# For Low Pressure (Air)

# Purge Hi Cupla

Air line coupling with residual pressure release function

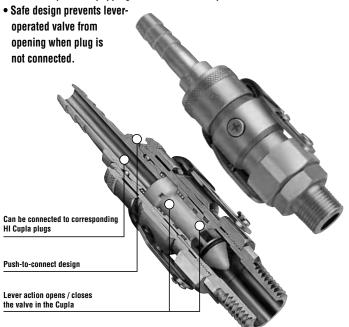






# **Push-to-connect operation even with** existing internal pressure! Eliminates unpleasant popping noise and hose whip motion on disconnection.

- 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.



Can be connected to corresponding HI Cupla plugs  Push-to-connect design  Lever action opens / closes the valve in the Cupla
How to Operate



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



Turning down the lever opens the valve and allows the fluid flow.

(The turned-down lever works as a sleeve stopper and prevents disconnection.)



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.

### **Specifications Body material** Brass (Chrome plated) Size (Thread) 1/4", 3/8", 1/2", 3/4" Pressure unit MPa kqf/cm<sup>2</sup> Working pressure 10 10 145 Seal material Seal material Mark Remarks Working temperature range NBR (SG) Nitrile rubber -20°C to +60°C | Standard material

Max. Tightening Torque Nm {kgf•cr					ı {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. Models 400, 600 can be connected to plugs of Hi Cupla Models 400, 600 and 800. Interchangeable with each corresponding Hi Cupla Series models

Min. 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**

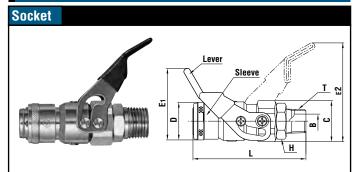
Not suitable for vacuum application in either connected or disconnected condition.

# **Pressure - Flow Characteristics**

[Test conditions] •Fluid : Air •Temperature : Room temperature 5.0 PV-400SM × 400PM PV-600SM × 600PM 4.0 3.0 Flow rate in m<sup>3</sup>/min 2.0 PV-30SM × 30PM 1.0 PV-20SM × 20PM Pressure in MPa {kgf/cm²}

# **Models and Dimensions**

WAF: WAF stands for width across flats



Model		Mass	Dimensions (mm)							
Model	Application	(g)	L	øD	E1	E <sub>2</sub>	H(WAF)	øC	Т	øΒ
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

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

# For Low Pressure (Air)

# Purge Line Cupla

Simple air line coupling manifold with residual pressure release function







# Residual pressure can be released by a mere lever turn. Very smooth connection/disconnection!

- Single action, just push in the plug to connect regardless of internal pressure
- No unpleasant noise of air pressure discharge and no hose whip motion on disconnection for safety operation.
- Safe design socket valve will not open or close unless plug is connected.
- Even after connection, a lever turn will open/close valve with perfect control of air flow or line shut-off.
- Enables simultaneous air supply to three outlets from a single air line. (A single outlet Purge Hi Cupla is also available – see the pages of Purge Hi Cupla for details.)



# **Application Example**

Specifications					
Body material	Brass (Chrome plated)				
Size	Inlet	R 1/2			
3126	Outlet Socket (PV-30SM)				
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	Nitrile rubber	NBR (SG)	-20°C to +60°C	Standard material	

Max. Tightening Torque	e Nm {kgf•cm}
Size (Thread)	1/2"
Torque	30 {306}

# **Flow Direction**

Fluid must run from the intake port to the outlet ports. Please refer to the flow directions (arrows) on the " Models and Dimensions."

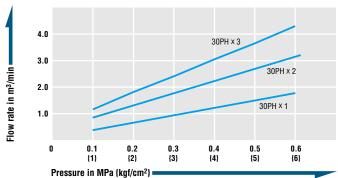
Can be connected with plugs for Hi Cupla Models 10, 17, 20, 30 and 40. Interchangeable with each corresponding Hi Cupla Series models.

Min. Cross-Sectional Area	(mm²)
Min. cross-sectional area	41

# **Suitability for Vacuum**

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

[Test conditions] •Fluid : Air •Temperature : Room temperature



# **Models and Dimensions**

