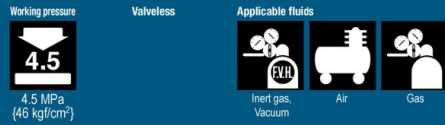


For Inert Gas and Vacuum

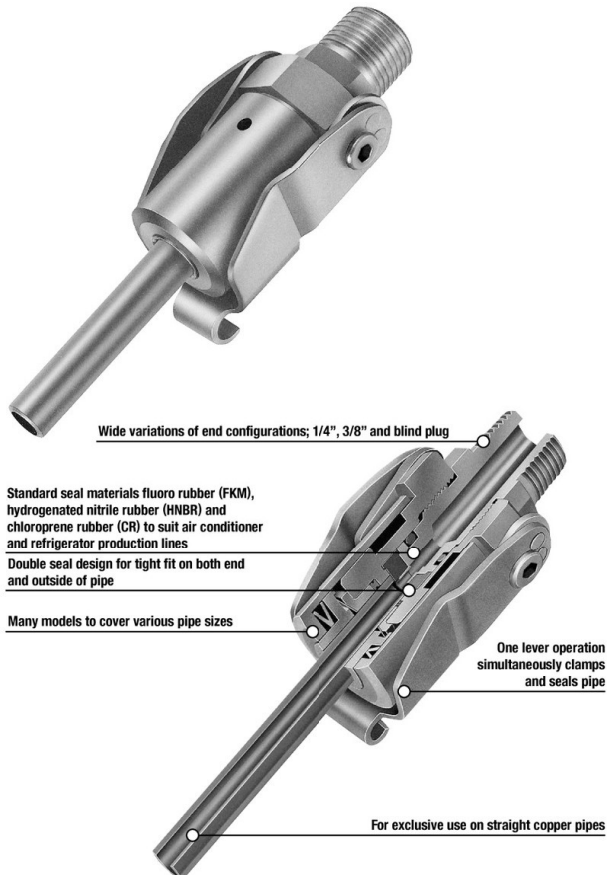
PCV PIPE CUPLA

For connection to copper pipes



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

- Clamps directly on to straight copper pipes 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.



Specifications

Model	PCV400	PCV470	PCV500	PCV600	PCV630	PCV800	PCV950	PCV1000	PCV1270	PCV1590
Copper pipe OD mm	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 Working temperature range	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			
	Hydrogenated nitrile rubber		HNBR (H708)		-20°C to +120°C		Standard material			

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

Maximum Tightening Torque

Nm (kgf·cm)

Size (Thread)	1/4"	3/8"
Torque	9 {92}	12 {122}

Flow Direction

Fluid flow can be bi-directional when socket and plug are connected.



Minimum Cross-Sectional Area

(mm²)

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

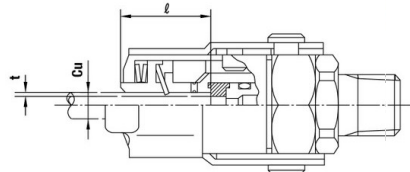
Suitability for Vacuum

1.3×10^{-1} Pa { 1×10^{-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)

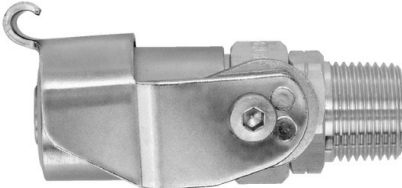
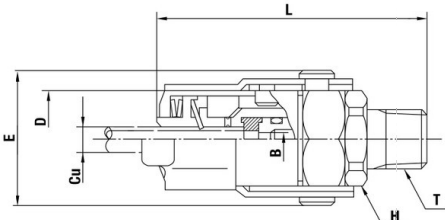


Items with asterisk (*) are made-to-order products.

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")	20.5	
PCV800	ø8.0 (5/16")		
PCV950	ø9.52 (3/8")		
PCV1000*	ø10.0		
PCV1270	ø12.7 (1/2")	30	1.0 or more
PCV1590	ø15.88 (5/8")		

PCV PIPE CUPLA

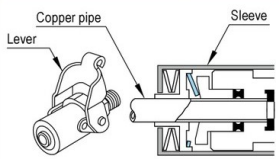
Models and Dimensions WAF : WAF stands for width across flats.

										
Product Group	Copper pipe OD mm	Model	Application (Thread)	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	9.7		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	10.0		R 3/8
		PCV1590-0	Blind plug	445	(68)		-	-		-

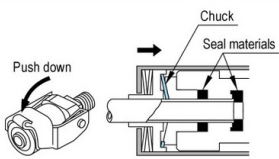
* For mass with a plug, add (brass body) 2P-V : 39 g, 3P-V : 67 g, (stainless steel body) 2P-V : 34 g, or 3P-V : 59 g
* Available on request

Clamping Mechanism

Before clamping



After clamping



When the lever is pushed down, the sleeve moves in the direction of the arrow, and at the same time actuates the chucks to grip the copper pipe firmly and provide a tight seal.

Application Example



Compressor pressure test