



FUJIKURA COMPOSITES

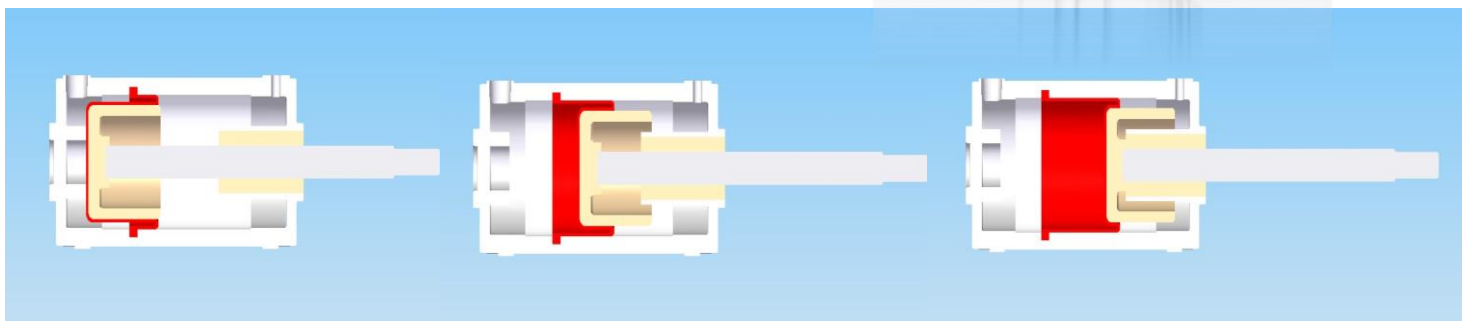
Fujikura PC Rolling Diaphragm Cylinder

【Features】

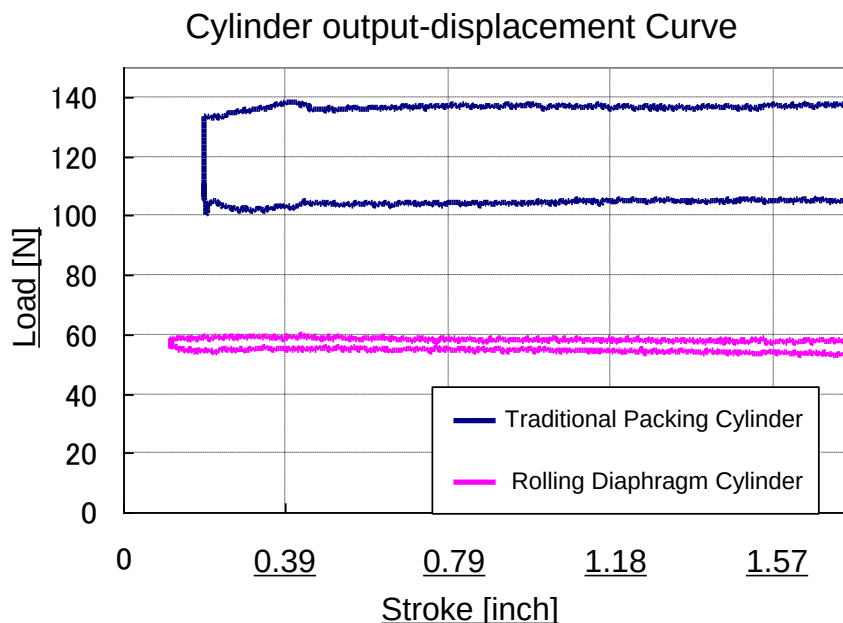
- Smooth-Movement
- Low Hysteresis
- No lubricant required
- Position sensor attachable



■ 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]

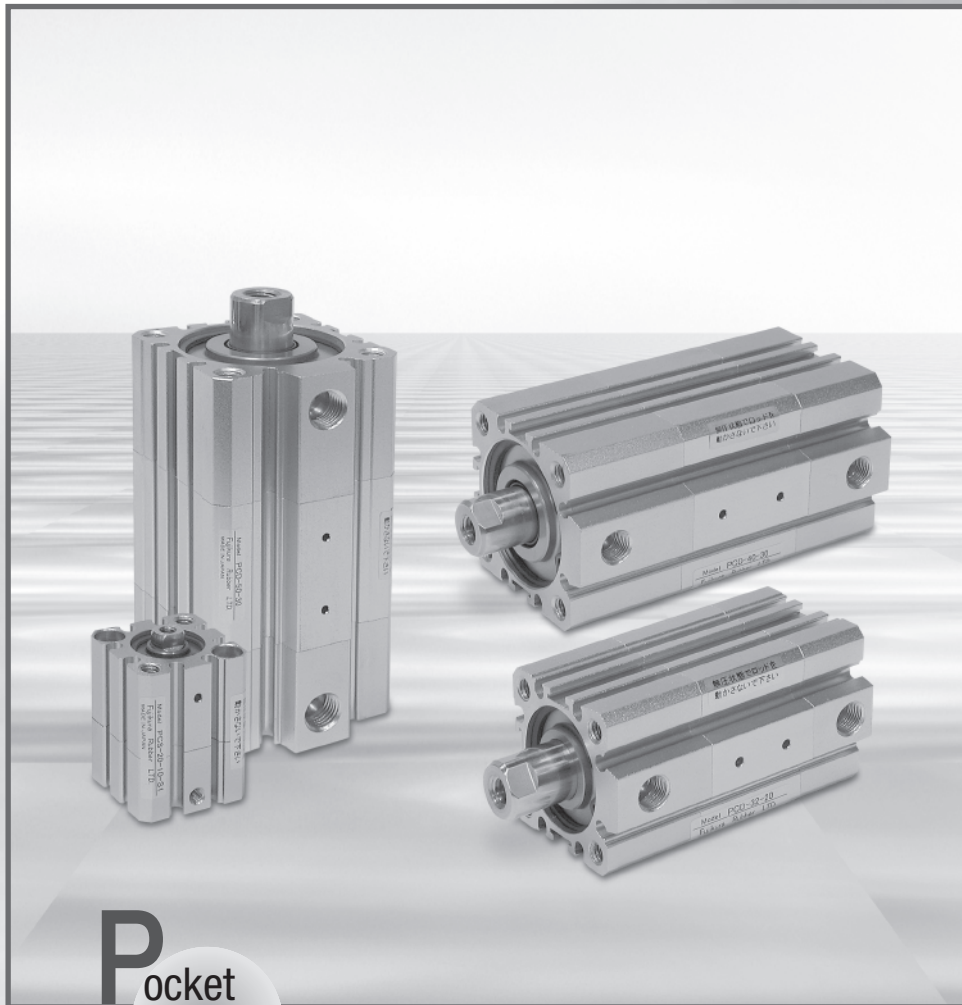
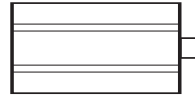


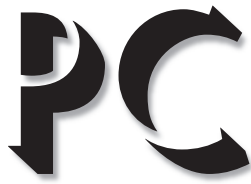
FUJIKURA COMPOSITES

Rolling Diaphragm Cylinder

PC

series

**P**ocket
Cylinder



PCS single-act

PCD double-act

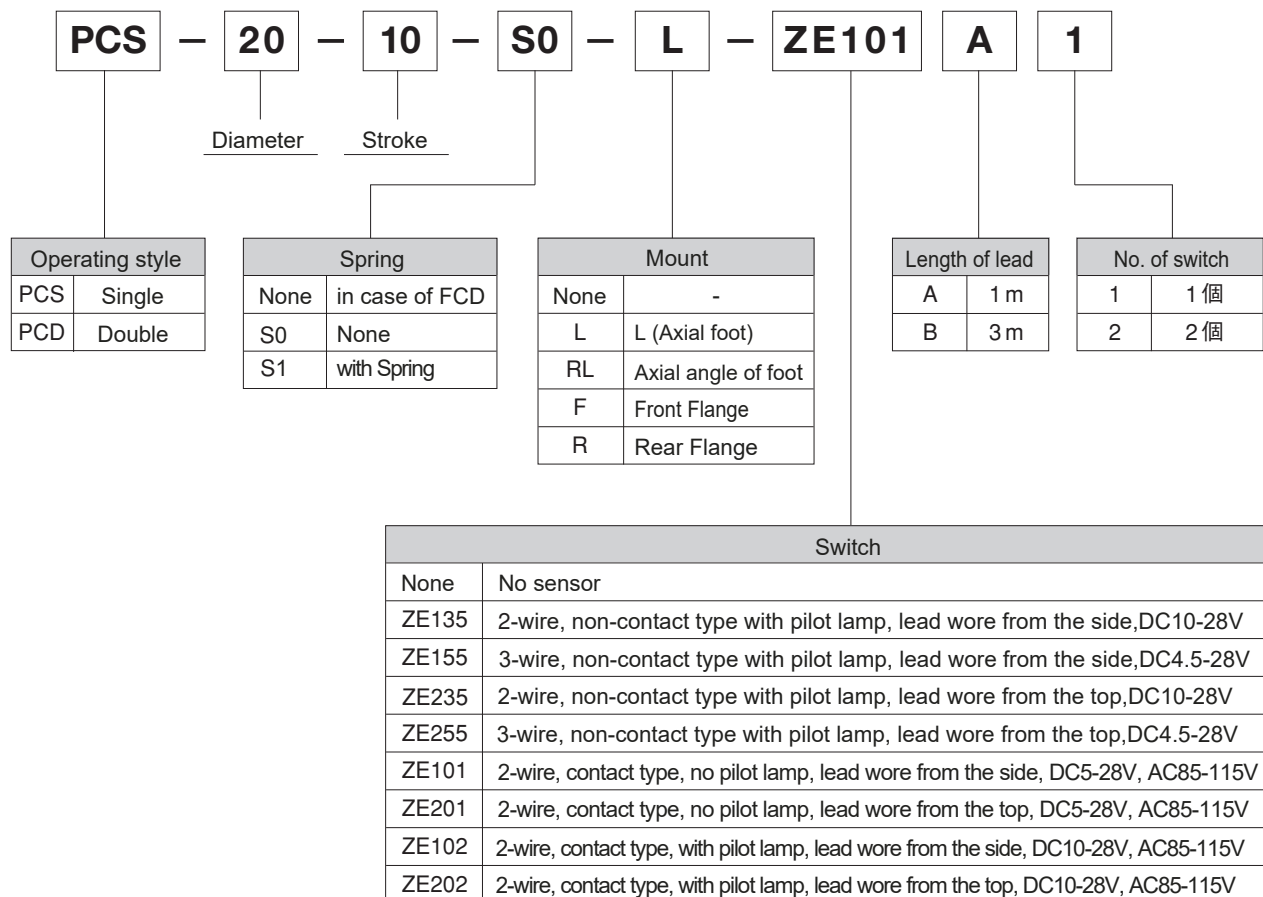
■ Specification

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	

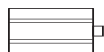
*1: Working pressure range of φ20 is 0.02 - 0.7MPa



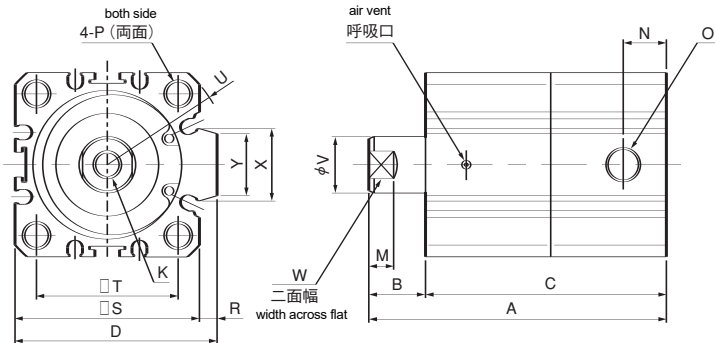
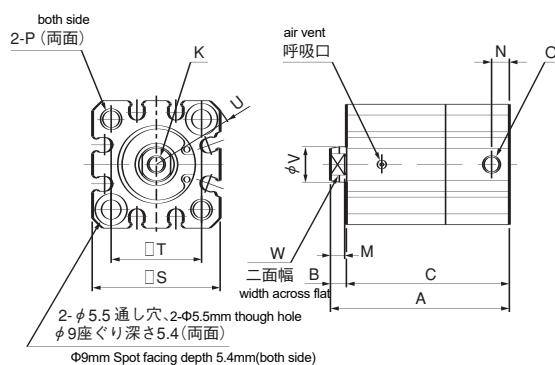
Model



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

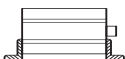


Standard

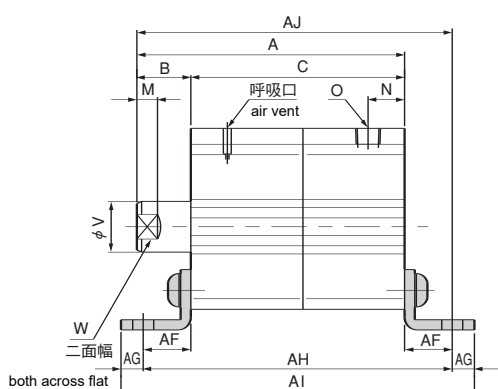
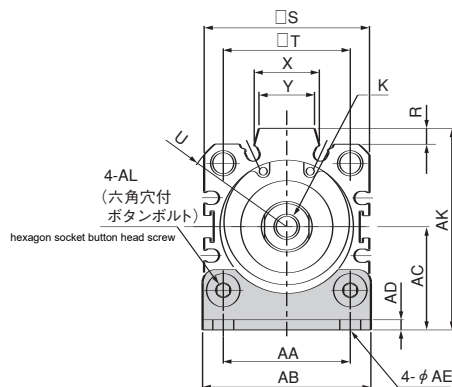


■PCS Standard

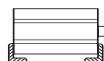
Model 形 式	A	B	C	D	K	M	N	O	P	R	S	T	U	V	W	X	Y	Valid pressure area 有効受圧面積 (mm ²)	Spring Force ばね反力 (N) zero-stroke 零ストローク時	full-stroke 全ストローク時	BF diaphragm BFダイヤフラム
20-10-S1	50.5	4.5	46	—	M5×0.8 深さ7	4	5	M5×0.8	M6 深さ12	—	36	25.5	R23.5	10	8	—	—	269	2.94	4.90	PC-DM1-20-20
32-10-S1	74	15	59	49.5	M8×1.25 深さ13	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



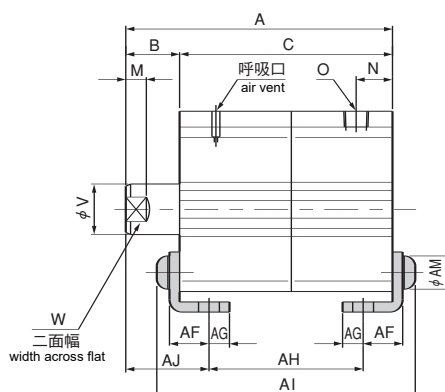
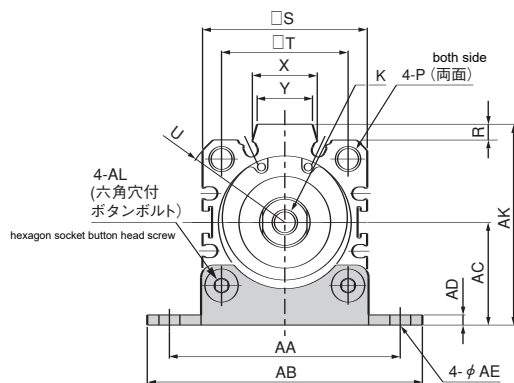
L (Axial foot)



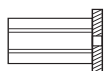
Model 形 式	A	B	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	K	M	N	O	P	R	S	T	U	V	W	X	Y
32-10-S1-L	74	15	59	34	45	28.5	3.2	6.6	15	7	89	103	89	55.5	M6×12	M8×1.25 深さ13	6.5	7.5	Rc1/8	M6 深さ12	4.5	45	34	R30	16	14	17.4	15
40-10-S1-L	88	17	71	40	53	32.5	3.2	6.6	15	7	101	115	103	63.5	M6×12	M8×1.25 深さ13	6.5	11.5	Rc1/8	M6 深さ12	5	52	40	R34.5	16	14	20.5	17.5



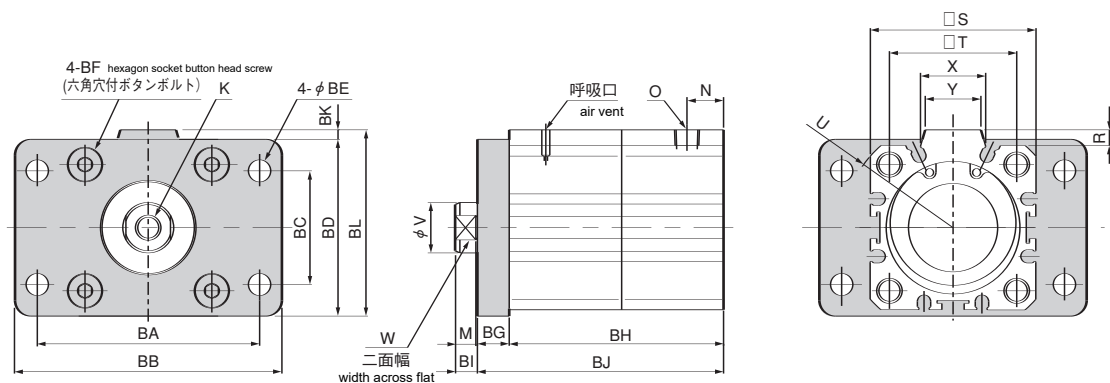
RL (Axial angle of foot)



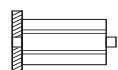
Model 形 式	A	B	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	K	M	N	O	P	R	S	T	U	V	W	X	Y
32-10-S1-RL	74	15	59	65	78	28.5	3.2	6.6	12.5	6.5	40.4	73.4	24.3	55.5	M6×12	10.5	M8×1.25 深さ13	6.5	7.5	Rc1/8	M6 深さ12	4.5	45	34	R30	16	14	17.4	15
40-10-S1-RL	88	17	71	73	87	32.5	3.2	6.6	12.5	6.5	52.4	85.4	26.3	63.5	M6×12	10.5	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



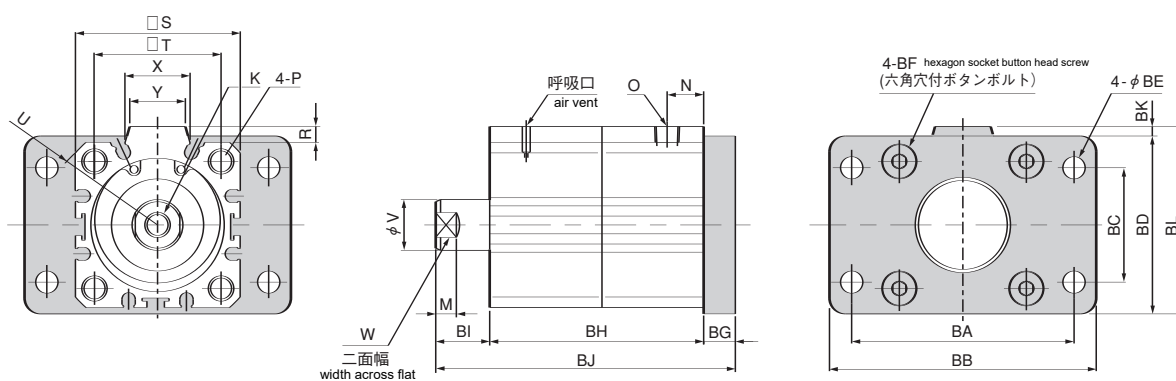
Front Flange



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

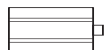


Rear Flange



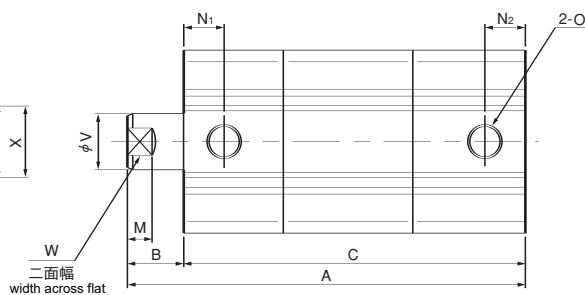
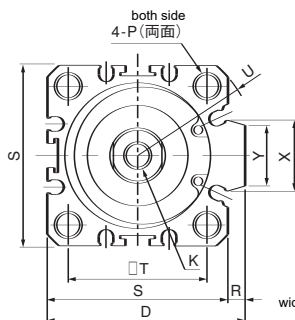
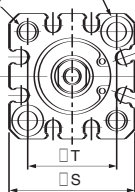
Model 形式	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	K	M	N	O	P	R	S	T	U	V	W	X	Y
32-10-S1-R	58	72	33	48	7	M6×12	8	59	15	82	3	51	M8×1.25 深さ13	6.5	7.5	Rc1/8	M6 深さ12	4.5	45	34	R30	16	14	17.4	15
40-10-S1-R	70	84	36	56	7	M6×15	10	71	17	98	3	59	M8×1.25 深さ13	6.5	11.5	Rc1/8	M6 深さ12	5	52	40	R34.5	16	14	20.5	17.5

PCD-20-10～50-50



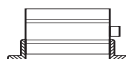
Standard

2- ϕ 5.5通し穴 2- ϕ 5.5mm through hole
 ϕ 9座ぐり深さ5.4(両面)
 ϕ 9mm Spot facing depth 5.4mm(both side)
 2-P(両面)
 both side

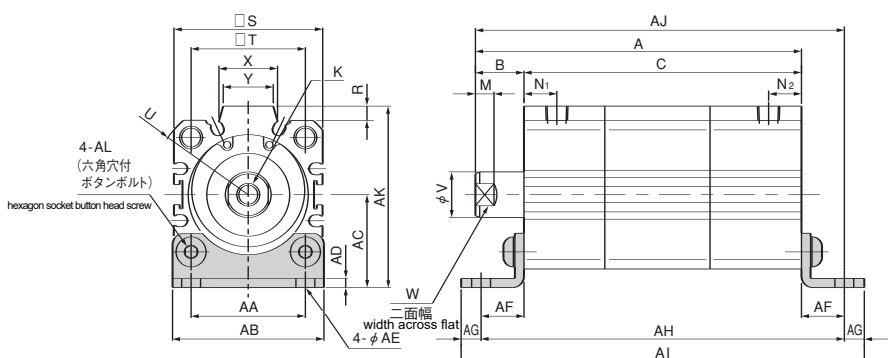


PCD standard

Model 形 式	A	B	C	D	K	M	N ₁	N ₂	O	P	R	S	T	U	V	W	X	Y	Valid pressure area 有効受圧面積 (mm ²)		BF diaphragm BFダイヤフラム	
																			extend side 押 側	retract side 引 側		
20 - 10 20	58 68	4.5	53.5 63.5	—	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	
32 - 10 20 30	96 96 106		15	81 81 91	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
40 - 10 20 30 40	114 114 124 134			17	97 97 107 117	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
50 - 20 30 40 50	136 136 146 156	18			118 118 128 138	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

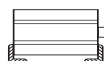


L (Axial foot)

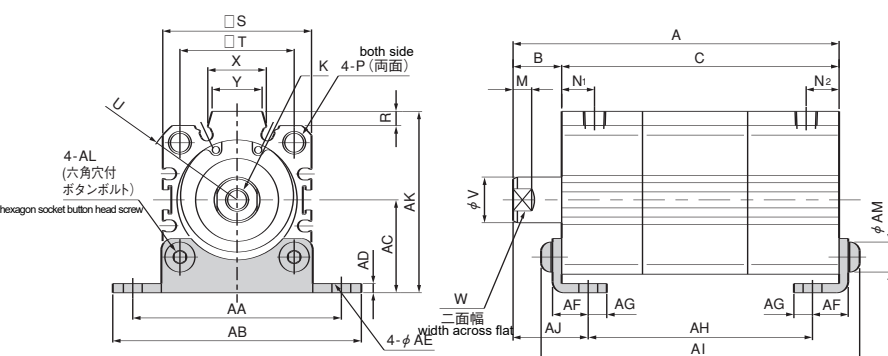


形 式	A	B	C	AA/AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
32-10-L	96	81	81	34	45	28.5	3.2	6.6	15	7	111	125	111	M6 × 12
20-L	96	15	81	34	45	28.5	3.2	6.6	15	7	111	125	111	55.5
30-L	106	91	91								121	135	121	
40-10-L	114	97	97	40	53	32.5	3.2	6.6	15	7	127	141	129	M6 × 12
20-L	114	17	97	40	53	32.5	3.2	6.6	15	7	127	141	129	63.5
30-L	124	107	107								137	151	139	
40-L	134	117	117								147	161	149	
50-20-L	136	118	118	50	64	38	3.2	9	18	9	154	172	154	M8 × 15
30-L	136	18	118	50	64	38	3.2	9	18	9	154	172	154	77
40-L	146	128	128								164	182	164	
50-L	156	138	138								174	192	174	

形 式	K	M	N ₁	N ₂	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
20-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
30-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
40-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
30-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
40-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
50-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



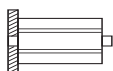
RL (Axial angle of foot)



形 式	A	B	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM
32-10-RL	96	81	81	65	78	28.5	3.2	6.6	12.5	6.5	62.4	95.4	24.3	55.5	M6 × 10.5	
20-RL	96	15	81	65	78	28.5	3.2	6.6	12.5	6.5	62.4	95.4	24.3	55.5	M6 × 10.5	
30-RL	106	91	91								72.4	105.4				
40-10-RL	114	97	97	73	87	32.5	3.2	6.6	12.5	6.5	78.4	111.4	26.3	63.5	M6 × 10.5	
20-RL	114	17	97	73	87	32.5	3.2	6.6	12.5	6.5	78.4	111.4	26.3	63.5	M6 × 10.5	
30-RL	124	107	107								88.4	121.4				
40-RL	134	117	117								98.4	131.4				
50-20-RL	136	118	118	87	103	38	3.2	9	14	8	96.4	134.4	28.8	77	M8 × 14	
30-RL	136	18	118	87	103	38	3.2	9	14	8	96.4	134.4	28.8	77	M8 × 14	
40-RL	146	128	128								106.4	144.4				
50-RL	156	138	138								116.4	154.4				

形 式	K	M	N ₁	N ₂	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
20-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
30-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
40-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
30-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
40-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
50-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

Model 形 式	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	K	M	N ₁	N ₂	O	P	R	S	T	U	V	W	X	Y
32 - 10 - F	58	72	33	48	7	M6 × 12	8	81	89	3	51	M8×1.25 depth 深さ13	6.5	11	7.5	Rc1/8	M6 depth 深さ12	4.5	45	34	R30	16	14	17.4	15	
20 - F								7	89																	
30 - F								91	99																	
40 - 10 - F	70	84	36	56	7	M6 × 15	10	97	107	3	59	M8×1.25 depth 深さ13	6.5	11.5	11.5	Rc1/8	M6 depth 深さ12	5	52	40	R34.5	16	14	20.5	17.1	
20 - F								7	107																	
30 - F								107	117																	
40 - F								117	127																	
50 - 20 - F	86	104	47	70	9	M8 × 15	10	118	128	4	74	M10×1.5 depth 深さ15	7	12	12	Rc1/4	M8 depth 深さ16	7	64	50	R42.5	20	17	21.6	19	
30 - F								8	128																	
40 - F								128	138																	
50 - F								138	148																	

[illegible]