For Low Pressure (Air)

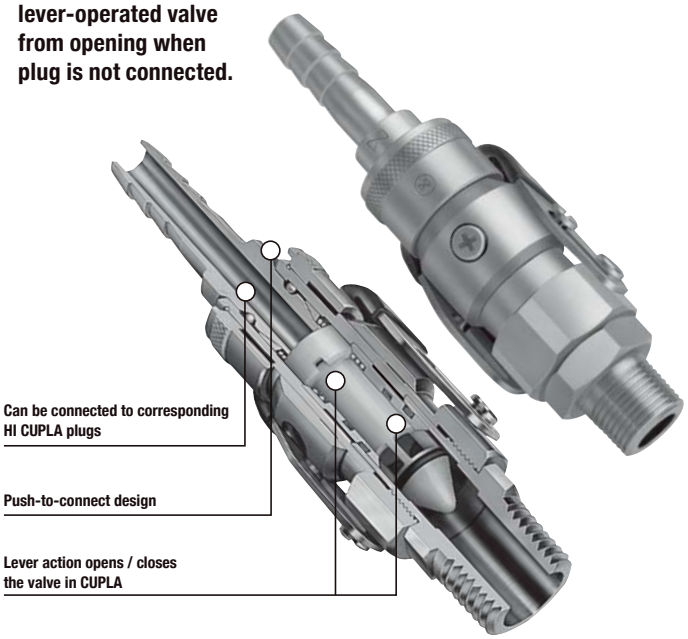
PURGE HI CUPLA

Air line coupling with residual pressure release function

Working pressure	Valve structure	Applicable fluid
1.0		
1.0 MPa {10 kgf/cm²}	One-way shut-off	Air

Push-to-connect operation even with existing internal pressure! Eliminates unpleasant popping noise and hose whip motion on disconnection.

- **Just push in the plug for connection regardless of internal pressure in socket.**
- **Even after connection, lever operation gives perfect control over valve opening/closing.**
- **In disconnection, lever action releases residual air pressure in the plug without unpleasant popping noise and hose whip motion.**
- **Safe design prevents lever-operated valve from opening when plug is not connected.**



Specifications

Body material	Brass (Chrome plated)			
Size (Thread)	1/4", 3/8", 1/2", 3/4"			
Pressure unit	**MPa**	**kgf/cm²**	**bar**	**PSI**
Working pressure	1.0	10	10	145
Seal material	**Seal material**	**Mark**	**Working temperature range**	**Remarks**
Working temperature range *1	Nitrile rubber	NBR	-20˚C to +60˚C	Standard material

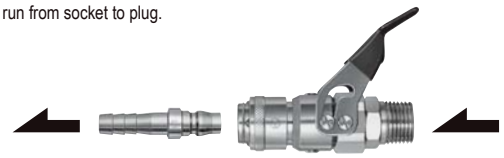
*1: The operable temperature range depends on the operating conditions.

Maximum Tightening Torque — Nm {kgf•cm}

Model	PV-20SM	PV-30SM	PV-40SM	PV-400SM	PV-600SM
Torque	9 {92}	11 {112}	30 {306}	30 {306}	50 {510}

Flow Direction

Fluid must run from socket to plug.



Interchangeability

Models 20, 30 and 40 can be connected to plugs of HI CUPLA Models 10, 17, 20, 30 and 40. Interchangeable with each models of NUT CUPLA series and HI CUPLA series.
Models 400 and 600 can be connected with plugs of HI CUPLA models 400, 600 and 800.
Please see page 21 for "HI CUPLA Series Interchangeability".

Minimum Cross-Sectional Area — (mm²)

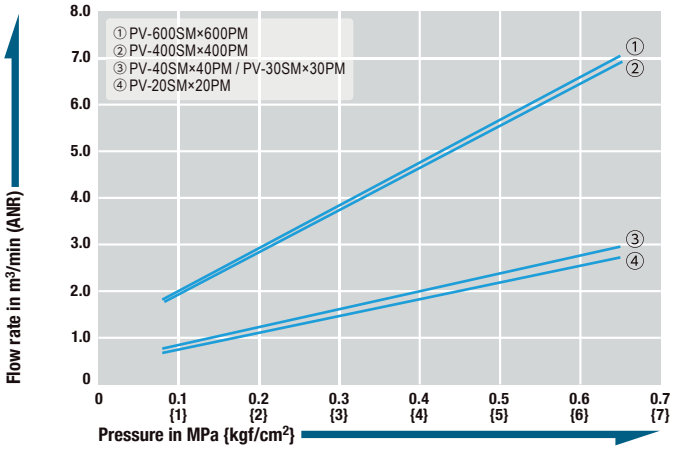
Model	PV-20SM	PV-30SM	PV-40SM	PV-400SM	PV-600SM
Min. cross-sectional area	38	41	41	94	94

Suitability for Vacuum

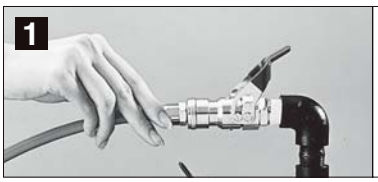
Not suitable for vacuum application in either connected or disconnected condition.

Pressure - Flow Characteristics

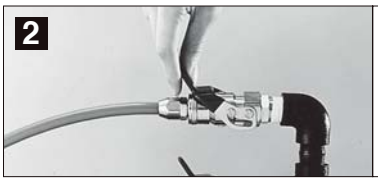
[Test conditions] - Fluid : Air



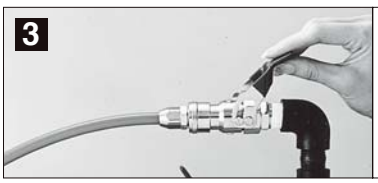
How to Operate



1 Just push the plug into socket.
(In this stage the valve of the socket is not open.)



2 Turning down the lever opens the valve and allows the fluid flow.
(The turned-down lever works as a sleeve stopper and prevents disconnection.)

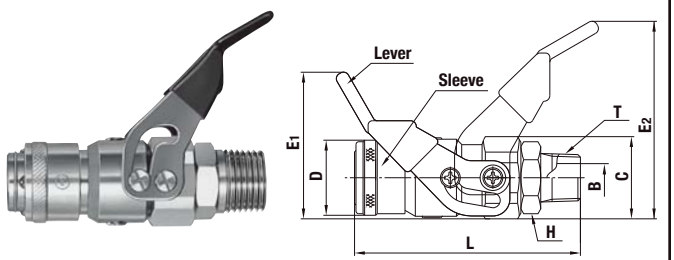


3 When the lever is pulled up, residual air pressure in the plug is purged without unpleasant popping noise and hose whip motion on disconnection. In this stage, the socket valve is still closed.

Models and Dimensions

WAF : WAF stands for width across flats.

Socket



Model	Application (Thread)	Mass (g)	Dimensions (mm)							
			L	øD	E_1	E_2	H(WAF)	øC	T	øB
PV-20SM	Rc 1/4	225	(79)	26.5	(50.5)	(70)	Hex.22	29	R 1/4	7
PV-30SM	Rc 3/8	229	(80)	26.5	(50.5)	(70)	Hex.22	29	R 3/8	10
PV-40SM	Rc 1/2	235	(82)	26.5	(50.5)	(70)	Hex.22	29	R 1/2	14
PV-400SM	Rc 1/2	411	(94)	35	(61.5)	(82)	Hex.30	37.5	R 1/2	13
PV-600SM	Rc 3/4	424	(97)	35	(61.5)	(82)	Hex.30	37.5	R 3/4	18