

For Inert Gas and Vacuum

PCV Pipe Cupla

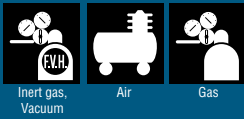
For connection to copper pipes

Working pressure

4.5
4.5 MPa
(46 kgf/cm²)

Valveless

Applicable fluids



Clamps directly on straight copper pipes !
Double seal construction withstands a vacuum of up to 1.3×10^{-1} Pa.

- Clamps directly on to a straight copper pipe eliminating unnecessary welding or flaring.
- Withstands a vacuum of up to 1.3×10^{-1} Pa (when connected) making it possible to be used in leak testing, vacuum suction and refrigerant charge.
- Select from three standard types of seal materials to be used with fluids for air conditioner and refrigerator production lines. Many models to suit various pipe sizes.
- One lever operation simultaneously clamps and seals pipe. Double seal construction for tight fit on end and outside surface of pipe ensures excellent sealing and vacuum resistance.



Wide variations of end configurations; 1/4", 3/8" and blind plug

Standard seal materials fluoro rubber (FKM), hydrogenated nitrile rubber (HNBR) and chloroprene rubber (CR) to suit air conditioner and refrigerator production lines

Double seal design for tight fit on both end and outside of pipe

Many models to cover various pipe sizes

One lever operation simultaneously clamps and seals pipe

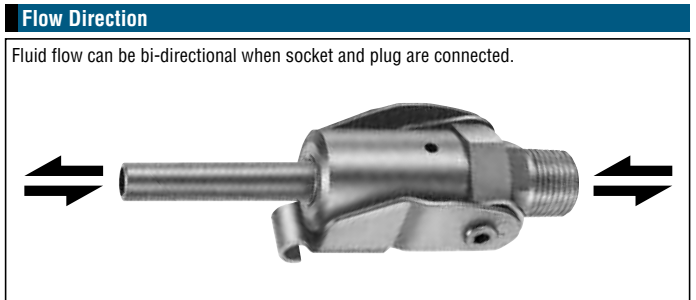


For exclusive use on straight copper pipes

Specifications										
Model	PCV400	PCV470	PCV500	PCV600	PCV630	PCV800	PCV950	PCV1000	PCV1270	PCV1590
Copper pipe OD	ø4.0	ø4.76 (3/16")	ø5.0	ø6.0	ø6.35 (1/4")	ø8.0 (5/16")	ø9.52 (3/8")	ø10.0	ø12.7 (1/2")	ø15.88 (5/8")
Body material	Brass									
Pressure unit	MPa	kgf/cm ²		bar	PSI					
Working pressure	4.5	46		45	653					
Seal material	Seal material	Mark		Working temperature range	Remarks					
	Chloroprene rubber	CR (C308)		-20°C to +80°C	Standard material					
	Fluoro rubber	FKM (X-100)		-20°C to +180°C	Standard material					
Working temperature range	Hydrogenated nitrile rubber		HNBR (H708)	-20°C to +120°C	Standard material					

* Hydrogenated nitrile rubber (HNBR) is colored in blue for easy recognition.

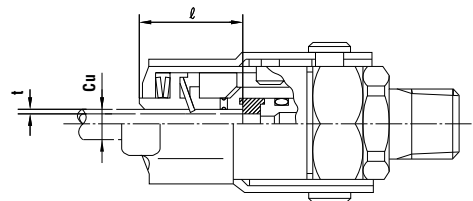
Max. Tightening Torque		Nm {kgf·cm}
Size (Thread)	1/4"	3/8"
Torque	9 {92}	12 {122}



Min. Cross-Sectional Area (mm ²)						
Model	PCV400	PCV470	PCV500	PCV600	PCV630	PCV800
Min. cross-sectional area	3.8	3.8	3.8	9.1	9.1	16.6
Model	PCV950	PCV1000	PCV1270-2	PCV1270-3	PCV1590-2	PCV1590-3
Min. cross-sectional area	16.6	16.6	50.3	73.9	50.3	78.5

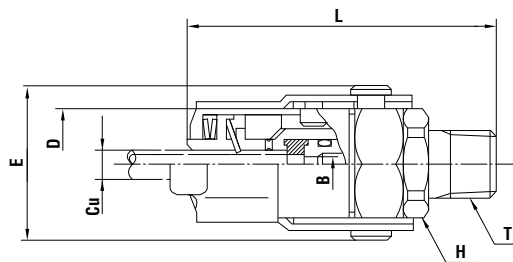
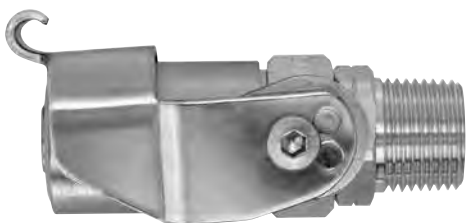
Suitability for Vacuum		1.3 x 10 ⁻¹ Pa {1 x 10 ⁻³ mmHg}
Cupla only	When connected to a pipe	
—	Operational	

Pipe Outside Diameter, Insert Length of Pipe into Cupla, and Minimum Thickness of Pipe Wall (mm)



Items with asterisk (*) are made-to-order products.

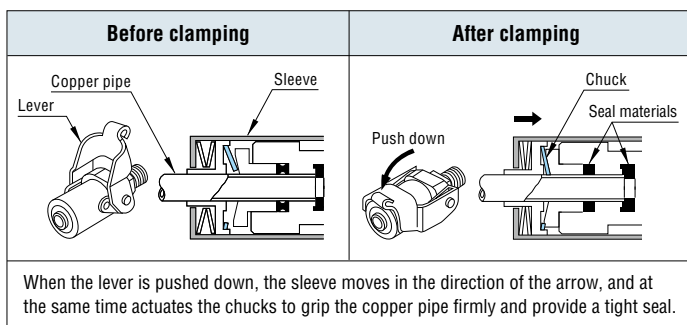
Product Group	Pipe OD (Cu)	Insert Length of Pipe into Cupla (l)	Minimum Thickness of Pipe Wall (t)
PCV400*	ø4.0	19	0.8 or more
PCV470	ø4.76 (3/16")		
PCV500*	ø5.0		
PCV600	ø6.0		
PCV630	ø6.35 (1/4")		
PCV800	ø8.0 (5/16")	20.5	0.8 or more
PCV950	ø9.52 (3/8")		
PCV1000*	ø10.0		
PCV1270	ø12.7 (1/2")	30	1.0 or more
PCV1590	ø15.88 (5/8")		



Product Group	Pipe OD (Cu)	Model	Application	Mass (g)	Dimensions (mm)					
					L	øD	H(WAF)	øB	E	T
PCV400 *	ø4.0	PCV400-2	Rc 1/4	155	(59)	22.2	Hex.17	2.2	(32.5)	R 1/4
		PCV400-3	Rc 3/8	155	(60)		Hex.19			R 3/8
PCV470	ø4.76 (3/16)	PCV470-2	Rc 1/4	155	(60)	22.2	Hex.17	2.2	(32.5)	R 1/4
		PCV470-3	Rc 3/8	160	(61)		Hex.19			R 3/8
		PCV470-0	Blind plug	160	(47)	-	-	-		
PCV500 *	ø5.0	PCV500-2	Rc 1/4	155	(59)	22.2	Hex.17	2.2	(32.5)	R 1/4
		PCV500-3	Rc 3/8	155	(60)		Hex.19			R 3/8
PCV600	ø6.0	PCV600-2	Rc 1/4	150	(60)	22.2	Hex.17	3.4	(32.5)	R 1/4
		PCV600-3	Rc 3/8	155	(61)		Hex.19			R 3/8
		PCV600-0	Blind plug	155	(47)	-	-	-		
PCV630	ø6.35 (1/4)	PCV630-2	Rc 1/4	145	(60)	22.2	Hex.17	3.4	(32.5)	R 1/4
		PCV630-3	Rc 3/8	150	(61)		Hex.19			R 3/8
		PCV630-0	Blind plug	150	(47)	-	-	-		
PCV800	ø8.0 (5/16)	PCV800-2	Rc 1/4	175	(62)	24.8	Hex.17	4.6	(35.5)	R 1/4
		PCV800-3	Rc 3/8	180	(63)		Hex.19			R 3/8
		PCV800-0	Blind plug	185	(50)	-	-	-		
PCV950	ø9.52 (3/8)	PCV950-2	Rc 1/4	175	(62)	24.8	Hex.17	4.6	(35.5)	R 1/4
		PCV950-3	Rc 3/8	180	(63)		Hex.19			R 3/8
		PCV950-0	Blind plug	180	(50)	-	-	-		
PCV1000 *	ø10.0	PCV1000-2	Rc 1/4	155	(62)	24.8	Hex.17	4.6	(35.5)	R 1/4
		PCV1000-3	Rc 3/8	155	(63)		Hex.19			R 3/8
PCV1270	ø12.7 (1/2)	PCV1270-2	Rc 1/4	470	(80)	34.8	Hex.24	8.0	(45.0)	R 1/4
		PCV1270-3	Rc 3/8	465	(81)		Hex.24			R 3/8
		PCV1270-0	Blind plug	475	(68)	-	-	-		
PCV1590	ø15.88 (5/8)	PCV1590-2	Rc 1/4	424	(80)	34.8	Hex.24	8.0	(45.0)	R 1/4
		PCV1590-3	Rc 3/8	435	(81)		Hex.24			R 3/8
		PCV1590-0	Blind plug	445	(68)	-	-	-		

* For mass with a plug, add (brass body) 2P-V : 39 g, 3P-V : 67 g, (stainless steel body) 2P-V : 34 g, or 3P-V : 59 g
 * Available on request

Clamping Mechanism



Application Example



Compressor pressure test

Before use, please be sure to read "Safety Guide" described at the end of this book and "Instruction Sheet" that comes with the products.