



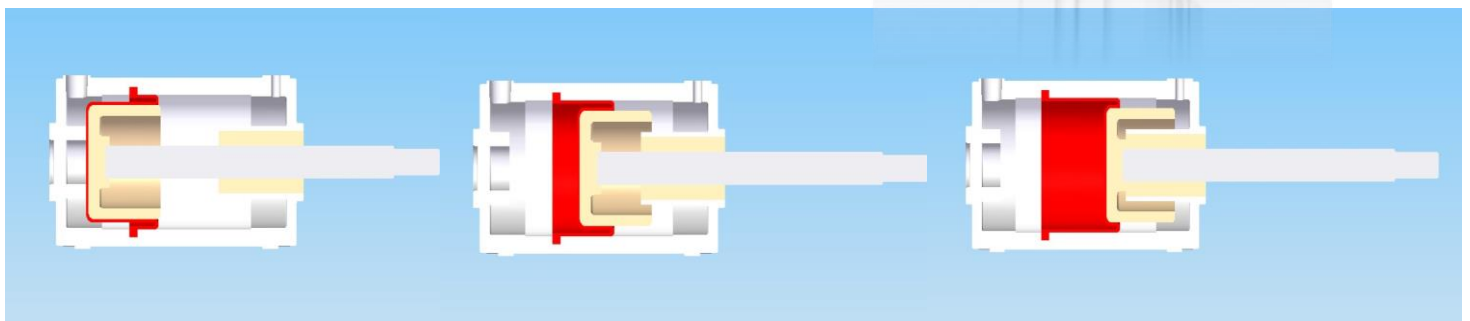
## Fujikura PC Rolling Diaphragm Cylinder

### 【Features】

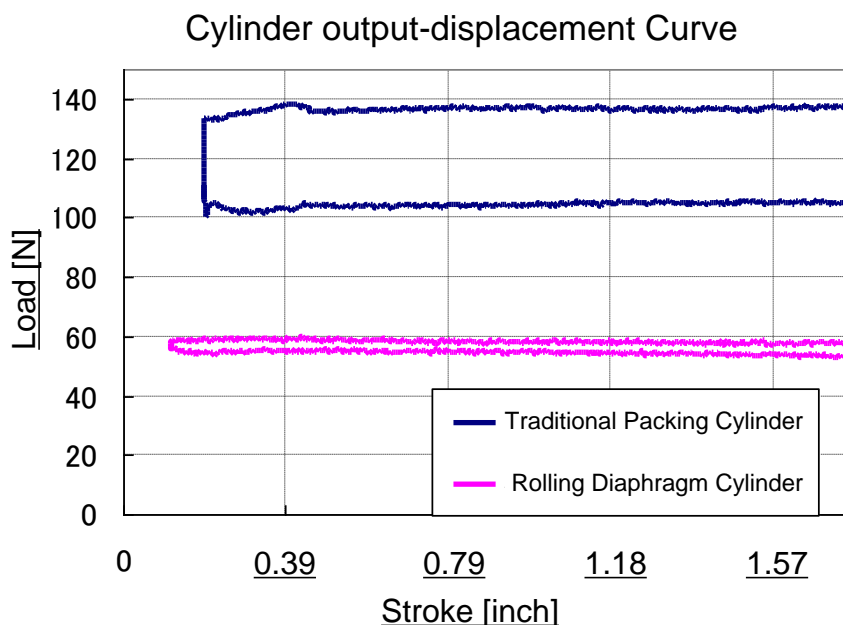
- Smooth-Movement
- Low Hysteresis
- No lubricant required
- Position sensor attachable



### ■ Internal structure



### ■ Hysteresis Characteristics



### ■ Applications

- Press Control: Polisher, Lapper, Grinder, Surface Mounter, Roll Press Equipment
- Tension Control : Printing Machine, Coater, Laminator, Rewinder



# FUJIKURA COMPOSITES

## ■ Specification

Operating style	Single action (push) / Double action
Cylinder diameter      mm [in.]	20 ~ 50 [0.79 ~ 1.97]
Stroke                      mm [in.]	10 ~ 50 [0.39 ~ 1.97]
Working fluid	Clean compressed air
Working pressure range   MPa[psi]	0.015 ~ 0.7 [2.18 ~ 101.53] *1
Working temperature    °C[°F]	0 ~ 60 [32 ~ 140]
Bearing	Metal guide
Mount type	Rear flange, Front flange, Pivot, Trunnion, L type

\*1 : Working pressure range of  $\phi 20$  is 0.02~0.7MPa [2.90 ~ 101.53psi].

### PCS series (Single action type)

Cylinder diameter mm [in.]	20 [0.79]	32 [1.26]	40 [1.57]
stroke mm [in.]	10 [0.39]	10 [0.39]	10 [0.39]

### PCD series (Double action type)

Cylinder diameter mm [in.]	20 [0.79]		32 [1.26]			40 [1.57]				50 [1.97]			
Stroke mm [in.]	10 [0.39]	20 [0.79]	10 [0.39]	20 [0.79]	30 [1.18]	10 [0.39]	20 [0.79]	30 [1.18]	40 [1.57]	20 [0.79]	30 [1.18]	40 [1.57]	50 [1.97]

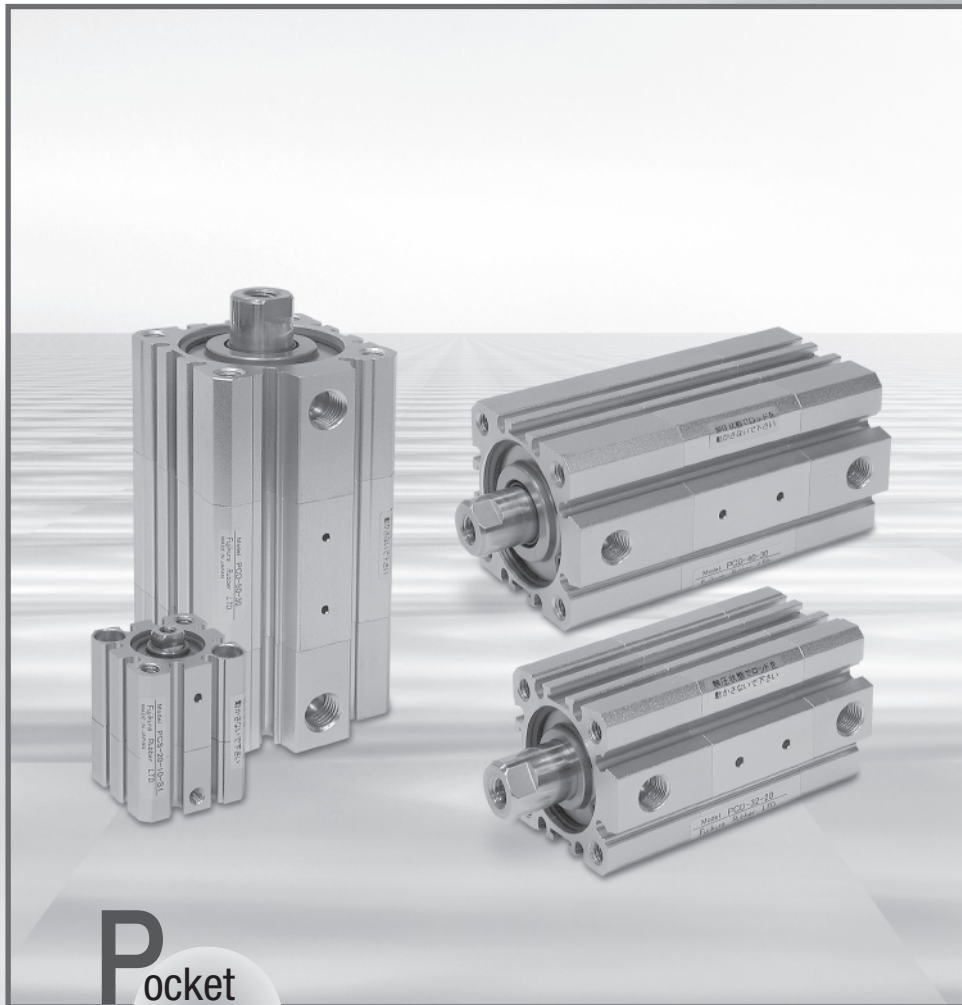
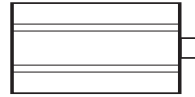


FUJIKURA COMPOSITES

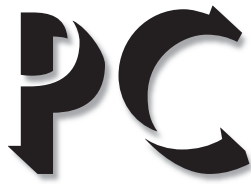
# Rolling Diaphragm Cylinder

**PC**

series



**P**ocket  
**C**ylinder



PCS single-act

PCD double-act

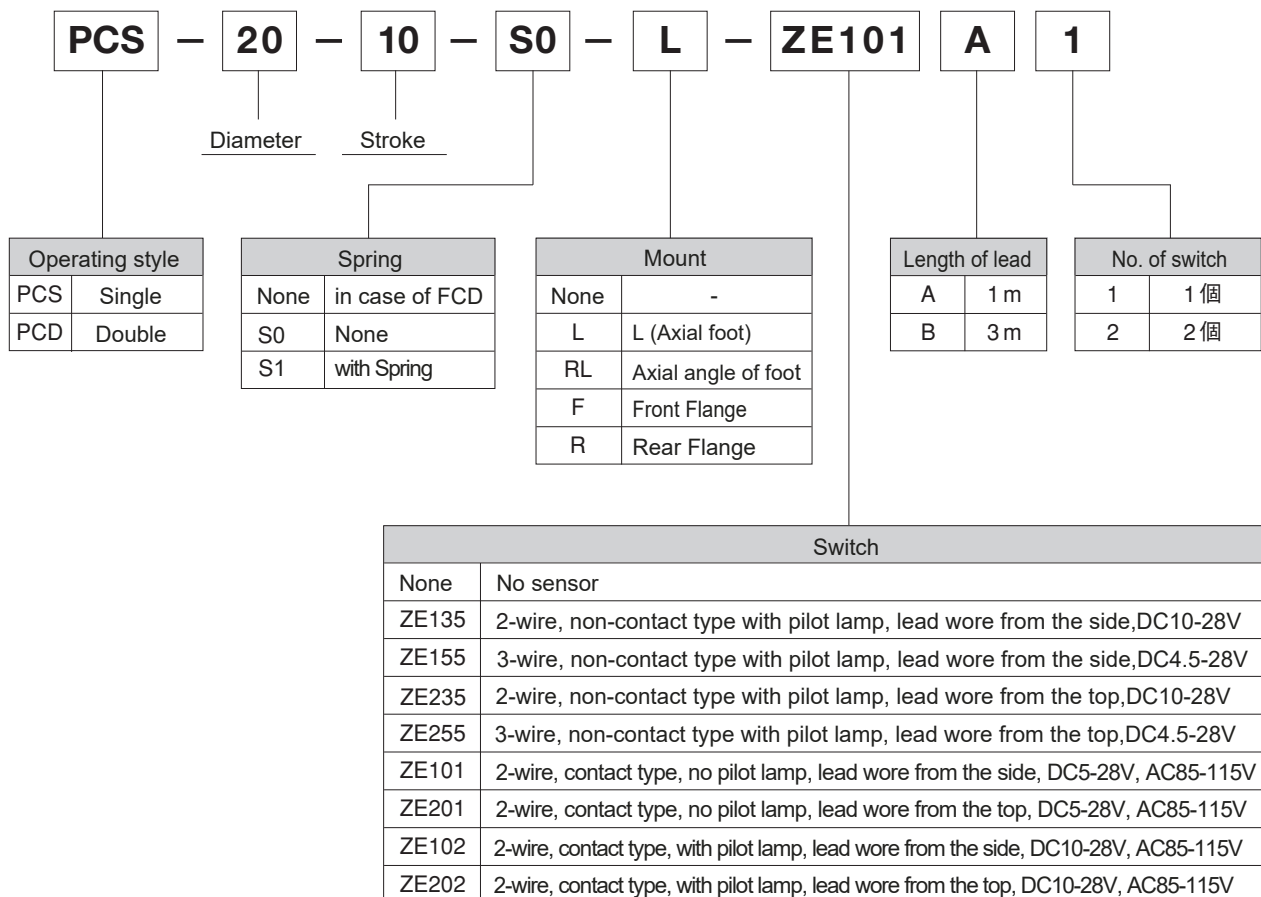
### ■ Specification

Operating style	Single, Double	
Diameter	mm	20~50
Stroke	mm	10~50
Fluid	Clean compressed air	
Working pressure range	MPa	0.015~0.7 *1
Working temperature	°C	0~60
Bearing type	None	
Mounting	L (Axial foot), Axial angle of foot Front Flange, Rear Flange	

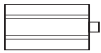
\*1: Working pressure range of φ20 is 0.02 - 0.7MPa



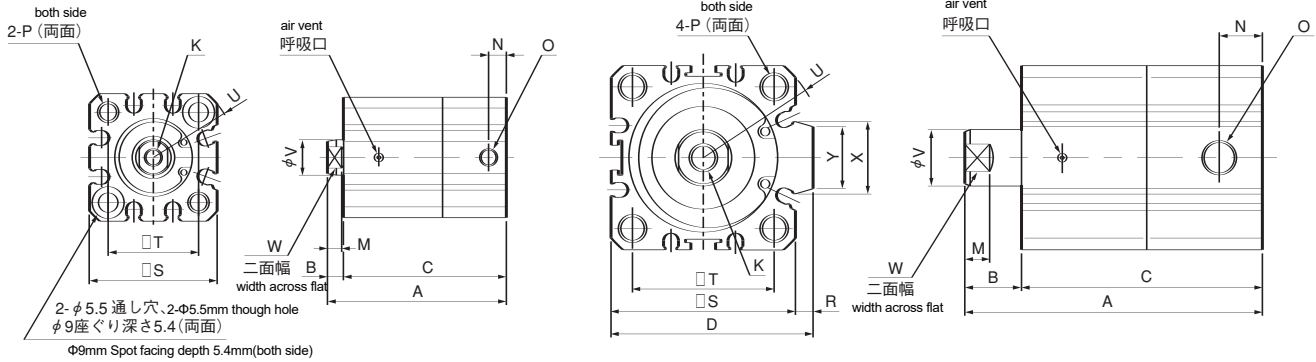
### Model



# PCS-20-10-S1~40-10-S1

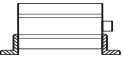


## Standard

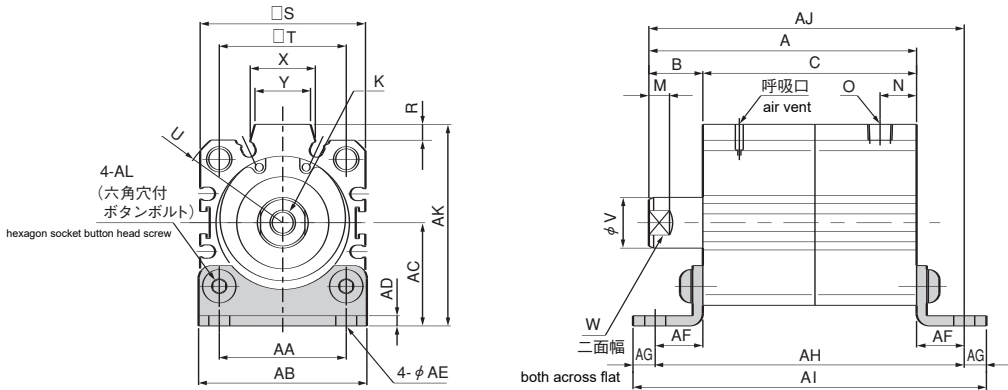


### ■PCS Standard

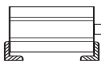
Model 形式	A	B	C	D	K	M	N	O	P	R	S	T	U	V	W	X	Y	Valid pressure area 有効受圧面積 (mm <sup>2</sup> )	Spring Force ばね反力 (N)		BF diaphragm BFダイヤフラム
																			zero-stroke 零ストローク時	full-stroke 全ストローク時	
20-10-S1	50.5	4.5	46	—	M5×0.8 深さ 7	4	5	M5×0.8	M6 深さ 12	—	36	25.5	R23.5	10	8	—	—	269	2.94	4.90	PC-DM1-20-20
32-10-S1	74	15	59	49.5	M8×1.25 深さ 13	6.5	7.5	Rc1/8	M6 深さ 12	4.5	45	34	R30	16	14	17.4	15	684	4.90	7.85	PC-DM1-32-32
40-10-S1	88	17	71	57	M8×1.25 深さ 13	6.5	11.5	Rc1/8	M6 深さ 12	5	52	40	R34.5	16	14	20.5	17.5	1100	7.85	11.8	PC-DM1-40-40



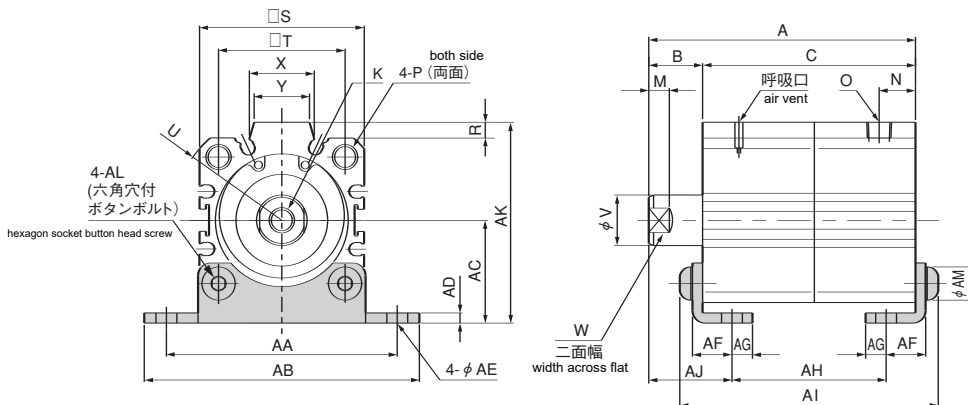
## L (Axial foot)



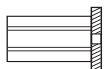
Model 形式	A	B	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	K	M	N	O	P	R	S	T	U	V	W	X	Y
40-10-S1-L	88	17	71	40	53	32.5	3.2	6.6	15	7	101	115	103	63.5	M6×12	M8×1.25 深さ 13	6.5	11.5	Rc1/8	M6 深さ 12	5	52	40	R34.5	16	14	20.5	17.5



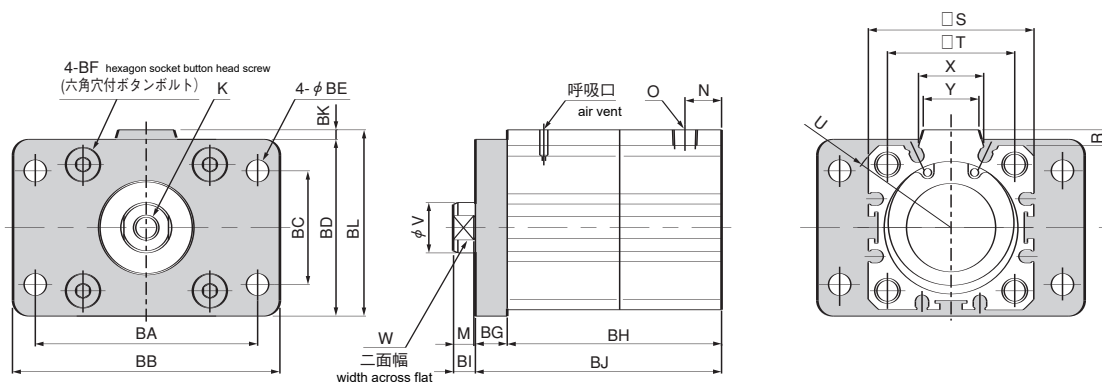
## RL (Axial angle of foot)



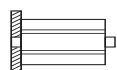
Model 形式	A	B	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	K	M	N	O	P	R	S	T	U	V	W	X	Y
40-10-S1-RL	88	17	71	73	87	32.5	3.2	6.6	12.5	6.5	52.4	85.4	26.3	63.5	M6×12	10.5	M8×1.25 深さ 13	6.5	11.5	Rc1/8	M6 深さ 12	5	52	40	R34.5	16	14	20.5	17.5



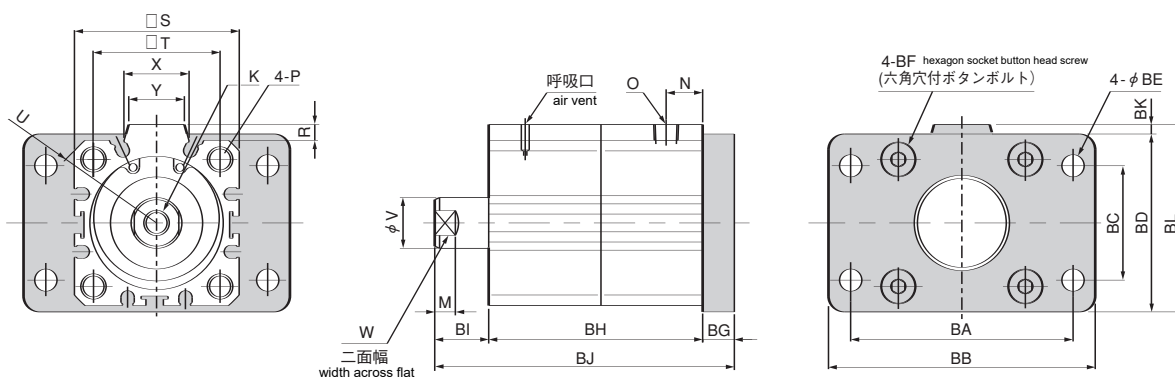
### Front Flange



Model 形式	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	K	M	N	O	P	R	S	T	U	V	W	X	Y
32-10-S1-F	58	72	33	48	7	M6×12	8	59	7	67	3	51	M8×1.25 深さ13	6.5	7.5	Rc1/8	M6 深さ12	4.5	45	34	R30	16	14	17.4	15
40-10-S1-F	70	84	36	56	7	M6×15	10	71	7	81	3	59	M8×1.25 深さ13	6.5	11.5	Rc1/8	M6 深さ12	5	52	40	R34.5	16	14	20.5	17.5

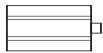


### Rear Flange



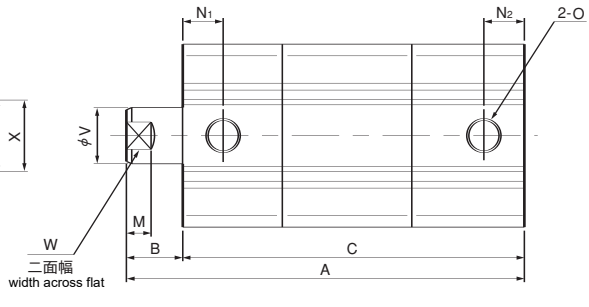
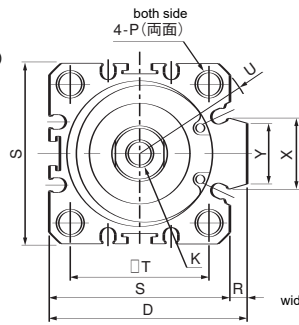
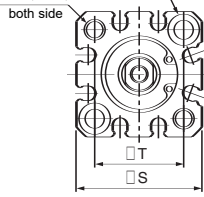
Model 形式	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	K	M	N	O	P	R	S	T	U	V	W	X	Y
32-10-S1-R	58	72	33	48	7	M6×12	8	59	15	82	3	51	M8×1.25 深さ13	6.5	7.5	Rc1/8	M6 深さ12	4.5	45	34	R30	16	14	17.4	15
40-10-S1-R	70	84	36	56	7	M6×15	10	71	17	98	3	59	M8×1.25 深さ13	6.5	11.5	Rc1/8	M6 深さ12	5	52	40	R34.5	16	14	20.5	17.5

# PCD-20-10 ~ 50-50



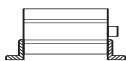
## Standard

2-φ5.5通し穴 2-φ5.5mm through hole  
φ9座ぐり深さ5.4(両面)  
φ9mm Spot facing depth 5.4mm(both side)  
2-P(両面)  
both side

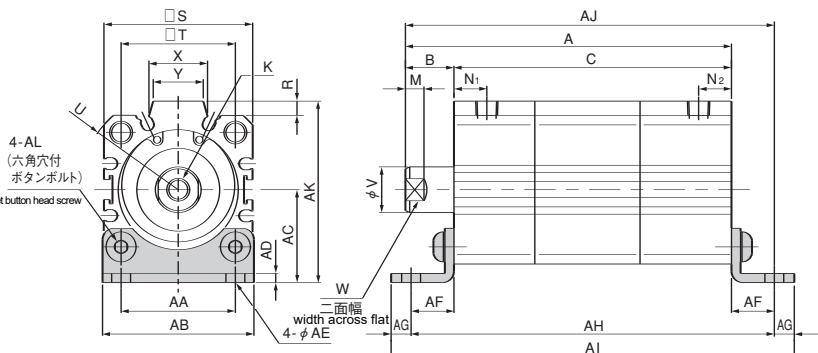


## PCD standard

Model 形式	A	B	C	D	K	M	N <sub>1</sub>	N <sub>2</sub>	O	P	R	S	T	U	V	W	X	Y	Valid pressure area 有効受圧面積 (mm <sup>2</sup> )		BF diaphragm BFダイヤフラム	
																			伸側 extend side	引側 retract side		
20-10	58	4.5	53.5	—	M5×0.8 深さ7	4	10	5	M5×0.8	M6 深さ12	—	36	25.5	R23.5	10	8	—	—	269	190	PC-DM1-20-20	
	68		63.5																			
32-10	96	15	81	49.5	M8×1.25 深さ13	6.5	11	7.5	Rc1/8	M6 深さ12	4.5	45	34	R30	16	14	17.4	15	684	483	PC-DM1-32-32	
	20		81																			
	30		106																			91
40-10	114	17	97	57	M8×1.25 深さ13	6.5	11.5	11.5	Rc1/8	M6 深さ12	5	52	40	R34.5	16	14	20.5	17.5	1100	903	PC-DM1-40-40	
	20		114																			97
	30		124																			107
	40		134																			117
50-20	136	18	118	71	M10×1.5 深さ15	7	12	12	Rc1/4	M8 深さ16	7	64	50	R42.5	20	17	21.6	19	1770	1450	PC-DM1-50-50	
	30		136																			118
	40		146																			128
	50		156																			138



## L (Axial foot)

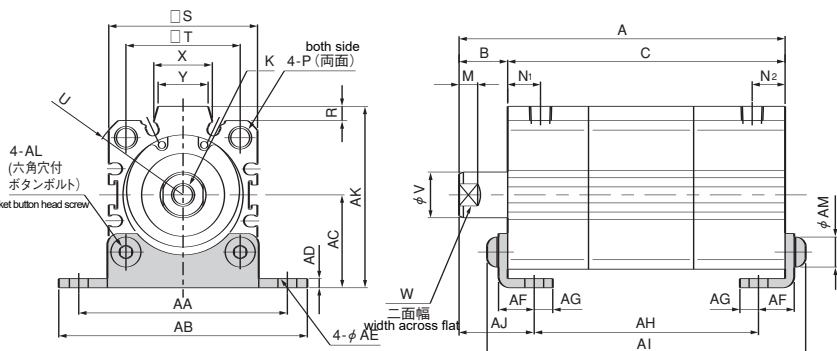


形式	A	B	C	AA/AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	
32-10-L	96	81	15	81	34	45	28.5	3.2	6.6	15	7	111	125	111	
	20-L	96										111	125	111	
	30-L	106										91	121	135	121
40-10-L	114	97	17	97	40	53	32.5	3.2	6.6	15	7	127	141	129	
	20-L	114										127	141	129	
	30-L	124										107	137	151	139
	40-L	134										117	147	161	149
50-20-L	136	118	18	118	50	64	38	3.2	9	18	9	154	172	154	
	30-L	136										154	172	154	
	40-L	146										128	164	182	164
	50-L	156										138	174	192	174

形式	K	M	N <sub>1</sub>	N <sub>2</sub>	O	P	R	S	T	U	V	W	X	Y	
32-10-L	M8×1.25 深さ13	6.5	11	7.5	Rc 1/8	M6 深さ12	4.5	45	34	R 30	16	14	17.4	15	
	40-10-L	M8×1.25 深さ13	6.5	11.5	11.5	Rc 1/8	M6 深さ12	5	52	40	R 34.5	16	14	20.5	17.5
	50-20-L	M10×1.5 深さ15	7	12	12	Rc 1/4	M8 深さ16	7	64	50	R 42.5	20	17	21.6	19



## RL (Axial angle of foot)



形式	A	B	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	
32-10-RL	96	81	15	81	65	78	28.5	3.2	6.6	12.5	6.5	62.4	95.4	24.3	55.5	M6 × 12	
	20-RL	96										62.4	95.4				
	30-RL	106										91	72.4				105.4
40-10-RL	114	97	17	97	73	87	32.5	3.2	6.6	12.5	6.5	78.4	111.4	26.3	63.5	M6 × 12	
	20-RL	114										78.4	111.4				
	30-RL	124										107	88.4				121.4
	40-RL	134										117	98.4				131.4
50-20-RL	136	118	18	118	87	103	38	3.2	9	14	8	96.4	134.4	28.8	77	M8 × 15	
	30-RL	136										96.4	134.4				
	40-RL	146										128	106.4				144.4
	50-RL	156										138	116.4				154.4

形式	K	M	N <sub>1</sub>	N <sub>2</sub>	O	P	R	S	T	U	V	W	X	Y	
32-10-RL	M8×1.25 深さ13	6.5	11	7.5	Rc 1/8	M6 深さ12	4.5	45	34	R 30	16	14	17.4	15	
	40-10-RL	M8×1.25 深さ13	6.5	11.5	11.5	Rc 1/8	M6 深さ12	5	52	40	R 34.5	16	14	20.5	17.5
	50-20-RL	M10×1.5 深さ15	7	12	12	Rc 1/4	M8 深さ16	7	64	50	R 42.5	20	17	21.6	19

