	59	37	232.5
25	16	1/4	10	12	10	40	38	126	15	78	59	41	240.5
32	16	1/4	10	12	10	40	38	126	15	78	59	41	240.5
40	18	1/4	12	11.5	12	53	52	128	21	82	59	46	263.5

Round Cylinder

PK1A Series / End locking type

Ø20, Ø25, Ø32, Ø40

Order Key

PK1A **LB** **40** **BL** - **100** **Y**

① ② ③ ④ ⑤

1. Mounting

Please refer to standard type.
Note) Clevis and Trunnion type is not available.

2. Bore (mm)

20	Ø 20
25	Ø 25
32	Ø 32
40	Ø 40

3. Locking Option

CL	Cap Side Locking
HL	Cap Side Locking
BL	Both Side Locking

4. Stroke (mm)

Please refer to Max. in table.

5. Rod Option

Please refer to Standard type.

Specifications

Item	Unit	20	25	32	40
Fluid		Air			
Operating Pressure Range	MPa(bar)	0.15 ~ 0.9 (1.15~ 9)			
Proof Pressure	MPa(bar)	0.15 (1.5)			
Operating Temperature	℃	5 ~ 60			
Piston Speed	mm/s	50 ~ 500			
Cushion		Bumper Cushion			
Stroke Tolerance	mm	0 ~ + 1.4			
Max. Stroke	mm	400	450	450	500
Locking Force	N	215	330	550	860

Woring Principles

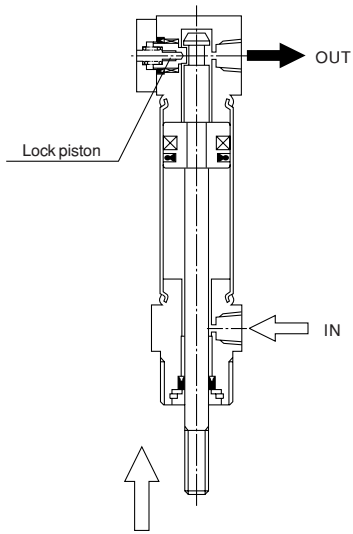
(Unit : mm)

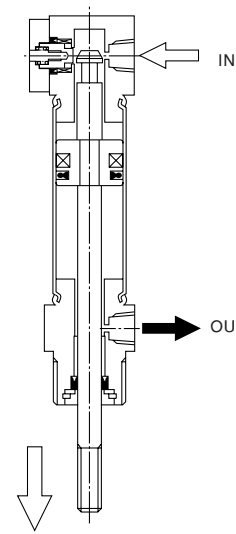
● Locking

After piston works until stroke end and air is exhausted, lock piston works with spring force, thereby locking piston rod mechanically.

● Release of Locking

Piston rod work as locking is released after lock piston works when air is supplied to port at lock structure side.



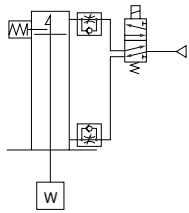


Handling Instructions

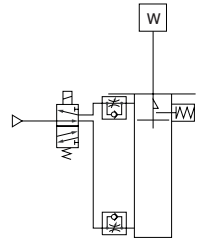
(Unit : mm)

Air Pressure Circuit

- At the start(when lock is released), pressure shall be applied temporarily to port at the side where is no lock mechanism. If the lock is released while load is applied to the lock mechanism(lock piston), the working inferiority and damage may be caused. As there is possibility that piston rod moves rapidly, it is very dangerous.
- Valve, with which pressure at lock side is completely exhausted, shall be selected, Lock shall not be set if the 3 position closed center type and 3 position pressure center type with pressure not exhausted are used.
- The air pressure circuit, for which exhaust pressure is not applied shall be set as there is a case, in which the lock is released if exhaust pressure is applied to port at the lock side during the lock. It shall be noted that the exhaust air side with manifold type valve is in case of concentrated piping.



With cap side lock



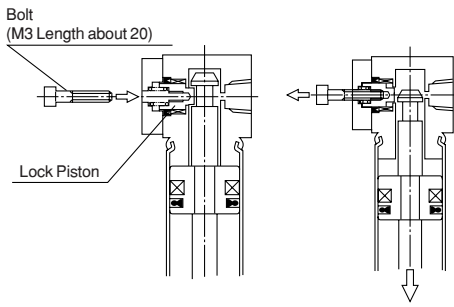
With head side lock

Manual Lock Release

- For the manual release of lock, M3(length about 20) bolt is inserted form the manual release port, and is thrust in the inside lock position. Then, the bolt is pulled, thereby releasing the lock. In the usual operation, bolt shall be removed.

Locking

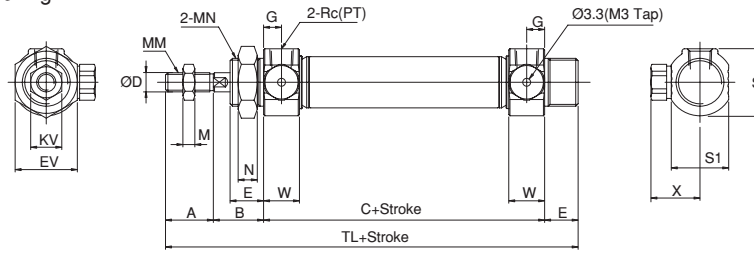
Lock release



Dimension

(Unit : mm)

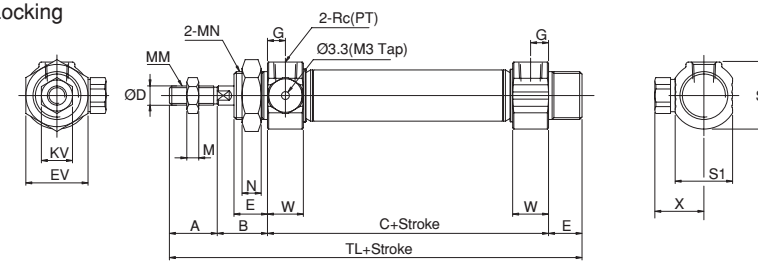
Both Side Locking



Bore	A	B	C	ØD	E	EV	G	KV	MM	M	MN	N	Rc(PT)	S
20	20	21	67.5	8	14	26	7.5	13	M8X1.25	5	M20X1.5	8	1/8	28
25	20	26	68.5	10	16	32	7.5	17	M10X1.25	6	M26X1.5	8	1/8	34
32	20	26	68.5	12	16	32	7.5	17	M10X1.25	6	M26X1.5	8	1/8	40
40	24	28	83.5	16	18	41	10.5	22	M14X1.5	8	M32X1.5	10	1/4	48

Bore	S1	W	TL	X
20	24	15	122.5	20.5
25	30	15	130.5	21.5
32	36	15	130.5	24.5
40	45	21	153.5	26.5

Head Side Locking



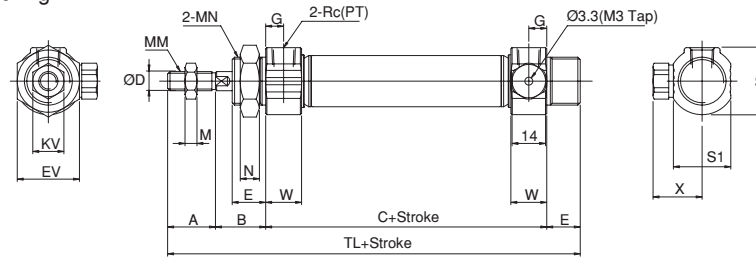
Bore	A	B	C	ØD	E	EV	G	KV	MM	M	MN	N	Rc(PT)	S
20	20	21	67.5	8	14	26	7.5	13	M8X1.25	5	M20X1.5	8	1/8	28
25	20	26	68.5	10	16	32	7.5	17	M10X1.25	6	M26X1.5	8	1/8	34
32	20	26	68.5	12	16	32	7.5	17	M10X1.25	6	M26X1.5	8	1/8	40
40	24	28	83.5	16	18	41	10.5	22	M14X1.5	8	M32X1.5	10	1/4	48

Bore	S1	W	TL	X
20	24	15	122.5	20.5
25	30	15	130.5	21.5
32	36	15	130.5	24.5
40	45	21	153.5	26.5

Dimension

(Unit : mm)

Cap Side Locking



Bore	A	B	C	ØD	E	EV	G	KV	MM	M	MN	N	Rc(PT)	S
20	20	21	67.5	8	14	26	7.5	13	M8X1.25	5	M20X1.5	8	1/8	28
25	20	26	68.5	10	16	32	7.5	17	M10X1.25	6	M26X1.5	8	1/8	34
32	20	26	68.5	12	16	32	7.5	17	M10X1.25	6	M26X1.5	8	1/8	40
40	24	28	83.5	16	18	41	10.5	22	M14X1.5	8	M32X1.5	10	1/4	48

Bore	S1	W	TL	X
20	24	15	122.5	20.5
25	30	15	130.5	21.5
32	36	15	130.5	24.5
40	45	21	153.5	26.5

Round Cylinder

PK1A Series / None-Rotating type

Ø25, Ø40

Order Key

PK1A [LB] [40] U - [100] - [ ] - [Y]

① ② ③ ④ ⑤ ⑥

1. Mounting

2. Bore (mm)

25	Ø 25
40	Ø 40

3. Acting

U	None-Rotating type

4. Stroke (mm)
Please refer to Max. in table.

5. Acting

Blank	Double Acting Single Rod
SB	Double Acting Double Rod
S	Spring Return
T	Spring Extend

6. Rod Option

Blank	None
SB	I Knuckle
S	Y Knuckle

Note) Ø25 : Using for standard Ø20 knuckle
Ø40 : Using for Non rotating exclusive knuckle

Specifications

Item	Unit	None-Rotating type			
		PK1A_U	PK1A_U-SB	PK1A_U-S	PK1A_U-T
Max. Operating Pressure	MPa(bar)	1.0 (10.0)			
Min. Operating Pressure	MPa(bar)	0.15 (1.5)		0.2 (2.0)	0.25 (2.5)
Operating Temperature	℃	5 ~ 60			
Piston Speed	mm/s	50 ~ 500			
Cushion	mm	Bumper Cushion			
Stroke Tolerance	mm	0 ~ + 1.4			
Allowable Torque	N	0.49		0.98	
Tolerance Rotating Angle	°	+/–1.5		+/–1	

Max. Stroke

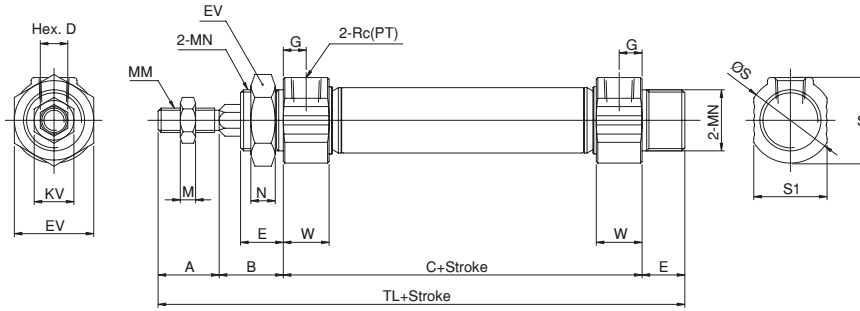
Bore	Unit	None-Rotating type			
		PK1A_U	PK1A_U-SB	PK1A_U-S	PK1A_U-T
Ø 25	mm	450	450	150	150
Ø 40		500	500	250	250

Round Cylinder

Dimension

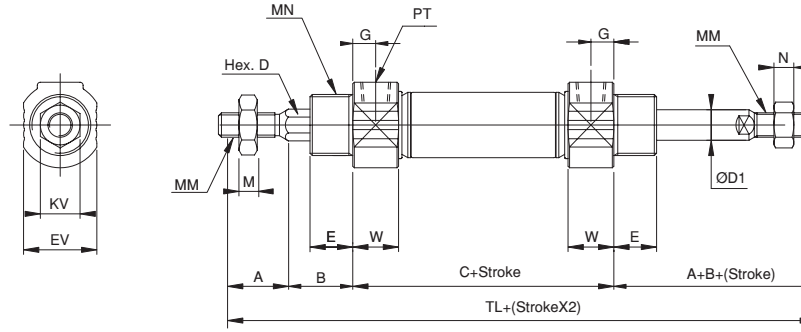
(Unit : mm)

Double Acting Single Rod



Bore	A	B	C	D	E	EV	G	KV	MM	M	MN	ØMN	N	Rc(PT)	ØS	S	S1	TL	W
25	20	26	68.5	9	16	32	7.5	13	M8X1.25	5	M26X1.5	25.8	8	1/8	34	34	30	130.5	15
40	24	28	83.5	14	18	41	10.5	17	M12X1.25	7	M32X1.5	31.8	10	1/4	48	48	45	153.5	21

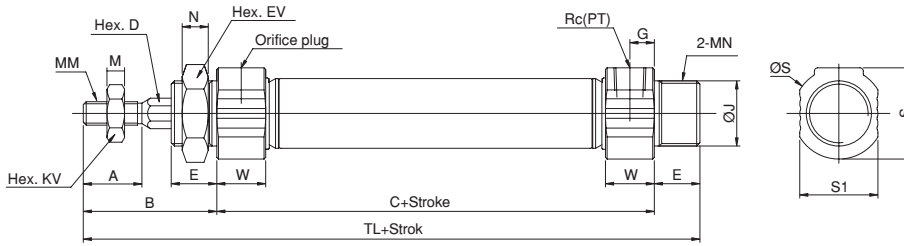
Double Acting Double Rod



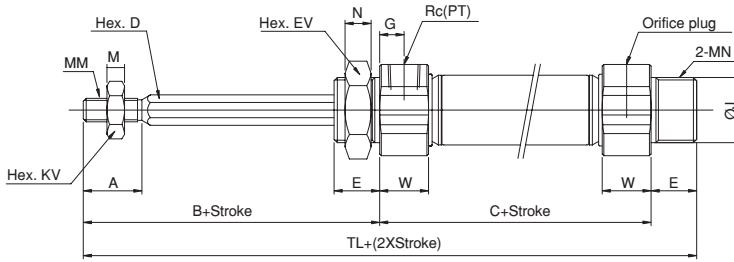
Bore	A	B	C	ØD	D1	E	EV	G	KV	M	MM	MN	N	PT	TL	W
25	20	26	68.5	9	10	16	30	7.5	13	5	M8xP1.25	M26xP1.5	6	1/8	160.5	15
40	24	28	83.5	14	16	18	45	10.5	17	7	M12xP1.25	M32xP1.5	10	1/4	187.5	21

Dimension

(Unit : mm)



Spring Extend



Bore	A	B	D	E	EV	G	ØJ	KV	KW	M	MM	MN	N	Rc(PT)	ØS	S	S1	W
25	20	46	9	16	32	7.5	25.8	13	6	5	M8X1.25	M26X1.5	8	1/8	34	34	30	15
40	24	52	14	18	41	10.5	31.8	17	7	7	M12X1.25	M32X1.5	10	1/4	48	48	45	21

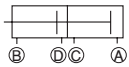
Dimension by Stroke

Stroke / Code / Bore	1~50		51~100		101~150		151~200		201~250	
	C	TL	C	TL	C	TL	C	TL	C	TL
25	93.5	155.5	118.5	180.5	143.5	205.5	–	–	–	–
40	108.5	178.5	133.5	203.5	158.5	228.5	183.5	253.5	208.5	278.5

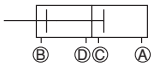
Round Cylinder

PK1A Series / Tandem type(SD)

Ø20, Ø25, Ø32, Ø40



When air pressure is supplied to ports Ⓑand Ⓒthe output force is doubled in the extend stroke.



When air pressure is supplied to ports Ⓑand Ⓓthe output force is doubled in the out stroke.

Order Key

PK1A [LB] [40] - [100] - [SD] [Y]

① ② ③ ④ ⑤

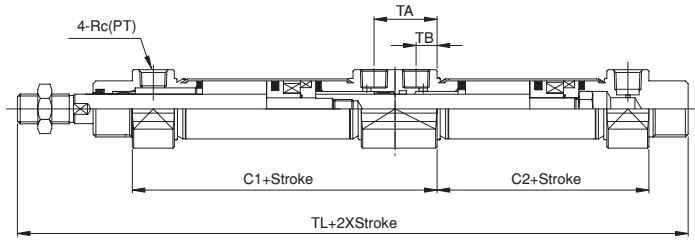
1. Mounting
2. Bore (mm).
   Ø 20, Ø 25, Ø 32, Ø 40
3. Stroke (mm)
4. Acting
   SD : Tandem Cylinder
5. Rod Option

Specifications

Acting	Unit	Double Acting
Fluid		Air
Operating Pressure Range	MPa	0.1~1.0
Proof Pressure	MPa	1.5
Operating Temperature	℃	5~60
Piston Speed	mm/s	50~500
Max. Stroke	mm	Stroke A + Stroke B < 700
Mounting		Flange, Foot, Trunnion, Clevis

Dimension

(Unit : mm)



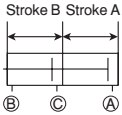
※ Other dimensions except the above are same with standard type. Please refer to standard type.

Bore	Rc(PT)	C1	C2	TA	TB	TL
20	1/8	83.5	51.5	22.5	7.5	190
25	1/8	84.5	52.5	22.5	7.5	199
32	1/8	84.5	52.5	22.5	7.5	199
40	1/4	105.5	61.5	31.5	10.5	237

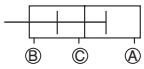
Round Cylinder

PK1A Series / 3 Position type(ST)

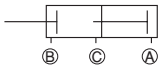
Ø20, Ø25, Ø32, Ø40



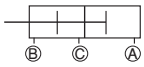
When air pressure is supplied to the Ⓑ ports, both A and B stroke extend.



When air pressure is supplied to the Ⓐ ports, the rod out by the A stroke length.



When air pressure is supplied to the Ⓒ ports, the rod out by the B stroke length.



When air pressure is supplied to both ports, Ⓐ and Ⓒ , double output force is obtainable in the range of the A stroke length.

※ Stroke A is first advancing stroke and Stroke B means total stroke of cylinder

Ex) In PK1A20-100-200-ST case, the cylinder advance 100 stroke first and total stroke of cylinder is 200 stroke.

Order Key

PK1A ① LB ② 40 - ③ 100 - ④ 200 - ⑤ ST ⑥ Y

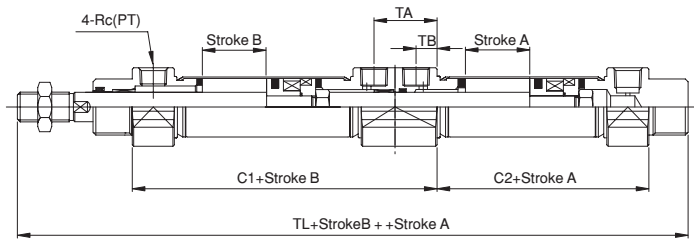
1. Mounting
2. Bore (mm).
   Ø 20, Ø 25, Ø 32, Ø 40
3. Stroke A (mm)
4. Stroke B (mm)
5. Cylinder Option
   ST : 3 Position Cylinder
6. Rod Option

Specifications

Acting	Unit	Double Acting
Fluid		Air
Operating Pressure Range	MPa	0.1~1.0
Proof Pressure	MPa	1.5
Operating Temperature	℃	5~60
Piston Speed	mm/s	50~500
Max. Stroke	mm	Stroke A + Stroke B < 700
Mounting		Flange, Foot, Trunnion, Clevis

Dimension

(Unit : mm)



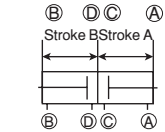
※ Other dimensions except the above are same with standard type. Please refer to standard type.

Bore	Rc(PT)	C1	C2	TA	TB	TL
20	1/8	83.5	51.5	22.5	7.5	190
25	1/8	84.5	52.5	22.5	7.5	199
32	1/8	84.5	52.5	22.5	7.5	199
40	1/4	105.5	61.5	31.5	10.5	237

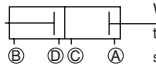
Round Cylinder

PK1A Series / 4 Position type(SF)

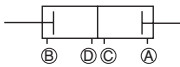
Ø20, Ø25, Ø32, Ø40



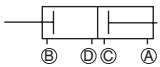
When air pressure is supplied to ports Ⓐ and Ⓑ both A and B stroke extend.



When air pressure is supplied to ports Ⓑ and Ⓒ, A out strokes.



When air pressure is supplied to ports Ⓒ and ⓓ, both strokes A and B out strokes.



When air pressure is supplied to ports ⓓ and Ⓐ, B out strokes.

Order Key

PK1A **LB** - **40** - **100** - **200** - **SF** - **Y**

① ② ③ ④ ⑤ ⑥

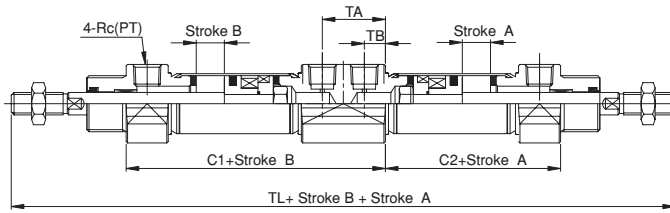
1. Mounting
2. Bore (mm).
   Ø 20, Ø 25, Ø 32, Ø 40
3. Stroke A (mm)
4. Stroke B (mm)
5. Acting
   SF : 4 Position Cylinder
6. Rod Option

Specifications

Acting	Unit	Double Acting
Fluid		Air
Operating Pressure Range	MPa	0.1~1.0
Proof Pressure	MPa	1.5
Operating Temperature	℃	5~60
Piston Speed	mm/s	50~500
Max. Stroke	mm	Stroke A + Stroke B < 700
Mounting		Flange, Foot, Trunnion, Clevis

Dimension

(Unit : mm)



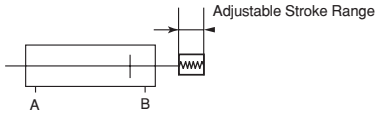
※ Other dimensions except the above are same with standard type. Please refer to standard type.

Bore	Rc(PT)	C1	C2	TA	TB	TL
20	1/8	83.5	51.5	22.5	7.5	217
25	1/8	84.5	52.5	22.5	7.5	229
32	1/8	84.5	52.5	22.5	7.5	229
40	1/4	105.5	61.5	31.5	10.5	271

Round Cylinder

PK1A Series / Adjustable stroke type(SR)

Ø20, Ø25, Ø32, Ø40



The cylinder stroke can be Adjusted by adjusting stopper at cap side.

Order Key

PK1A ① LB ② 40 - ③ 100 - ④ 50 - ⑤ SR - ⑥ Y

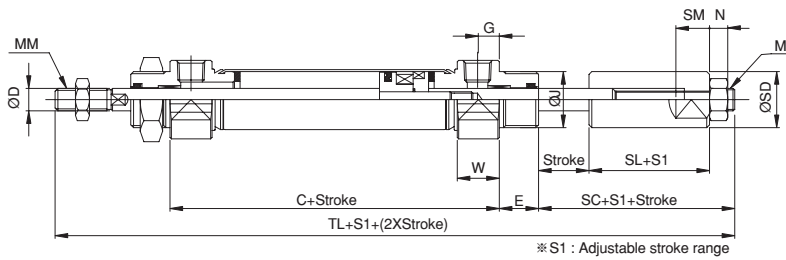
1. Mounting
2. Bore (mm).
   Ø 20, Ø 25, Ø 32, Ø 40
3. Stroke (mm)
4. Adjustable Stroke Range
   0~50mm
5. Cylinder Option
   SR : Adjustable Stroke Cylinder
6. Rod Option

Specifications

Acting	Unit	Double Acting
Fluid		Air
Operating Pressure Range	MPa	0.1~1.0
Proof Pressure	MPa	1.5
Operating Temperature	℃	5~60
Piston Speed	mm/s	50~500
Max. Stroke	mm	500
Adjustable Stroke Range	mm	0~50
Mounting		Flange, Foot, Trunnion

Dimension

(Unit : mm)



※S1 : Adjustable stroke range

Bore	C	ØD	ØJ	KW	M	MM	N	SC	ØSD	SL	SM	TL
20	67.5	8	19.8	5	5	M8X1.25	8	27	18	18	12	149.5
25	68.5	10	25.8	6	6	M10X1.25	8	35	24	24	14	165.5
32	68.5	12	25.8	6	6	M10X1.25	8	35	24	24	14	165.5
40	83.5	16	31.8	7	8	M14X1.5	10	439	30	28	16	192.5

※ Other dimensions except the above are same with standard type. Please refer to standard type.

Guide Unit

PGU Series

ø20, ø25, ø32, ø40

- Guide Unit for PK1A Series
- Highly accurate guidance
- High torque loading capacity
- Light weight and long life

Specifications

Model No.	Unit	PGU
Speed range	mm/s	50~500
Stroke allowance	mm	0~1,000st : +1.5/0 1,001st~ : +2.0/0

ORDER KEY

PGU ① 20 ② 100 ③ N ④

1. Series
Guide Unit for PK1A series

2. Bore (mm).

20	ϕ20
25	ϕ25
32	ϕ32
40	ϕ40

3. Strok e

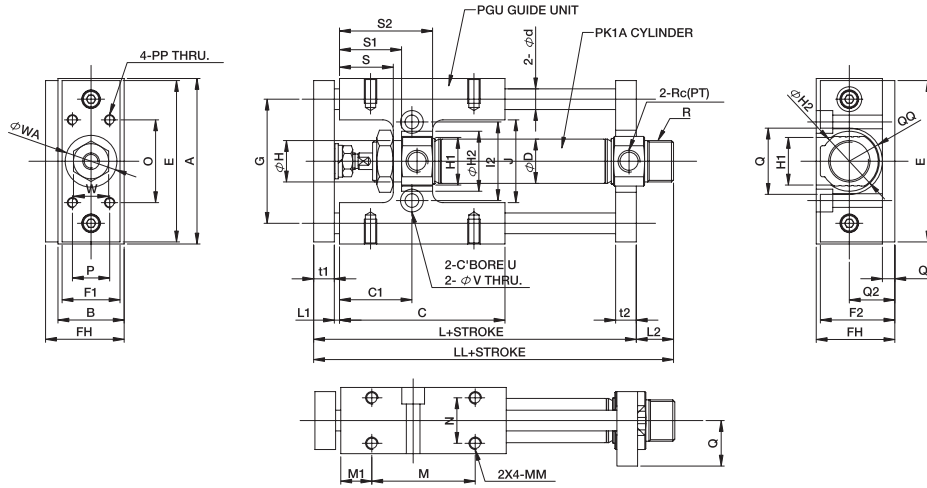
Bore	Standard Stroke
20	75, 100, 125, 150, 200, 250, 300
25	75, 100, 125, 150, 200, 250, 300
32	75, 100, 125, 150, 200, 250, 300, 350, 400
40	75, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500

4. Option

Blank	Rear Plate
N	None

Dimensions

(Unit : mm)



Bore	A	B	C	C1	Φ D	Φ d	E	F1	F2	FH	G	Φ H	H1	Φ H2	I2	J	L	L1	L2	LL	M	M1	MM
20	80	32	80	35	21.4	10	78	28	36	38	60	20	23	29	38	40	106	2.5	18	124	50	15	M6×1.0 DP : 12
25	100	40	90	35	25.4	10	98	38	40	50	76	26	29	35	50	52	122.5	7	11	133.5	50	20	M6×1.0 DP : 12
32	100	44	90	35	33.6	12	98	38	40	52	76	26	35	41	51	52	122.5	7	11	133.5	50	20	M6×1.0 DP : 12
40	126	54	120	40	41.6	14	124	50	50	67	100	32	44	50	68	74	154	7	2.5	156.5	70	25	M6×1.0 DP : 16

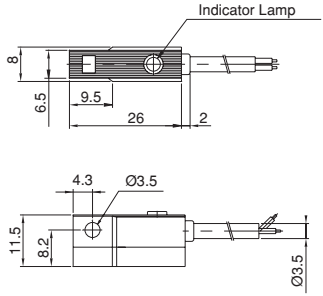
Bore	N	O	P	PP	Q	QQ	Q1	Q2	R	S	S1	S2	t1	t2	U	Φ V	Rc(PT)	W	Φ WA	STROKE
20	22	40	18	M5×0.8	32	R16	6	22	M20×1.5	26	30	45	10	10	Φ11 DP : 8	6.6	1/8	17	25	~300
25	30	60	28	M5×0.8	38	R19	10	30	M26×1.5	25	30	45	12	10	Φ11 DP : 8	6.6	1/8	17	25	~300
32	30	60	28	M6×1.0	42	R21	8	30	M26×1.5	25	30	45	12	10	Φ11 DP : 8	6.6	1/8	17	25	~400
40	38	70	38	M6×1.0	54	R27	13	40	M32×1.5	26	34	54	14	12	Φ14 DP : 10	9	1/4	22	31	~500

Accessories

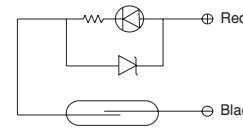
Sensor Mounting Position

(Unit : mm)

Sensor(CL-D-C73)

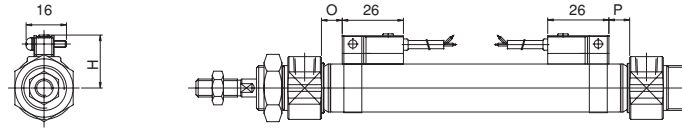


Internal Circuit



Bore	H	O	P
20	22.5	7	6
25	25	8	7
32	28.5	8	7
40	32.5	12	11

Dimension for sensor



Min. stroke for sensor

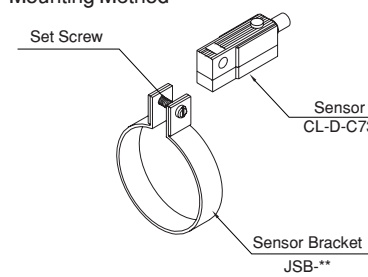
(Unit : mm)

Sensor Type	Number of Sensor				
	2 Sensor		n ea		1 Sensor
	Different Side	Same Side			
CL-D-C73	10	45	$10+45\left(\frac{n-2}{2}\right)$ (n=2,4,6..)	45+45(n-2)	10

Sensor

Item		CL-D-C73
Voltage	AC 110V	5~40mA,
	AC 220V	5~20mA,
	DC 24V	5~12mA
Proof Voltage		DC 500V, 50MΩ
Operating Temperature		-10 C ~ 60 C
Internal Voltage Drop		Less than 3V
Indicator Lamp		Diode turns red when Sensor "ON"

Mounting Method

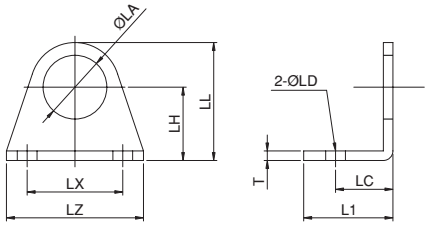


Sensor Bracket

Item	Ø20	Ø25	Ø32	Ø40
Part No.	JSB-20	JSB-25	JSB-32	JSB-40

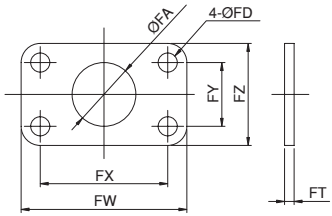
Mounting Bracket

Foot



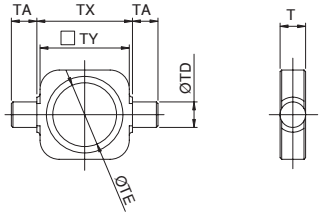
Part No.	Bore	LL	LH	LX	LZ	ØLA	ØLD	LC	L1	T
PK1A20-LB	20	37	23	30	43	20	6.2	18	28	3
PK1A25-LB	25, 32	48	30	46	62	26	7	23	35	3
PK1A40-LB	40	54	30	46	62	32	7	24	36	3

Flange



Part No.	Bore	FT	FY	FZ	ØFD	ØFA	FX	FW
PK1A20-FH	20	3	20	32	6	20	40	52
PK1A25-FH	25, 32	5	28	44	7	26	64	80
PK1A40-FH	40	5	28	44	7	32	64	80

Trunnion

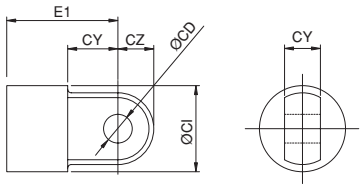


Part No.	Bore	T	TA	ØTD	TX	TY	ØTE
PK1A20-TH	20	8	8	8	30	28	20
PK1A25-TH	25, 32	10	12	10	40	38	26
PK1A40-TH	40	12	11.5	12	53	52	32

Accessories

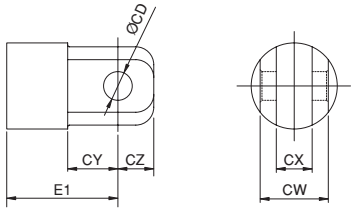
Mounting Bracket

Single Clevis



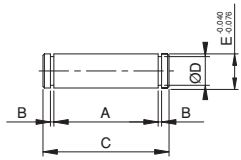
Part No.	Bore	ØCD	ØCI	CY	CZ	E1
PK1A20-CA	20	8	24	14	10	31
PK1A25-CA	25, 32	10	30	14	10	33
PK1A40-CA	40	12	38	18	12	41

Double Clevis



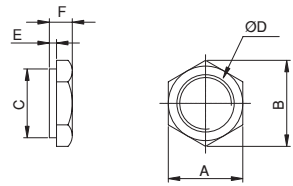
Part No.	Bore	CD	CW	CX	CY	CZ	E1
PK1A20-CB	20	8	19	10	14	10	31
PK1A25-CB	25, 32	10	19	10	14	10	33
PK1A40-CB	40	12	30	15	18	12	41

Pin for Double Clevis



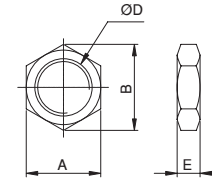
Bore	A	B	C	D	E	Stop-Ring
20	19.2	1	26	$6^{+0.075}_{0}$	8	E type 6
25, 32	19.2	1	26	$8^{+0.09}_{0}$	10	E type 8
40	30.2	1.2	37.8	$10^{+0.09}_{0}$	12	E type 10

Nut for Trunnion



Bore	A	B	C	ØD	E	F
20	26	30	24	M20X1.5	2.5	8
25, 32	35	40	31	M26X1.5	4.5	10
40	45	52	40	M32X1.5	6.5	12

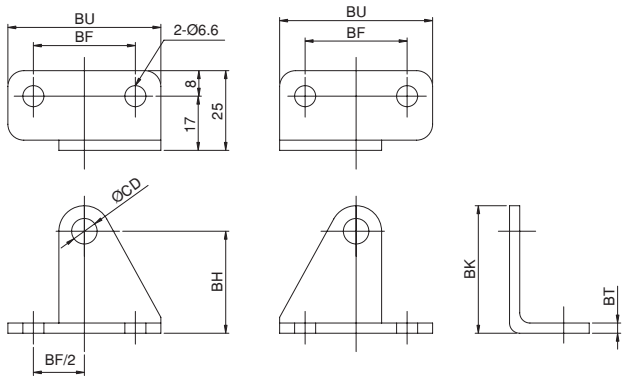
Mounting Nut



Bore	A	B	ØD	E
20	26	30	M20X1.5	8
25	32	37	M26X1.5	8
40	41	47.3	M32X1.5	10

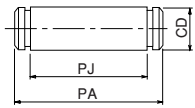
Mounting Bracket

Pivot Bracket



Bore	Part No.			BF	BH	BK	BT	BU	CD
	Integrated Clevis	Single Clevis	Trunnion						
20	MAZ3-BK020PA	MAZ3-BK020PB	MAZ3-BK020	32	32	40	3.2	48	8
25		MAZ3-BK032PB							
32	MAZ3-BK032PA		MAZ3-BK032	36	36	46	4	52	10
40	MAZ3-BK040PA	MAZ3-BK040PB	MAZ3-BK040	40	40	52	4	56	12

Pin for Pivot Bracket



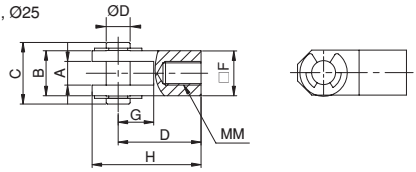
Bore	CD		PA		PJ	
	Integrated Clevis	Single Clevis	Integrated Clevis	Single Clevis	Integrated Clevis	Single Clevis
20	8	8	31	27	26	22
25	8	10	31	29	26	24
32	10	10	32	29	27	24
40	12	12	36	32	31	27

Accessories

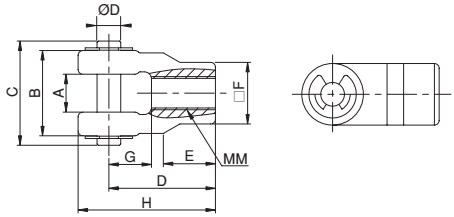
Rod Option

Y Knuckle

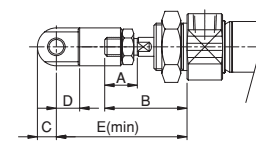
Ø20, Ø25



Ø40



Y Knuckle assembled



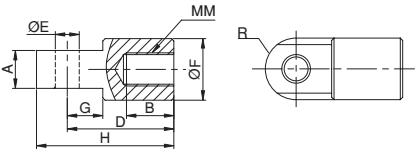
Bore	A	B	C	ØD	E
20	20	41	8	12	56
25, 32	20	46	10	15	67
25*	20	46	8	12	61
40	24	52	13	18	81

*is for Non-rotating type.

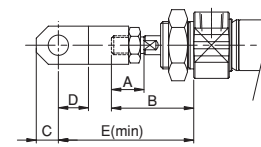
		A	B	C	ØD	D	E	ØF	G	H	R	ØMM	Stop ring
PK1A20-Y	20	8	16	23	8	30		16	12	39		M8x1.25	E type 6
PK1A25-Y	25, 32	10	19	26	10	35		19	15	46		M10x1.25	E type 8
PK1A40-Y	40	16	36	44	10	45	22	26	18	58	13	M14x1.5	C type 10
PK1A40U-Y	40	16	36	44	10	45	27	26	18	58	13	M12x1.25	C type 10

Note) Please choose PKA2-Y for Ø25 None rotating cylinder.

I Knuckle



I Knuckle assembled



Part No.	Bore	A	B	D	ØE	ØF	G	H	MM	R
PK1A20-I	20	8	13	30	8	16	12	38	M8x1.25	8
PK1A25-I	25, 32	10	15	35	10	19	15	45	M10x1.25	10
PK1A40-I	40	16	20	45	10	26	15	58	M14x1.5	13
PK1A40U-I	40	16	20	45	10	26	15	58	M12x1.25	13

Note) Please choose PKA2-I for Ø25 None rotating cylinder.

Bore	A	B	C	ØD	E
20	20	41	8	12	56
25, 32	20	46	10	15	67
25*	20	46	8	12	61
40	24	52	13	18	81

*is for Non-rotating type.