

For Low Pressure (Air)

Full-Blow Cupla

Air line coupling with low pressure loss and high flow rate

Working pressure

1.5
1.5 MPa
(15 kgf/cm²)

Valve structure



One-way shut-off

Applicable fluid

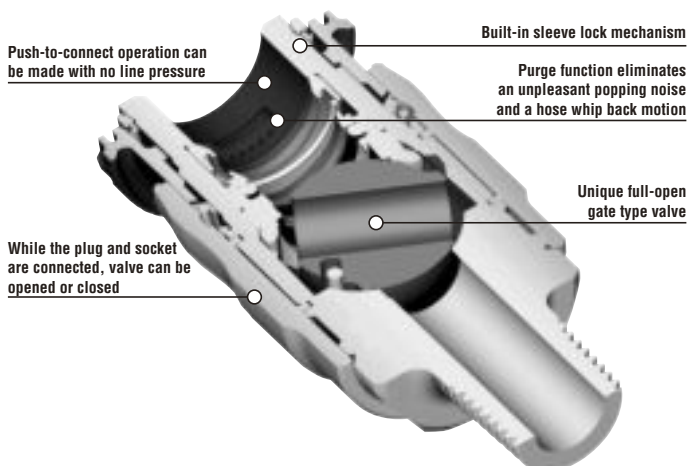


Air

Unique full-open gate type valve mechanism realizes low pressure loss and high flow rate, which reduces required source air volume.

- The flow rate is increased by up to 40% more than that of conventional Cuplas.
- During connection and disconnection, the valve is closed, enabling connection/disconnection under zero line pressure.
- When the sleeve of socket is returned to its original position, the purge mechanism releases the residual air pressure in the plug, eliminating an unpleasant popping noise and a hose whip back motion on disconnection.
- Built-in sleeve lock mechanism prevents accidental disconnection of Cuplas, ensuring safe operation.
- The valve can be opened and closed while the socket and plug are connected.
- The weight is reduced by 30 to 45% compared with that of conventional Cuplas.

Note: Direct mounting of Full-Blow Cupla to percussive and vibrating tools should be avoided.



Specifications

Body material		Aluminum alloy		
Size	Thread and hose barb	1/4", 3/8", 1/2"		
	SN type	For ø6.5 mm x ø10 mm, ø8 mm x ø12 mm polyurethane hose For ø8.5 mm x ø12.5 mm, ø11 mm x ø16 mm polyurethane hose		
Working pressure	MPa	1.5		
	kgf/cm ²	15		
	bar	15		
	PSI	218		
Seal material		Nitrile rubber	NBR (SG)	Working temperature range
Working temperature range		-20°C to +60°C		
		Standard material		

Max. Tightening Torque

Nm (kgf·cm)

Size (Thread)	1/4"	3/8"	1/2"
Torque	14 {143}	22 {224}	60 {612}

Flow Direction

Fluid must run from socket to plug.



Interchangeability

Can be connected with plugs for Hi Cupla Models 10, 17, 20, 30, and 40. Interchangeable with all other Hi Cupla Series products. Please see the page for "Hi Cupla Series Interchangeability." Cannot be interchangeable with some plugs for plastic Hi Cupla 250 (discontinued product).

Min. Cross-Sectional Area

(mm²)

Socket \ Plug	17PH	20PH	30PH	40PH	10PM	20PM	30PM	40PM	20PF	30PF	40PF
FBH-20SH	16	20	24	24	13	24	24	24	24	24	24
FBH-30SH	16	20	44	44	13	44	44	44	44	44	44
FBH-40SH	16	20	44	44	13	44	44	44	44	44	44
FBH-20SM	16	20	44	44	13	44	44	44	44	44	44
FBH-30SM	16	20	44	44	13	44	44	44	44	44	44
FBH-40SM	16	20	44	44	13	44	44	44	44	44	44
FBH-20SF	16	20	44	44	13	44	44	44	44	44	44
FBH-30SF	16	20	44	44	13	44	44	44	44	44	44
FBH-40SF	16	20	44	44	13	44	44	44	44	44	44
FBH-65SN	16	20	24	24	13	24	24	24	24	24	24
FBH-80SN	16	20	44	44	13	44	44	44	44	44	44
FBH-85SN	16	20	44	44	13	44	44	44	44	44	44
FBH-110SN	16	20	44	44	13	44	44	44	44	44	44

Suitability for Vacuum

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

Pressure - Flow Rated Characteristics (Comparison with Hi Cupla)

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

