For Air

Full-Blow Cupla

Low pressure loss & high flow rate





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 the original position, the purge mechanism releases the residual pressure inside the plug eliminating unpleasant pop and hose whipping motion.
- Built-in sleeve lock mechanism prevents unexpected disconnection of Cuplas, assuring safe operation.
- The valve can be opened and closed while the socket and plug is connected.

 \bullet 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							
	1/4" (20 type) • 3/8" (30 type) • 1/2" (40 type)							
Size	For ø6.5 mm × ø10 mm • ø8 mm × ø12 mm polyurethane hose							
	For ø8.5 mm × ø12.5 mm • ø11 mm × ø16 mm polyurethane hose							
Working pressure MPa {kgf/cm ² }	1.5 {15}							
Pressure resistance MPa {kgf/cm ² }	2.0 {20}							
Seal material	Seal material	Mark	Working temperature range	Remarks				
Working temperature range	Nitrile rubber	NBR (SG)	-5°C~+60°C	Standard material				

Max. Tightening Torque N•m {kgf•cm}							
Size	1/4"	3/8"	1/2"	spring nut			
Torque	14 {143}	22 {224}	66 {612}	9~11 {92~112}			

Flow Direction



Interchangeability

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

Min. Cross-Sectional Area (mm							
Model	17PH	20PH	20PM/PF	30PH	30PM/PF	40PH	40PM/PF
FBH-20SH	16	20	23.8	23.8	23.8	23.8	23.8
FBH-30SH	16	20	44.2	44.2	44.2	44.2	44.2
FBH-40SH	16	20	44.2	44.2	44.2	44.2	44.2
FBH-20SM	16	20	44.2	44.2	44.2	44.2	44.2
FBH-30SM	16	20	44.2	44.2	44.2	44.2	44.2
FBH-40SM	16	20	44.2	44.2	44.2	44.2	44.2
FBH-20SF	16	20	44.2	44.2	44.2	44.2	44.2
FBH-30SF	16	20	44.2	44.2	44.2	44.2	44.2
FBH-40SF	16	20	44.2	44.2	44.2	44.2	44.2
FBH-65SN	16	20	23.8	23.8	23.8	23.8	23.8
FBH-80SN	16	20	44.2	44.2	44.2	44.2	44.2
FBH-85SN	16	20	44.2	44.2	44.2	44.2	44.2
FBH-110SN	16	20	44.2	44.2	44.2	44.2	44.2

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 3.0 FBH-40SM × 40PN 2.5 FBH-20SM × 20PM 2.0 FBH-30SM × 30PM 1.5 Hi Cupla ⁻low Q in m³/min **=** 1.0 0.5 0.4 {4} 0.2 0.5 0.6 0.7 0.1 0.3 **{1**} {2} {3} {5} {6} {7} Pressure in MPa {kgf/cm²}