

PCC

Pin clamp cylinder

ø50

Special

Features

- The lever direction can be selected from 4 options.
- Two types of locating pin shape are available.
- The receiving surface position of the workpiece can be adjusted by up to 2 mm.
- Position locking mechanism can be selected.
- Spatter-proof specification can be selected.
- With cleaning holes as standard.
- Extensive mounting types are available.



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LCG
LCW
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STR2
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LMB
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MFC
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RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Pin clamp cylinder

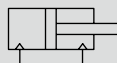
Double acting/single rod

PCC Series

Double acting/position locking

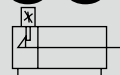
PCC-Q Series

JIS symbol



Double acting/single rod

JIS symbol



Double acting/position locking



Common specifications

Item	PCC/PCC-Q
Bore size mm	50
Actuation	Double acting
Working fluid	Compressed air
Max. working pressure MPa	0.5 (≈73 psi, 5 bar)
Min. working pressure MPa	0.2 (≈29 psi, 2 bar)
Guaranteed proof pressure MPa	1.0 (≈150 psi, 10 bar)
Ambient temperature °C	-10 (14°F) to 60 (140°F)
Port size	Rc1/4
Working piston speed mm/s	50 to 300
Cushion	None
Lubrication	Not required

Theoretical clamping force

(Unit: N)

Pressure (MPa)	0.2	0.3	0.4	0.5
Clamping force (N)	329	494	659	824

Cylinder weight

Locating pin diameter	Standard					Position locking			
	A1	B1	C1	C2	D1	A1	B1	C1	C2
ø12.5 to ø13.0	1.8	2.0	2.0	2.0	1.7	2.2	2.4	2.4	2.4
ø14.5 to ø15.0	1.8	2.0	2.0	2.0	1.7	2.2	2.4	2.4	2.4
ø15.5 to ø16.0	1.8	2.0	2.0	2.0	1.7	2.2	2.4	2.4	2.4
ø17.5 to ø18.0	1.9	2.0	2.0	2.0	1.8	2.3	2.4	2.4	2.4
ø19.5 to ø20.0	1.9	2.1	2.0	2.0	1.8	2.3	2.5	2.4	2.4
ø24.5 to ø25.0	2.0	2.1	2.1	2.1	1.9	2.4	2.5	2.5	2.5
ø29.5 to ø30.0	2.1	2.2	2.2	2.2	2.0	2.5	2.6	2.6	2.6

Switch specifications

Item	Proximity 2-wire		
	T2YD	T2YDT	T2YDU (Made to order)
Applications	Dedicated for programmable controller		
Indicator lamp	Red/green LED (Lit when ON)		
Load voltage	24 VDC ±10%		
Load current	5 to 20 mA		
Internal voltage drop	6 V or less		
Leakage current	1.0 mA or less		
Output delay time *1 (ON Delay, OFF delay)	60 ms or less		
Lead wire length	1 m (oil resistant vinyl cabtyre cable ø6, 0.5 mm ² x 2-conductor) *2	1 m (flame-resistant vinyl cabtyre cable ø6, 0.5 mm ² x 2-conductor) *2	0.3 m (flame-resistant vinyl cabtyre cable with M12 cable connector, AWG20, 2-conductor)
Insulation resistance	100 MΩ and over with 500 VDC megger		
Withstand voltage	No failure after 1 minute of 1,000 VAC application.		
Max. shock resistance	980 m/s ²		
Ambient temperature	-10 to +60°C		
Degree of protection	JIS C0920 (water-tight), IEC standards IP67, oil resistance		
Weight g	1 m:61 3 m:166 5 m:272		35

*1: Indicates the time from magnetic sensor detection of the piston magnet until switch output.

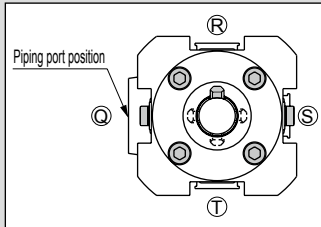
*2: 3 m and 5 m lead wires are available as options.

3: As the switch for AC magnetic field (T2YD) is for spot welding machine, it cannot be used with arc welding machine (DC).

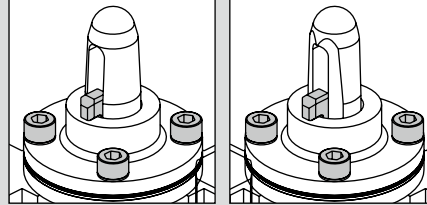
*4: Flame-resistant lead wires are available as options.

Pin clamp cylinder PCC Series

The lever direction can be selected from 4 options.



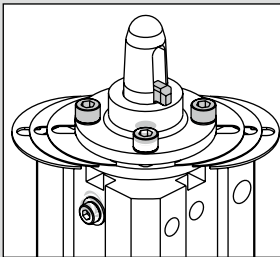
Two types of locating pin shape are available.



Round pin

Diamond pin

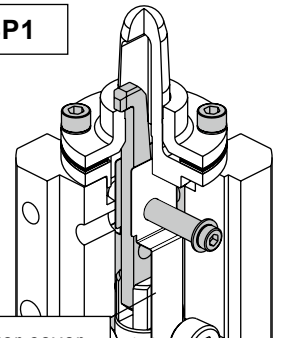
The receiving surface position of the workpiece can be adjusted by up to 2 mm (when unit with shim is selected)



Adjustable by 0.5 mm to 2 mm
One side $1 \times t1 + 2 \times t0.5$
(one side: 3, both sides: 6)

Spatter-proof

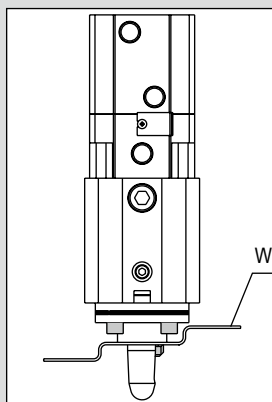
SP1



Spatter cover

SP1: Prevents spatter deposits in the clamp lever cam groove.

Position locking mechanism can be selected.



Workpiece

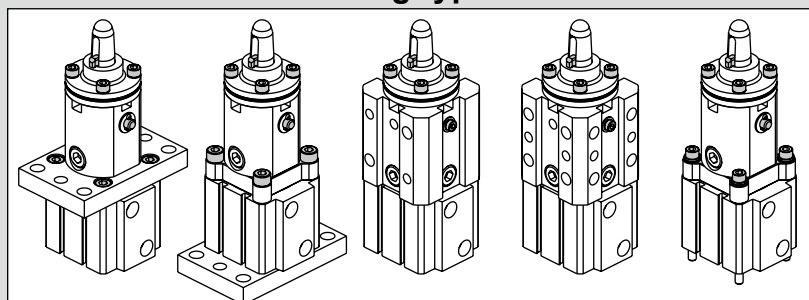
- It holds the clamp position regardless of the thickness of the workpiece
- It prevents the workpiece from falling out in emergencies.

Note: The D1 type is not supported.

With cleaning holes as standard.

As the cleaning hole has tapered pipe threading (Rc3/8), it can be used as an air blow port for internal cleaning.

Extensive mounting types are available.



A1

Top flange

B1

Bottom flange

C1

Side mounting
(2 surfaces)

C2

Side mounting
(2 surfaces)

D1

Bottom mounting

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

PCC/PCC-Q Series

How to order

Basic

PCC — **C1** 5 **R** **177** **D** - **T2YD** **D** - **2** **SP1**

With position locking

PCC-Q **C1** 5 **R** **177** **D** - **T2YD** **D** - **2** **SP1**

Model No.

A Mounting
*1

B Clamp lever direction

C Locating pin diameter
*2

D Locating pin shape

E Switch model No.
*3, *5

F Switch quantity

G Shim

H Spatter-proof

⚠ Precautions for model No. selection

- *1 : When the position locking (Q) is selected, D1 (bottom mount) cannot be selected.
- *2 : Consult with CKD for other locating pin diameters.
- *3 : T type switches can also be installed. Consult with CKD for H and V type strong magnetic field switches.
- *4 : Refer to pages 1118 and 1135 for the switch specifications and usage guidelines.
- *5 : Switches are shipped with the product.

[Example of model No.]

PCC-C15R177D-T2YDD-2SP1

Model: Pin clamp cylinder double acting/single rod

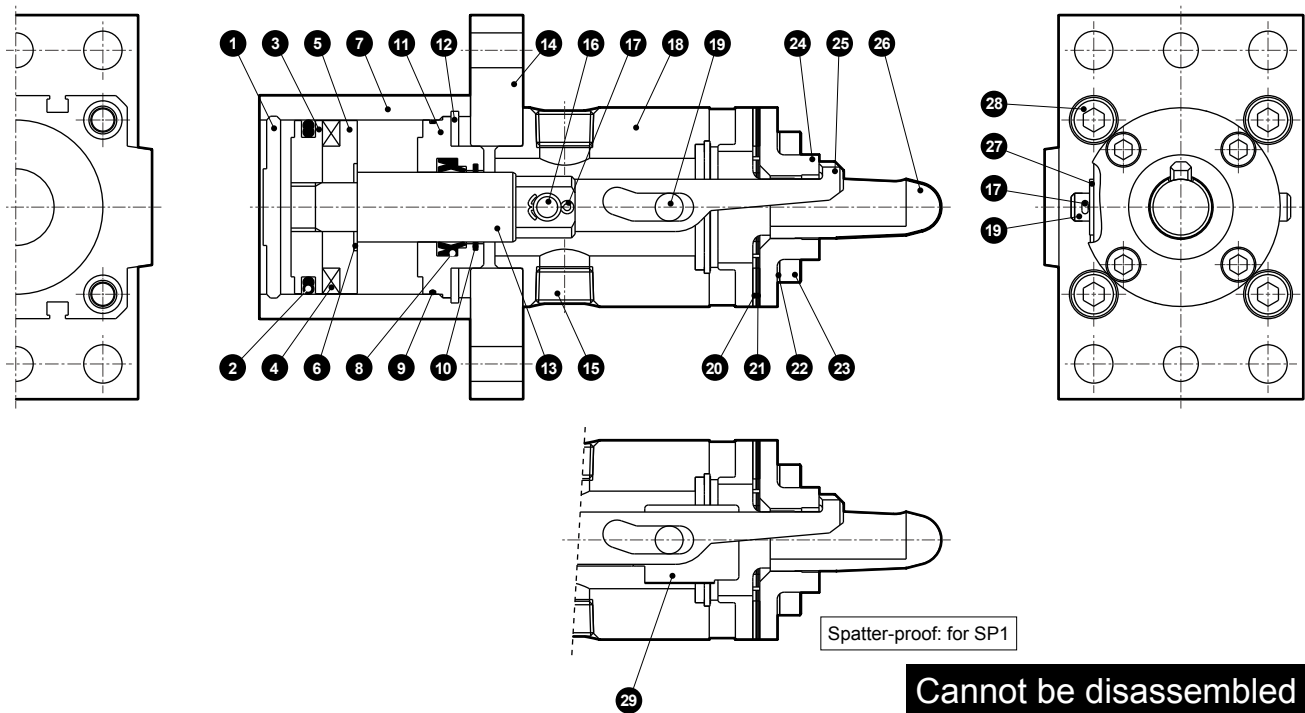
- A** Mounting : Side mounting
- B** Clamp lever direction : R
- C** Locating pin diameter : $\phi 17.7$
- D** Locating pin shape : Diamond pin
- E** Switch model No. : Strong magnetic field proof switch T2YD, 1 m lead wire
- F** Switch quantity : With switches on both sides
- G** Shim : With 2 mm shim
- H** Spatter protection : With spatter cover

Code	Description	
A Mounting *1		
A1	Top flange 	Bottom flange
	Side mounting (2 surfaces) 	Side mounting (2 surfaces)
D1	Bottom mount 	
B Clamp lever direction		
Q		
R		
S		
T		
C Locating pin diameter *2		
Refer to the locator pin diameter on the following page.		
D Locating pin shape		
Blank	Round pin	
D	Diamond pin	
E Switch model No. *3, *5		
Code	Type	
T2YD*	2-color display	
T2YDT*	for AC magnetic field	
T2YDU		
* Lead wire length		
Blank	1 m	
3	3 m	
5	5 m	
F Switch quantity		
Blank	Without switch	
R	With unclamp side switch	
H	With clamp side switch	
D	With switches on both sides	
G Shim		
0	Without shim	
2	With 2 mm shim	
H Spatter-proof		
Blank	No spatter-proofing	
SP1	With spatter cover	

(C Locating pin diameter)

C Locating pin diameter					
Code	Locating pin diameter	Applicable workpiece hole diameter	Code	Locating pin diameter	Applicable workpiece hole diameter
125	ø12.5	ø13	179	ø17.9	ø18
127	ø12.7		180	ø18.0	
128	ø12.8		195	ø19.5	
129	ø12.9		197	ø19.7	
130	ø13.0		198	ø19.8	
145	ø14.5	ø15	199	ø19.9	ø20
147	ø14.7		200	ø20.0	
148	ø14.8		245	ø24.5	
149	ø14.9		247	ø24.7	
150	ø15.0		248	ø24.8	
155	ø15.5	ø16	249	ø24.9	ø25
157	ø15.7		250	ø25.0	
158	ø15.8		295	ø29.5	
159	ø15.9		297	ø29.7	
160	ø16.0		298	ø29.8	
175	ø17.5	ø18	299	ø29.9	ø30
177	ø17.7		300	ø30.0	
178	ø17.8				

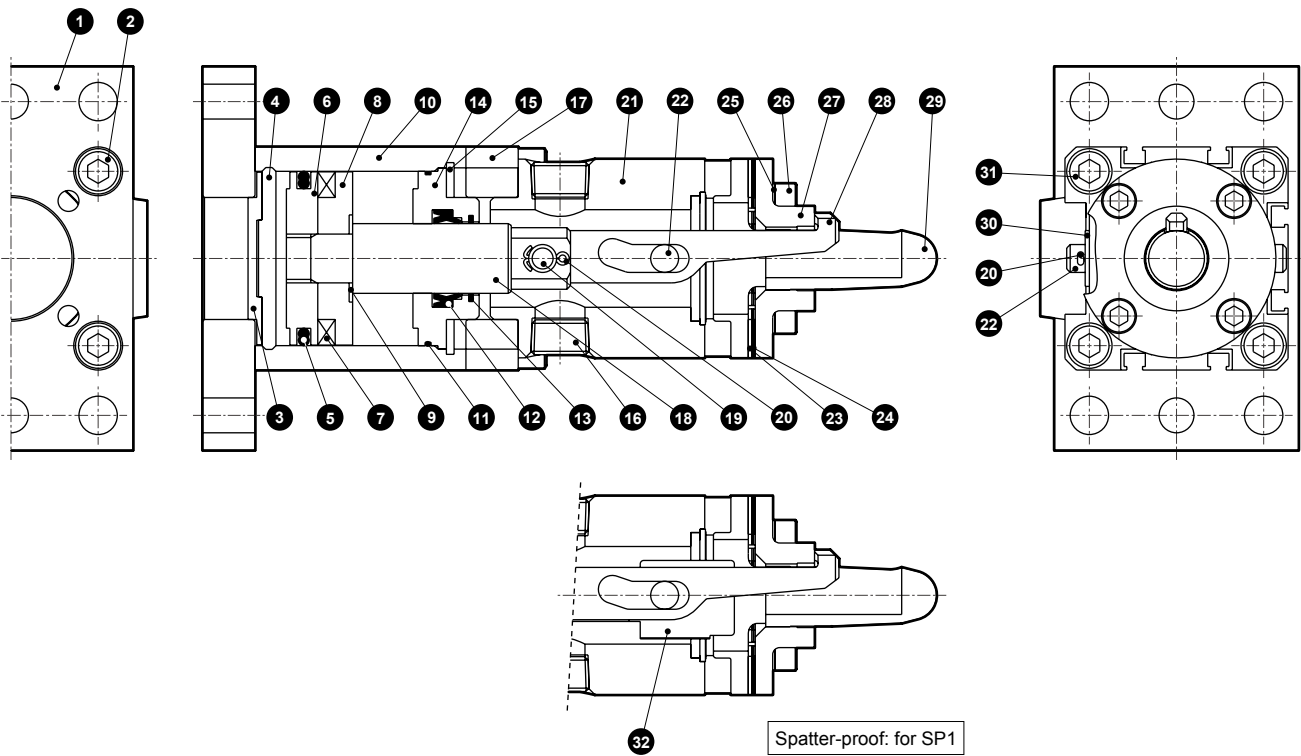
Internal structure and parts list (PCC-A1)



No.	Part name	Material	No.	Part name	Material
1	Cover	Aluminum alloy	16	Hinge pin (2)	Steel
2	Piston packing	Nitrile rubber	17	Split pin	Steel
3	Piston	Aluminum alloy	18	Guide	Aluminum alloy
4	Piston magnet	Plastic magnet	19	Hinge pin (1)	Steel
5	Spacer	Special resin	20	Shim 1	Stainless steel
6	Spacer washer	Stainless steel	21	Shim 0.5	Stainless steel
7	Body	Aluminum alloy	22	Conical spring washer	Steel
8	Rod packing	Nitrile rubber	23	Hexagon socket head cap screw	Steel
9	Rod metal gasket	Nitrile rubber	24	Spacer	Steel
10	Coil scraper	Phosphor bronze	25	Clamp lever	Steel
11	Rod metal	Special aluminum	26	Locating pin	Steel
12	C type snap ring	Steel	27	Plain washer	Steel
13	Piston rod	Steel	28	Hexagon socket head cap screw	Steel
14	Flange	Aluminum alloy	29	Spatter cover	Copper alloy
15	Plug	Steel			

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
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JSB3
LMB
LML
HCM
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RCS2
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SpdContr
Ending

Internal structure and parts list (PCC-B1)

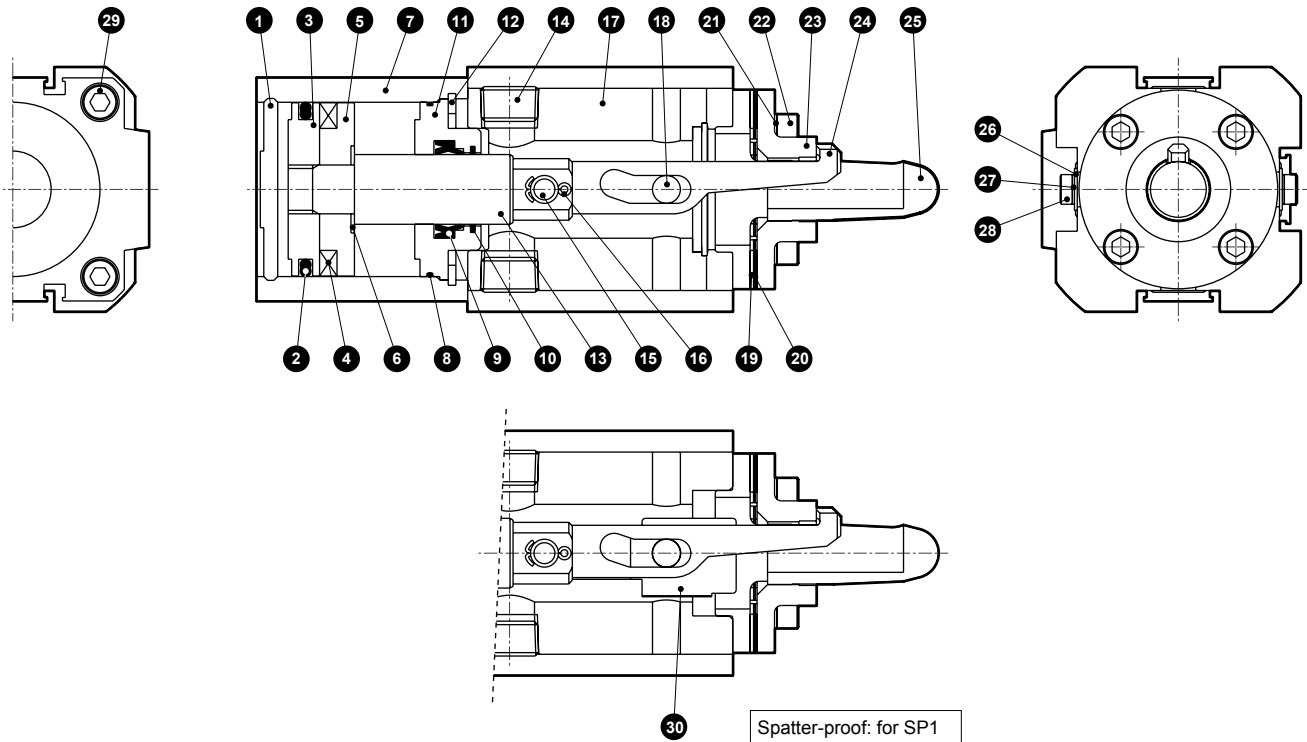


Cannot be disassembled

No.	Part name	Material	No.	Part name	Material
1	Flange	Aluminum alloy	17	Collar	Aluminum alloy
2	Hexagon socket head cap screw	Steel	18	Piston rod	Steel
3	Spigot ring	Aluminum alloy	19	Hinge pin (2)	Steel
4	Cover	Aluminum alloy	20	Split pin	Steel
5	Piston packing	Nitrile rubber	21	Guide	Aluminum alloy
6	Piston	Aluminum alloy	22	Hinge pin (1)	Steel
7	Piston magnet	Plastic magnet	23	Shim 1	Stainless steel
8	Spacer	Special resin	24	Shim 0.5	Stainless steel
9	Spacer washer	Stainless steel	25	Conical spring washer	Steel
10	Body	Aluminum alloy	26	Hexagon socket head cap screw	Steel
11	Rod metal gasket	Nitrile rubber	27	Spacer	Steel
12	Rod packing	Nitrile rubber	28	Clamp lever	Steel
13	Coil scraper	Phosphor bronze	29	Locating pin	Steel
14	Rod metal	Special aluminum	30	Plain washer	Steel
15	C type snap ring	Steel	31	Hexagon socket head cap screw	Steel
16	Plug	Steel	32	Spatter cover	Copper alloy

Internal structure and parts list (PCC-C1, PCC-C2)

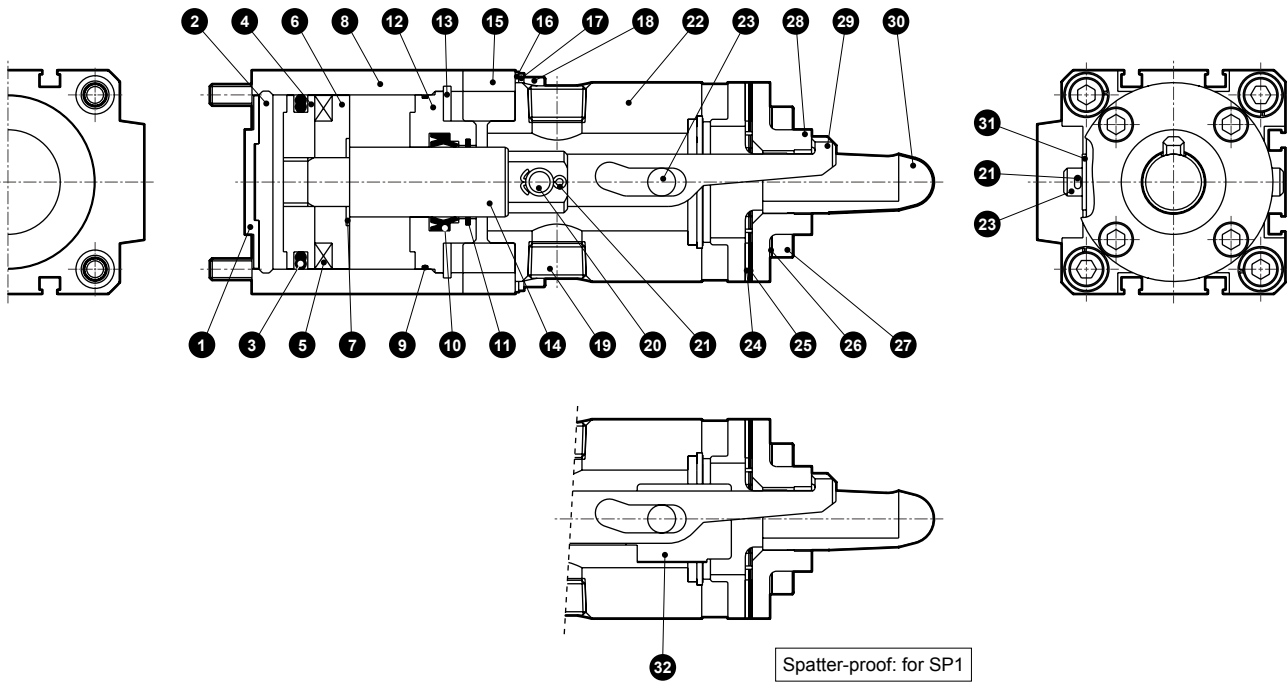
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Cannot be disassembled

No.	Part name	Material	No.	Part name	Material
1	Cover	Aluminum alloy	16	Split pin	Steel
2	Piston packing	Nitrile rubber	17	Guide	Aluminum alloy
3	Piston	Aluminum alloy	18	Hinge pin (1)	Steel
4	Piston magnet	Plastic magnet	19	Shim 1	Stainless steel
5	Spacer	Special resin	20	Shim 0.5	Stainless steel
6	Spacer washer	Stainless steel	21	Conical spring washer	Steel
7	Body	Aluminum alloy	22	Hexagon socket head cap screw	Steel
8	Rod metal gasket	Nitrile rubber	23	Spacer	Steel
9	Rod packing	Nitrile rubber	24	Clamp lever	Steel
10	Coil scraper	Phosphor bronze	25	Locating pin	Steel
11	Rod metal	Special aluminum	26	Plain washer	Steel
12	C type snap ring	Steel	27	Conical spring washer	Steel
13	Piston rod	Steel	28	Hexagon socket head cap screw	Steel
14	Plug	Steel	29	Hexagon socket head cap screw	Steel
15	Hinge pin (2)	Steel	30	Spatter cover	Copper alloy

Internal structure and parts list (PCC-D1)

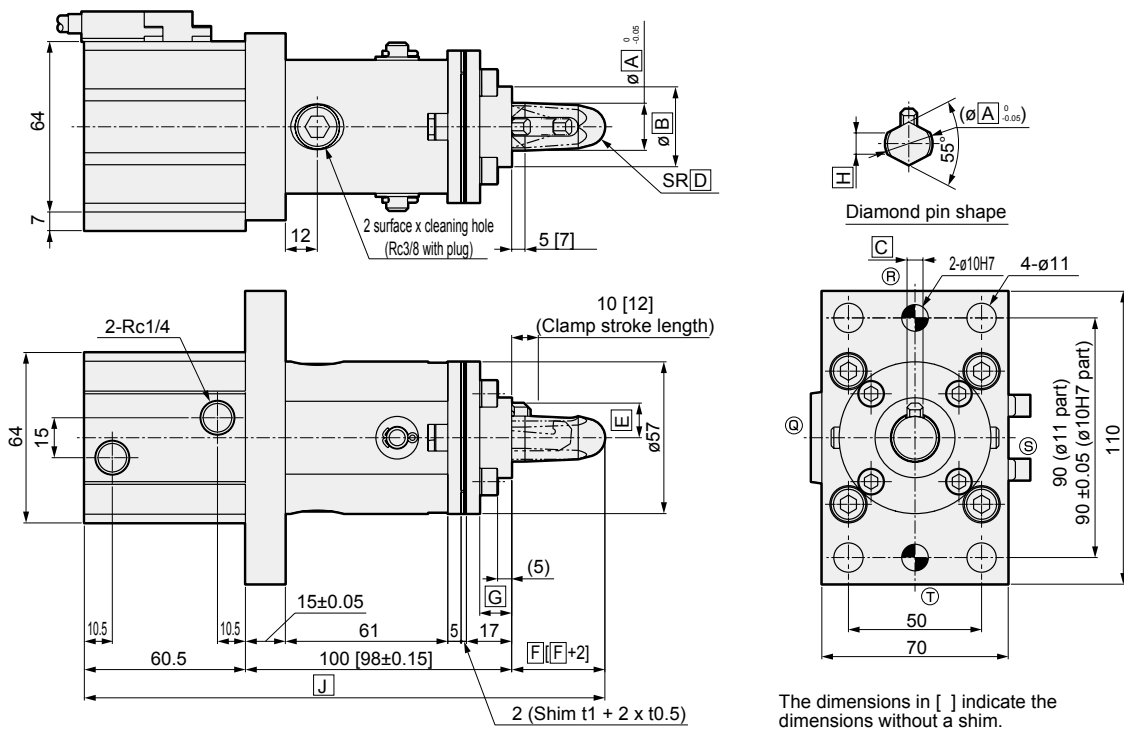


Cannot be disassembled

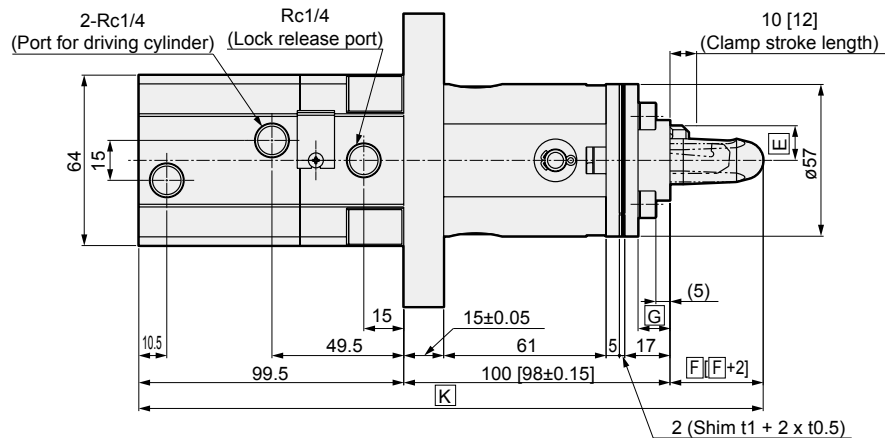
No.	Part name	Material	No.	Part name	Material
1	Spigot ring	Aluminum alloy	17	Spring washer	Steel
2	Cover	Aluminum alloy	18	Hexagon socket head cap screw	Steel
3	Piston packing	Nitrile rubber	19	Plug	Steel
4	Piston	Aluminum alloy	20	Hinge pin (2)	Steel
5	Piston magnet	Plastic magnet	21	Split pin	Steel
6	Spacer	Special resin	22	Guide	Aluminum alloy
7	Spacer washer	Stainless steel	23	Hinge pin (1)	Steel
8	Body	Aluminum alloy	24	Shim 1	Stainless steel
9	Rod metal gasket	Nitrile rubber	25	Shim 0.5	Stainless steel
10	Rod packing	Nitrile rubber	26	Conical spring washer	Steel
11	Coil scraper	Phosphor bronze	27	Hexagon socket head cap screw	Steel
12	Rod metal	Special aluminum	28	Spacer	Steel
13	C type snap ring	Steel	29	Clamp lever	Steel
14	Piston rod	Steel	30	Locating pin	Steel
15	Collar	Aluminum alloy	31	Plain washer	Steel
16	Plain washer	Steel	32	Spatter cover	Copper alloy

Dimensions (PCC-A1, PCC-QA1)

● PCC-A1



● PCC-QA1

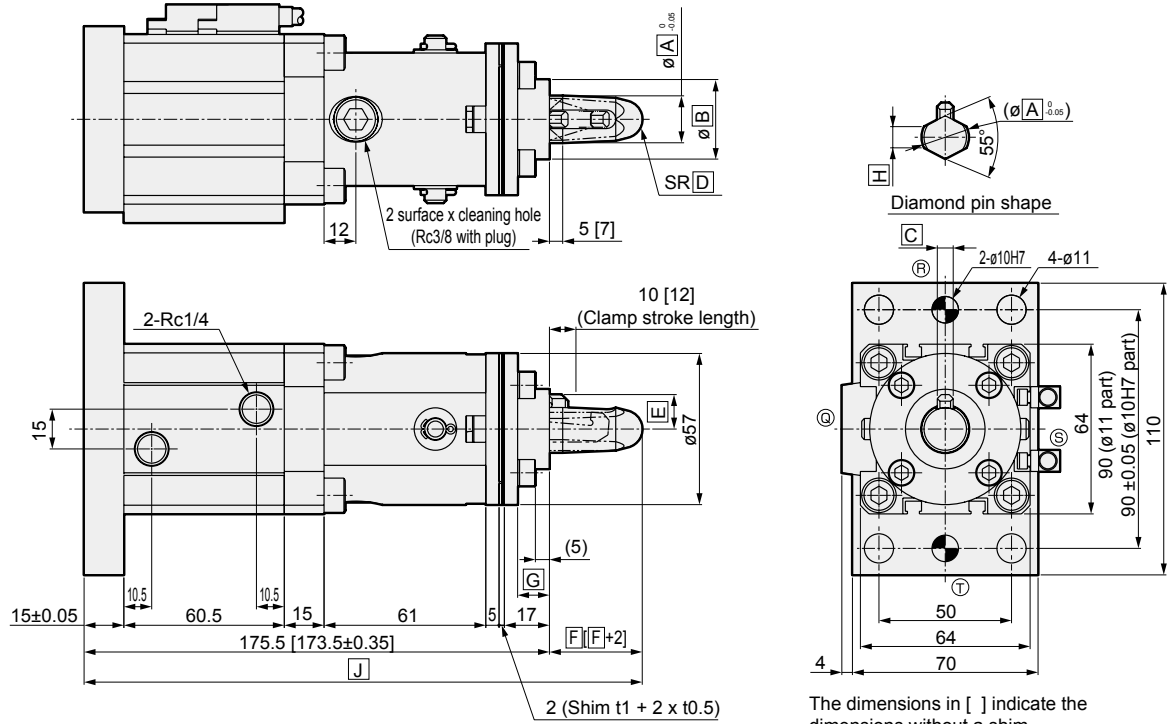


Code Locating pin ϕ (mm)	Common dimensions (mm)										Code Locating pin ϕ (mm)	Common dimensions (mm)									
	A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K
$\phi 12.5$	12.5	30	4.5	5	9.5	30	12	6	190.5	229.5	$\phi 17.9$	17.9	30	6	7	13	35	12	8	195.5	234.5
$\phi 12.7$	12.7	30	4.5	5	9.5	30	12	6	190.5	229.5	$\phi 18.0$	18.0	30	6	7	13.5	35	12	8	195.5	234.5
$\phi 12.8$	12.8	30	4.5	5	9.5	30	12	6	190.5	229.5	$\phi 19.5$	19.5	30	6	8	14	35	12	10	195.5	234.5
$\phi 12.9$	12.9	30	4.5	5	9.5	30	12	6	190.5	229.5	$\phi 19.7$	19.7	30	6	8	14	35	12	10	195.5	234.5
$\phi 13.0$	13.0	30	4.5	5	10	30	12	6	190.5	229.5	$\phi 19.8$	19.8	30	6	8	14	35	12	10	195.5	234.5
$\phi 14.5$	14.5	30	6	5	11	30	12	7	190.5	229.5	$\phi 19.9$	19.9	30	6	8	14	35	12	10	195.5	234.5
$\phi 14.7$	14.7	30	6	5	11	30	12	7	190.5	229.5	$\phi 20.0$	20.0	30	6	8	14.5	35	12	10	195.5	234.5
$\phi 14.8$	14.8	30	6	5	11	30	12	7	190.5	229.5	$\phi 24.5$	24.5	40	6	9	16.5	35	11.5	12	195.5	234.5
$\phi 14.9$	14.9	30	6	5	11	30	12	7	190.5	229.5	$\phi 24.7$	24.7	40	6	9	16.5	35	11.5	12	195.5	234.5
$\phi 15.0$	15.0	30	6	6	11.5	30	12	7	190.5	229.5	$\phi 24.8$	24.8	40	6	9	16.5	35	11.5	12	195.5	234.5
$\phi 15.5$	15.5	30	6	6	11.5	30	12	7	190.5	229.5	$\phi 24.9$	24.9	40	6	9	16.5	35	11.5	12	195.5	234.5
$\phi 15.7$	15.7	30	6	6	11.5	30	12	7	190.5	229.5	$\phi 25.0$	25.0	40	6	10	17	35	11.5	12	195.5	234.5
$\phi 15.8$	15.8	30	6	6	11.5	30	12	7	190.5	229.5	$\phi 29.5$	29.5	40	6	12	19.5	35	11.5	14	195.5	234.5
$\phi 15.9$	15.9	30	6	6	11.5	30	12	7	190.5	229.5	$\phi 29.7$	29.7	40	6	12	19.5	35	11.5	14	195.5	234.5
$\phi 16.0$	16.0	30	6	6.5	12	30	12	7	190.5	229.5	$\phi 29.8$	29.8	40	6	12	19.5	35	11.5	14	195.5	234.5
$\phi 17.5$	17.5	30	6	7	13	35	12	8	195.5	234.5	$\phi 29.9$	29.9	40	6	12	19.5	35	11.5	14	195.5	234.5
$\phi 17.7$	17.7	30	6	7	13	35	12	8	195.5	234.5	$\phi 30.0$	30.0	40	6	12.5	20	35	11.5	15	195.5	234.5
$\phi 17.8$	17.8	30	6	7	13	35	12	8	195.5	234.5											

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
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MechHnd/Chuk
ShkAbs
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FK
SpdContr
Ending

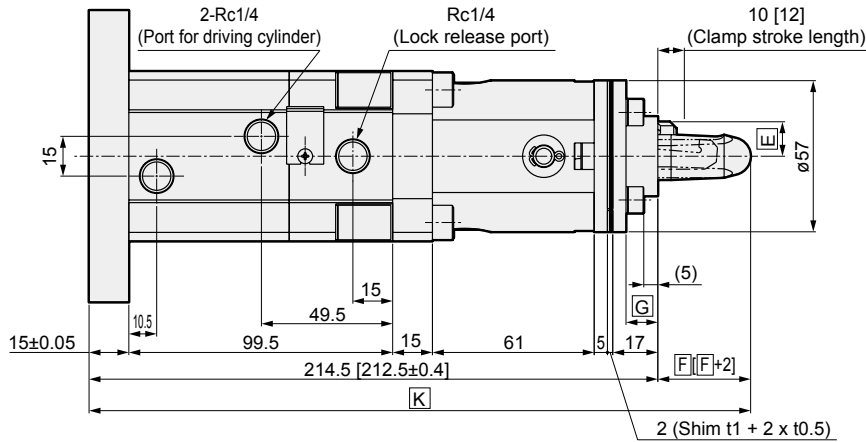
Dimensions (PCC-B1, PCC-QB1)

● PCC-B1



The dimensions in [] indicate the dimensions without a shim.

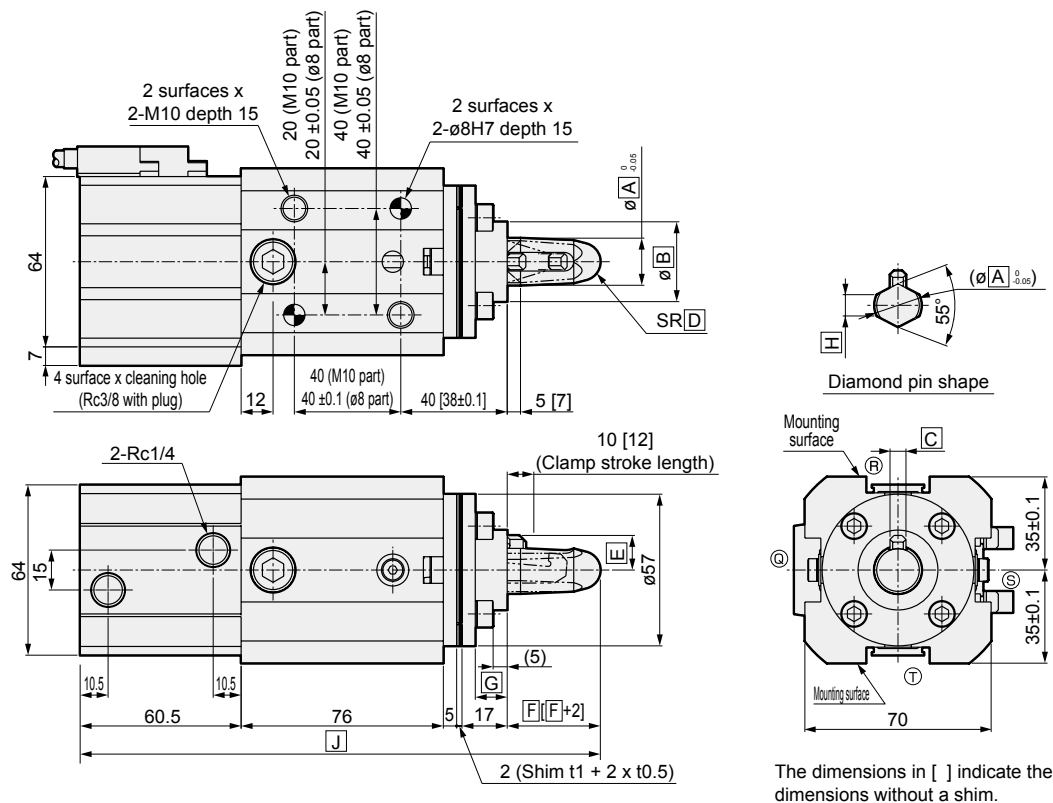
● PCC-QB1



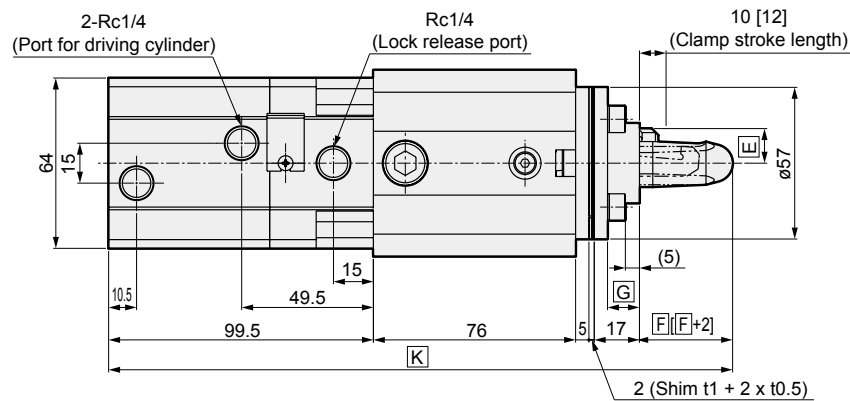
Code Locating pin ϕ (mm)	Common dimensions (mm)										Code Locating pin ϕ (mm)	Common dimensions (mm)									
	A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K
$\phi 12.5$	12.5	30	4.5	5	9.5	30	12	6	205.5	244.5	$\phi 17.9$	17.9	30	6	7	13	35	12	8	210.5	249.5
$\phi 12.7$	12.7	30	4.5	5	9.5	30	12	6	205.5	244.5	$\phi 18.0$	18.0	30	6	7	13.5	35	12	8	210.5	249.5
$\phi 12.8$	12.8	30	4.5	5	9.5	30	12	6	205.5	244.5	$\phi 19.5$	19.5	30	6	8	14	35	12	10	210.5	249.5
$\phi 12.9$	12.9	30	4.5	5	9.5	30	12	6	205.5	244.5	$\phi 19.7$	19.7	30	6	8	14	35	12	10	210.5	249.5
$\phi 13.0$	13.0	30	4.5	5	10	30	12	6	205.5	244.5	$\phi 19.8$	19.8	30	6	8	14	35	12	10	210.5	249.5
$\phi 14.5$	14.5	30	6	5	11	30	12	7	205.5	244.5	$\phi 19.9$	19.9	30	6	8	14	35	12	10	210.5	249.5
$\phi 14.7$	14.7	30	6	5	11	30	12	7	205.5	244.5	$\phi 20.0$	20.0	30	6	8	14.5	35	12	10	210.5	249.5
$\phi 14.8$	14.8	30	6	5	11	30	12	7	205.5	244.5	$\phi 24.5$	24.5	40	6	9	16.5	35	11.5	12	210.5	249.5
$\phi 14.9$	14.9	30	6	6	11	30	12	7	205.5	244.5	$\phi 24.7$	24.7	40	6	9	16.5	35	11.5	12	210.5	249.5
$\phi 15.0$	15.0	30	6	6	11.5	30	12	7	205.5	244.5	$\phi 24.8$	24.8	40	6	9	16.5	35	11.5	12	210.5	249.5
$\phi 15.5$	15.5	30	6	6	11.5	30	12	7	205.5	244.5	$\phi 24.9$	24.9	40	6	9	16.5	35	11.5	12	210.5	249.5
$\phi 15.7$	15.7	30	6	6	11.5	30	12	7	205.5	244.5	$\phi 25.0$	25.0	40	6	10	17	35	11.5	12	210.5	249.5
$\phi 15.8$	15.8	30	6	6	11.5	30	12	7	205.5	244.5	$\phi 29.5$	29.5	40	6	12	19.5	35	11.5	14	210.5	249.5
$\phi 15.9$	15.9	30	6	6	11.5	30	12	7	205.5	244.5	$\phi 29.7$	29.7	40	6	12	19.5	35	11.5	14	210.5	249.5
$\phi 16.0$	16.0	30	6	6.5	12	30	12	7	205.5	244.5	$\phi 29.8$	29.8	40	6	12	19.5	35	11.5	14	210.5	249.5
$\phi 17.5$	17.5	30	6	7	13	35	12	8	210.5	249.5	$\phi 29.9$	29.9	40	6	12	19.5	35	11.5	14	210.5	249.5
$\phi 17.7$	17.7	30	6	7	13	35	12	8	210.5	249.5	$\phi 30.0$	30.0	40	6	12.5	20	35	11.5	15	210.5	249.5
$\phi 17.8$	17.8	30	6	7	13	35	12	8	210.5	249.5											

Dimensions (PCC-C1, PCC-QC1)

● PCC-C1



● PCC-QC1 (position locking)

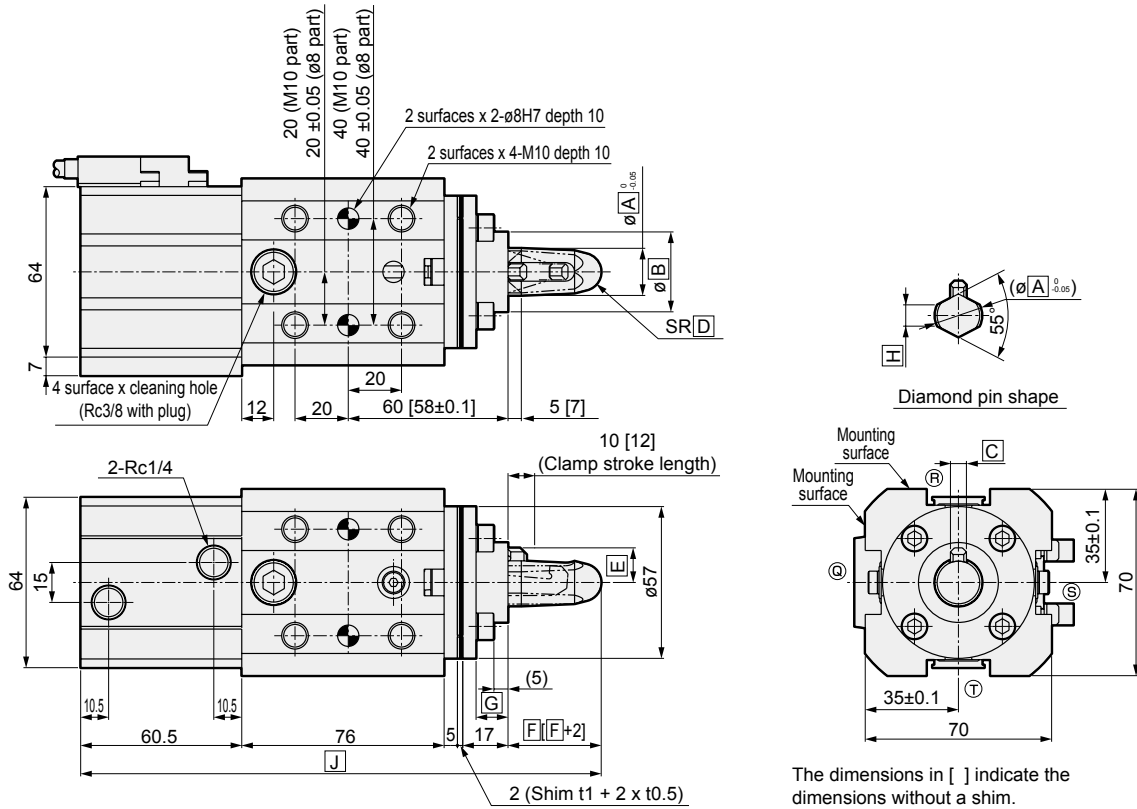


Code Locating pin ø (mm)	Common dimensions (mm)										Code Locating pin ø (mm)	Common dimensions (mm)									
	A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K
ø12.5	12.5	30	4.5	5	9.5	30	12	6	190.5	229.5	ø17.9	17.9	30	6	7	13	35	12	8	195.5	234.5
ø12.7	12.7	30	4.5	5	9.5	30	12	6	190.5	229.5	ø18.0	18.0	30	6	7	13.5	35	12	8	195.5	234.5
ø12.8	12.8	30	4.5	5	9.5	30	12	6	190.5	229.5	ø19.5	19.5	30	6	8	14	35	12	10	195.5	234.5
ø12.9	12.9	30	4.5	5	9.5	30	12	6	190.5	229.5	ø19.7	19.7	30	6	8	14	35	12	10	195.5	234.5
ø13.0	13.0	30	4.5	5	10	30	12	6	190.5	229.5	ø19.8	19.8	30	6	8	14	35	12	10	195.5	234.5
ø14.5	14.5	30	6	5	11	30	12	7	190.5	229.5	ø19.9	19.9	30	6	8	14	35	12	10	195.5	234.5
ø14.7	14.7	30	6	5	11	30	12	7	190.5	229.5	ø20.0	20.0	30	6	8	14.5	35	12	10	195.5	234.5
ø14.8	14.8	30	6	5	11	30	12	7	190.5	229.5	ø24.5	24.5	40	6	9	16.5	35	11.5	12	195.5	234.5
ø14.9	14.9	30	6	5	11	30	12	7	190.5	229.5	ø24.7	24.7	40	6	9	16.5	35	11.5	12	195.5	234.5
ø15.0	15.0	30	6	6	11.5	30	12	7	190.5	229.5	ø24.8	24.8	40	6	9	16.5	35	11.5	12	195.5	234.5
ø15.5	15.5	30	6	6	11.5	30	12	7	190.5	229.5	ø24.9	24.9	40	6	9	16.5	35	11.5	12	195.5	234.5
ø15.7	15.7	30	6	6	11.5	30	12	7	190.5	229.5	ø25.0	25.0	40	6	10	17	35	11.5	12	195.5	234.5
ø15.8	15.8	30	6	6	11.5	30	12	7	190.5	229.5	ø29.5	29.5	40	6	12	19.5	35	11.5	14	195.5	234.5
ø15.9	15.9	30	6	6	11.5	30	12	7	190.5	229.5	ø29.7	29.7	40	6	12	19.5	35	11.5	14	195.5	234.5
ø16.0	16.0	30	6	6.5	12	30	12	7	190.5	229.5	ø29.8	29.8	40	6	12	19.5	35	11.5	14	195.5	234.5
ø17.5	17.5	30	6	7	13	35	12	8	195.5	234.5	ø29.9	29.9	40	6	12	19.5	35	11.5	14	195.5	234.5
ø17.7	17.7	30	6	7	13	35	12	8	195.5	234.5	ø30.0	30.0	40	6	12.5	20	35	11.5	15	195.5	234.5
ø17.8	17.8	30	6	7	13	35	12	8	195.5	234.5											

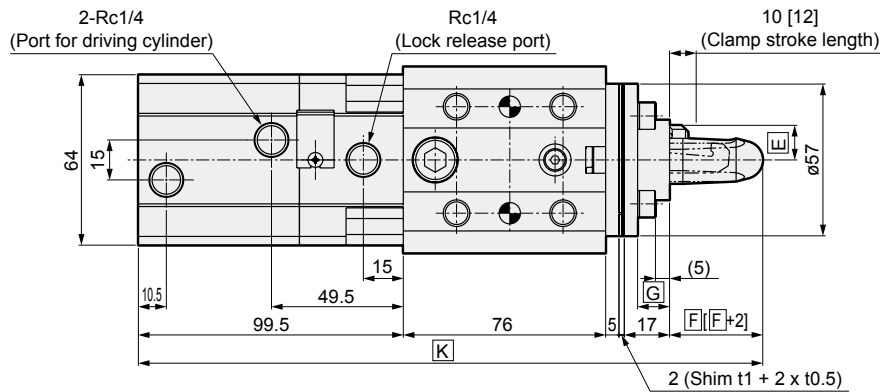
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Dimensions (PCC-C2, PCC-QC2)

● PCC-C2

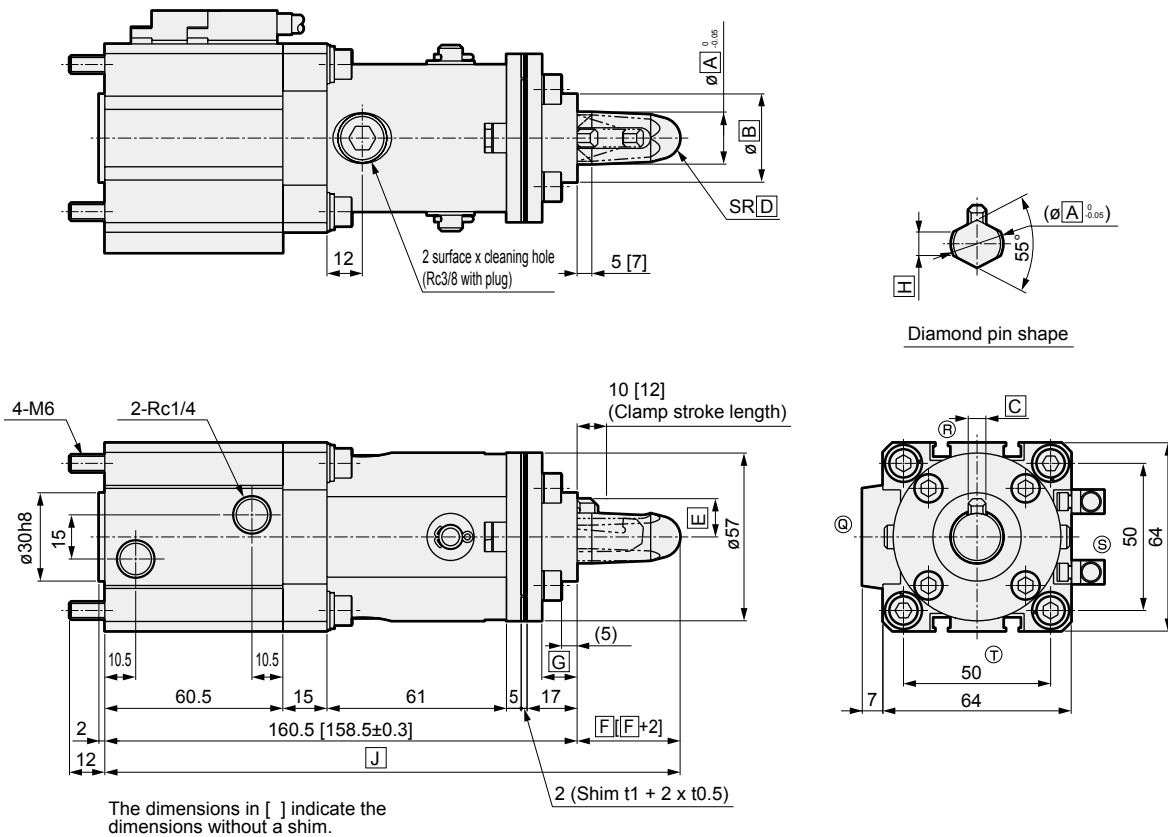


● PCC-QC2



Code Locating pin ø (mm)	Common dimensions (mm)										Code Locating pin ø (mm)	Common dimensions (mm)									
	A	B	C	D	E	F	G	H	J	K		A	B	C	D	E	F	G	H	J	K
ø12.5	12.5	30	4.5	5	9.5	30	12	6	190.5	229.5	ø17.9	17.9	30	6	7	13	35	12	8	195.5	234.5
ø12.7	12.7	30	4.5	5	9.5	30	12	6	190.5	229.5	ø18.0	18.0	30	6	7	13.5	35	12	8	195.5	234.5
ø12.8	12.8	30	4.5	5	9.5	30	12	6	190.5	229.5	ø19.5	19.5	30	6	8	14	35	12	10	195.5	234.5
ø12.9	12.9	30	4.5	5	9.5	30	12	6	190.5	229.5	ø19.7	19.7	30	6	8	14	35	12	10	195.5	234.5
ø13.0	13.0	30	4.5	5	10	30	12	6	190.5	229.5	ø19.8	19.8	30	6	8	14	35	12	10	195.5	234.5
ø14.5	14.5	30	6	5	11	30	12	7	190.5	229.5	ø19.9	19.9	30	6	8	14	35	12	10	195.5	234.5
ø14.7	14.7	30	6	5	11	30	12	7	190.5	229.5	ø20.0	20.0	30	6	8	14.5	35	12	10	195.5	234.5
ø14.8	14.8	30	6	5	11	30	12	7	190.5	229.5	ø24.5	24.5	40	6	9	16.5	35	11.5	12	195.5	234.5
ø14.9	14.9	30	6	5	11	30	12	7	190.5	229.5	ø24.7	24.7	40	6	9	16.5	35	11.5	12	195.5	234.5
ø15.0	15.0	30	6	6	11.5	30	12	7	190.5	229.5	ø24.8	24.8	40	6	9	16.5	35	11.5	12	195.5	234.5
ø15.5	15.5	30	6	6	11.5	30	12	7	190.5	229.5	ø24.9	24.9	40	6	9	16.5	35	11.5	12	195.5	234.5
ø15.7	15.7	30	6	6	11.5	30	12	7	190.5	229.5	ø25.0	25.0	40	6	10	17	35	11.5	12	195.5	234.5
ø15.8	15.8	30	6	6	11.5	30	12	7	190.5	229.5	ø29.5	29.5	40	6	12	19.5	35	11.5	14	195.5	234.5
ø15.9	15.9	30	6	6	11.5	30	12	7	190.5	229.5	ø29.7	29.7	40	6	12	19.5	35	11.5	14	195.5	234.5
ø16.0	16.0	30	6	6.5	12	30	12	7	190.5	229.5	ø29.8	29.8	40	6	12	19.5	35	11.5	14	195.5	234.5
ø17.5	17.5	30	6	7	13	35	12	8	195.5	234.5	ø29.9	29.9	40	6	12	19.5	35	11.5	14	195.5	234.5
ø17.7	17.7	30	6	7	13	35	12	8	195.5	234.5	ø30.0	30.0	40	6	12.5	20	35	11.5	15	195.5	234.5
ø17.8	17.8	30	6	7	13	35	12	8	195.5	234.5											

Dimensions (PCC-D1)



Code Locating pin \varnothing (mm)	Common dimensions (mm)									Code Locating pin \varnothing (mm)	Common dimensions (mm)								
	A	B	C	D	E	F	G	H	J		A	B	C	D	E	F	G	H	J
$\varnothing 12.5$	12.5	30	4.5	5	9.5	30	12	6	190.5	$\varnothing 17.9$	17.9	30	6	7	13	35	12	8	195.5
$\varnothing 12.7$	12.7	30	4.5	5	9.5	30	12	6	190.5	$\varnothing 18.0$	18.0	30	6	7	13.5	35	12	8	195.5
$\varnothing 12.8$	12.8	30	4.5	5	9.5	30	12	6	190.5	$\varnothing 19.5$	19.5	30	6	8	14	35	12	10	195.5
$\varnothing 12.9$	12.9	30	4.5	5	9.5	30	12	6	190.5	$\varnothing 19.7$	19.7	30	6	8	14	35	12	10	195.5
$\varnothing 13.0$	13.0	30	4.5	5	10	30	12	6	190.5	$\varnothing 19.8$	19.8	30	6	8	14	35	12	10	195.5
$\varnothing 14.5$	14.5	30	6	5	11	30	12	7	190.5	$\varnothing 19.9$	19.9	30	6	8	14	35	12	10	195.5
$\varnothing 14.7$	14.7	30	6	5	11	30	12	7	190.5	$\varnothing 20.0$	20.0	30	6	8	14.5	35	12	10	195.5
$\varnothing 14.8$	14.8	30	6	5	11	30	12	7	190.5	$\varnothing 24.5$	24.5	40	6	9	16.5	35	11.5	12	195.5
$\varnothing 14.9$	14.9	30	6	5	11	30	12	7	190.5	$\varnothing 24.7$	24.7	40	6	9	16.5	35	11.5	12	195.5
$\varnothing 15.0$	15.0	30	6	6	11.5	30	12	7	190.5	$\varnothing 24.8$	24.8	40	6	9	16.5	35	11.5	12	195.5
$\varnothing 15.5$	15.5	30	6	6	11.5	30	12	7	190.5	$\varnothing 24.9$	24.9	40	6	9	16.5	35	11.5	12	195.5
$\varnothing 15.7$	15.7	30	6	6	11.5	30	12	7	190.5	$\varnothing 25.0$	25.0	40	6	10	17	35	11.5	12	195.5
$\varnothing 15.8$	15.8	30	6	6	11.5	30	12	7	190.5	$\varnothing 29.5$	29.5	40	6	12	19.5	35	11.5	14	195.5
$\varnothing 15.9$	15.9	30	6	6	11.5	30	12	7	190.5	$\varnothing 29.7$	29.7	40	6	12	19.5	35	11.5	14	195.5
$\varnothing 16.0$	16.0	30	6	6.5	12	30	12	7	190.5	$\varnothing 29.8$	29.8	40	6	12	19.5	35	11.5	14	195.5
$\varnothing 17.5$	17.5	30	6	7	13	35	12	8	195.5	$\varnothing 29.9$	29.9	40	6	12	19.5	35	11.5	14	195.5
$\varnothing 17.7$	17.7	30	6	7	13	35	12	8	195.5	$\varnothing 30.0$	30.0	40	6	12.5	20	35	11.5	15	195.5
$\varnothing 17.8$	17.8	30	6	7	13	35	12	8	195.5										

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

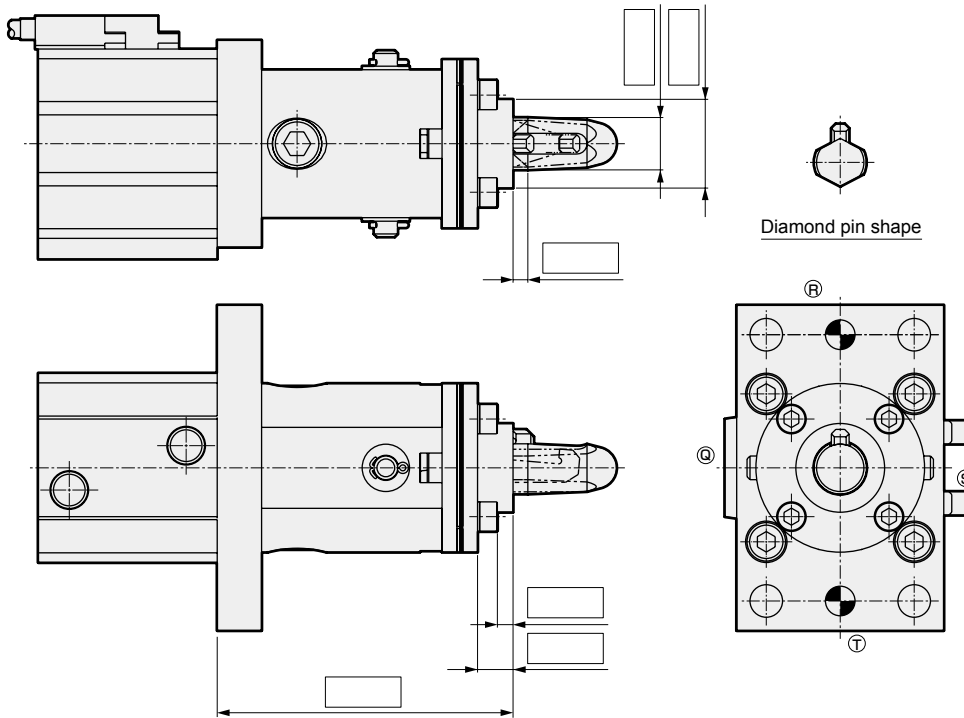
PCC-A1 custom-made specification sheet (copy for use)

1. Basic model No.

PCC-A15 - - ...**Basic**

PCC-QA15 - - ...**Position locking**

2. Specified dimension points (fill in the blanks for required points)



3. Other remarks

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
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Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

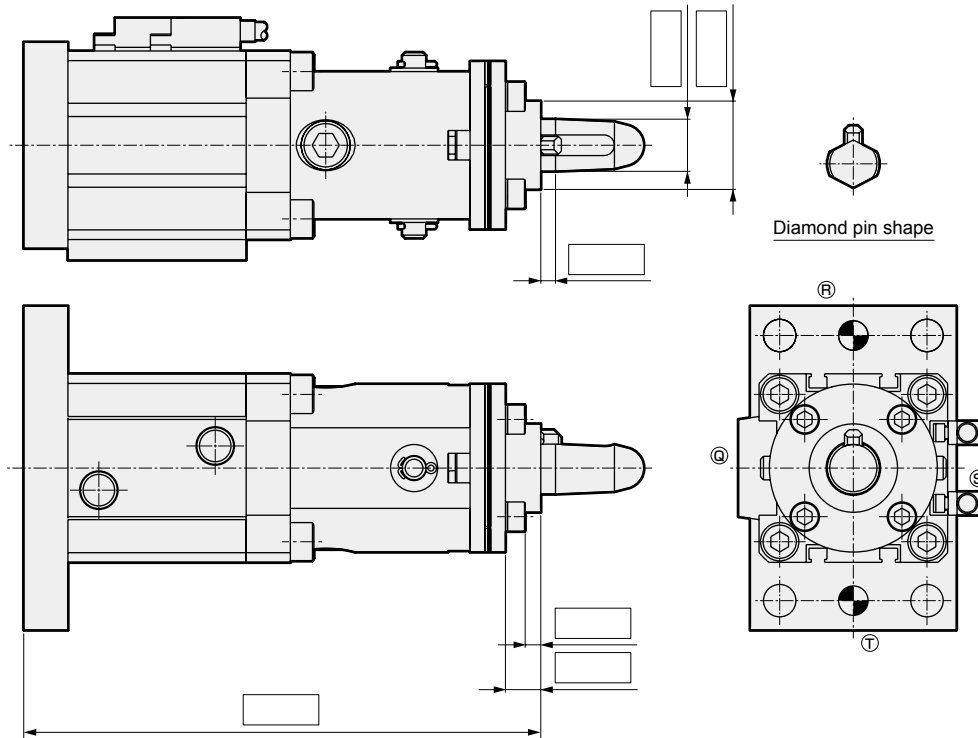
PCC-B1 custom-made specification sheet (copy for use)

1. Basic model No.

PCC-B15 - - ...Basic

PCC-QB15 - - ...Position locking

2. Specified dimension points (fill in the blanks for required points)



3. Other remarks

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

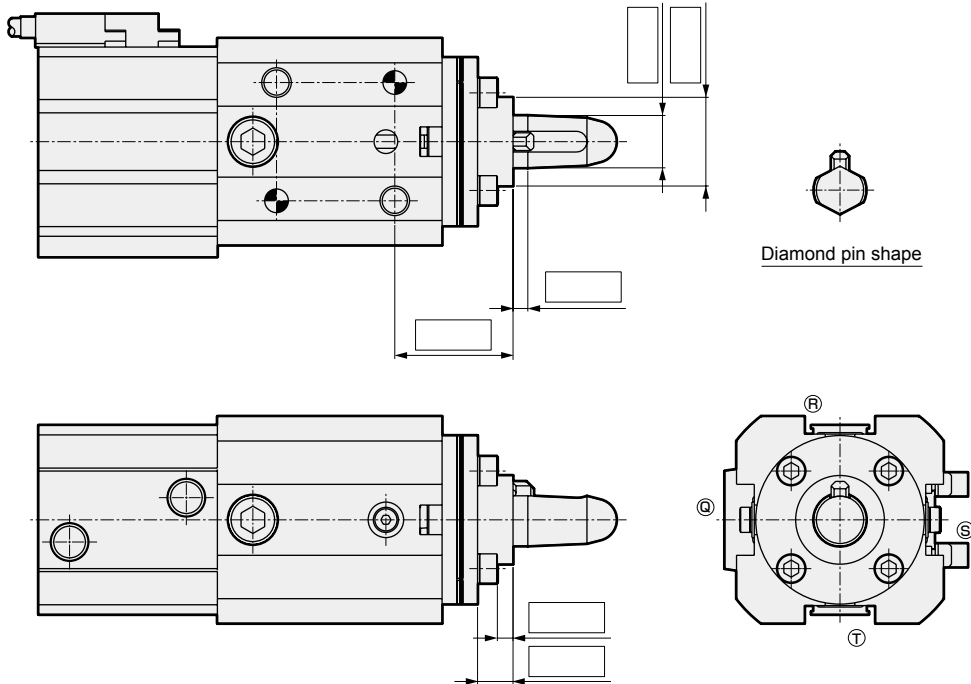
PCC-C1 custom-made specification sheet (copy for use)

1. Basic model No.

PCC-C15 - - ...Basic

PCC-QC15 - - ...Position locking

2. Specified dimension points (fill in the blanks for required points)



3. Other remarks

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

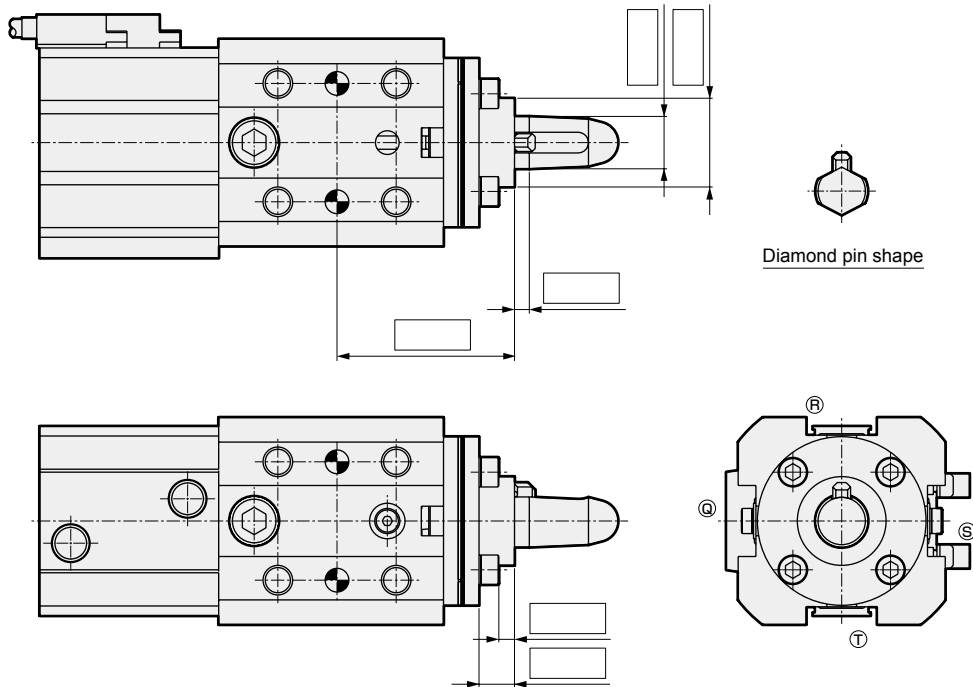
PCC-C2 custom-made specification sheet (copy for use)

1. Basic model No.

PCC-C25 - - ...**Basic**

PCC-QC25 - - ...**Position locking**

2. Specified dimension points (fill in the blanks for required points)



3. Other remarks

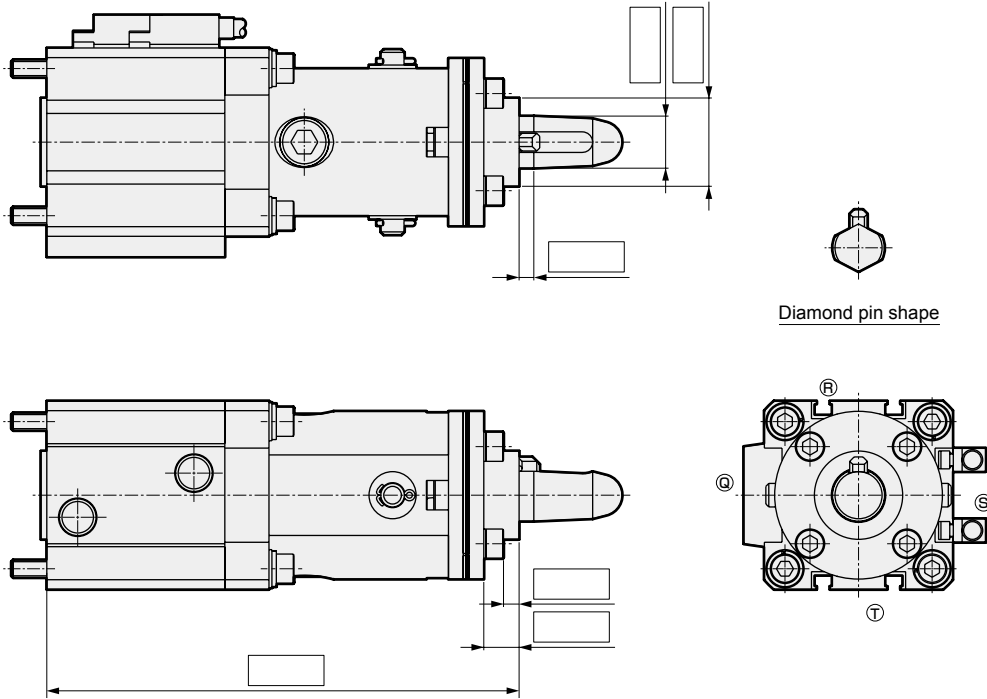
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LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

PCC-D1 custom-made specification sheet (copy for use)

1. Basic model No.

PCC-D15 - - **...Basic**

2. Specified dimension points (fill in the blanks for required points)



Diamond pin shape

3. Other remarks

- LCM
- LCR
- LCG
- LCW
- LCX
- STM
- STG
- STS/STL
- STR2
- UCA2
- ULK*
- JSK/M2
- JSG
- JSC3/JSC4
- USSD
- UFCD
- USC
- UB
- JSB3
- LMB
- LML
- HCM
- HCA
- LBC
- CAC4
- UCAC2
- CAC-N
- UCAC-N
- RCS2
- RCC2
- PCC**
- SHC
- MCP
- GLC
- MFC
- BBS
- RRC
- GRC
- RV3*
- NHS
- HRL
- LN
- Hand
- Chuk
- MecHnd/Chuk
- ShkAbs
- FJ
- FK
- SpdContr
- Ending

Safety precautions

■ Design/selection

⚠ WARNING

- This cylinder has been designed to simultaneously perform positioning and clamping of the workpiece. Do not use it for other applications, as this may cause accidents, damage to the cylinder, etc.
- If fingers may be caught in the clamp lever, install a protective cover, etc.
- When the circuit pressure drops due to power outage or problems in the air source, the clamping force drops, which may cause the workpiece to fall out depending on the mounting orientation of the product. Provide a position locking cylinder or safety measures on the device so that personnel are not injured or machines damaged.
- When mounting this cylinder to a transport robot or the like, it may not be possible to maintain clamping force due to the weight of the workpiece to be transported, inertial force during transportation, etc. Provide scattering protection to the workpiece as required upon considering the weight and inertial force of the workpiece to be transported.

PCC-Q (position locking) only

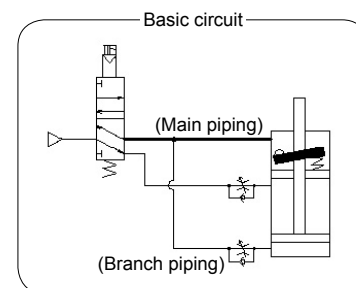
- Cylinder with position locking mechanism (for holding clamping position). Emergency stops (while in operation) can significantly decrease the service life.
- If back pressure is applied to the locking mechanism, the lock may be released. Use a discrete valve, or use an individual exhaust manifold.
- When unlocking, make sure to supply pressure to the clamp (rod) side port, and check that load is not applied to the lock mechanism before unlocking.
- Due to the structure, the clamp lever moves by about 1 mm when the lock is applied.

⚠ CAUTION

- Set the clamping of the workpiece within the clamp stroke range.
- When using this product in the welding process, be sure to ground to avoid current leading to the product.

PCC-Q (position locking) only

- Arrange the air piping of this cylinder (position locking) as shown in the figure on the right. Arranging the pipes differently from the figure at right, such as piping the position locking part as a single unit, may cause problems such as delayed response.
 - Be sure to branch the piping of this cylinder after the valve into the position locking part (main piping) and cylinder part (branch piping) as shown in the figure on the right.
 - Be sure to design the piping so that the lock is released before the cylinder starts operating. Failure to do so may prevent unlocking or cause the piston rod to jump out.



■ Use/maintenance

⚠ WARNING

PCC-Q (position locking) only

- Do not lubricate the lock, as this may cause the holding force to decrease.
- Do not disassemble the lock, as doing so may be dangerous.
- Always use the product with the dust cover on, except for when performing manual release, in order to prevent failure or malfunction.

⚠ CAUTION

- Remove spatter from the product upon removing the plug (R3/8) of the product side cleaning hole. During work, protect the piston rod sliding surface from scratches and dents.
- Locating pin and clamp lever are repair parts. Using an abraded locating pin or clamp lever may cause the position of the workpiece to be shifted while clamping or prevent proper clamping.

PCC-Q (position locking) only

- When locking the first time after leaving the lock released for a long time, a delayed response may occur in the lock. Do not leave the lock pressurized, and operate the lock at each cylinder operation.
- If no air pressure is supplied in vertical downward mounting, etc., holding force may not be sufficient when the lock is manually released. This may cause the clamp to release and the workpiece to fall from its own weight.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending