

For Air

Hi Cupla Ace

Lightweight plastic coupling with automatic safety lock for air line applications

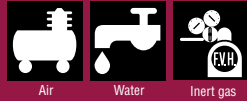
Working pressure



Valve structure



Applicable fluid



The weight is merely a quarter of steel Hi Cupla's and smooth push-in connection is achieved. Automatic sleeve lock for safety operation.

- Pressure ratings comparable to steel Cuplas.
- A built-in "automatic lock mechanism" to lock the sleeve when connected, thus prevents accidental detachment.
- Just push plug into socket for simple connection.
- The weight is a quarter of steel Hi Cupla for easy handling.
- Can be used for air, water, and inert gases.
- Plastic body will cause minimum risk of damage even when in contact with tools or equipment.
- Air flows in either direction from plug or from socket side when coupled.
- Plug and socket with hose guard nut are also available (see the pages of NK Cupla Hose / NK Cupla Coil Hose for details).

Specifications

Body material	Engineering plastics (PBT, POM)			
Size	1/4" (20 type) • 3/8" (30 type)			
	For ø5mm x ø8mm • ø6mm x ø9mm • ø6.5mm x ø10mm polyurethane hose			
	For ø8mm x ø12mm • ø8.5mm x ø12.5mm polyurethane hose			
	HA-T type • Inlet : 20P-PLA • Outlet : HA-65S x 2			
Working pressure MPa (kgf/cm ²)	1.5 (15) / 1.0 (10) for Model HA-T			
Pressure resistance MPa (kgf/cm ²)	2.0 (20) / 1.5 (15) for Model HA-T			
Seal material	Seal material	Mark	Working temperature range	Remarks
Working temperature range	Nitrile rubber	NBR (SG)	-5°C~+60°C	Standard material

• Plastic Plug : Working pressure 1.0MPa (10kgf/cm²), Pressure resistance 1.5MPa (15kgf/cm²)

Tightening Torque Range

	N·m (kgf·cm)		
Size	20/30SM	50/60/65SN	80/85SN
Torque	2.5~3 (26~29)	1.6~2.0 (16~20)	2.2~2.8 (22~29)

Flow Direction

Air flows in either direction from plug or from socket side when coupled.



Interchangeability

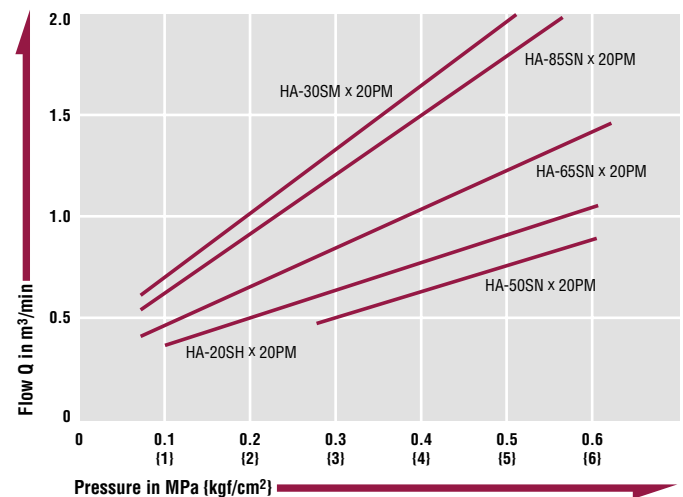
Can be connected with Hi Cupla Models 20, 30 and 40. Interchangeable with each corresponding Hi Cupla Series models.

Suitability for Vacuum

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

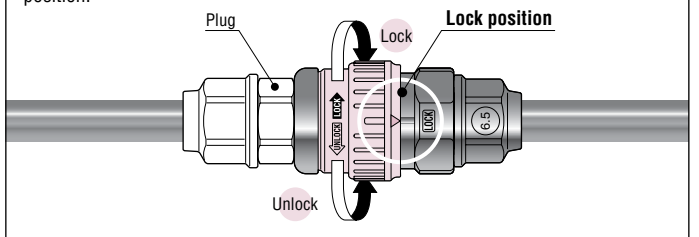
Pressure - Flow Characteristics

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



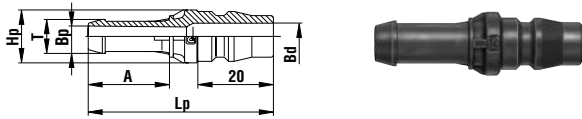
Automatic sleeve lock function

Hi Cupla Ace can be connected even if the locking sleeve is in the "lock" position, but when connected it cannot be disconnected without turning the sleeve to unlock position.



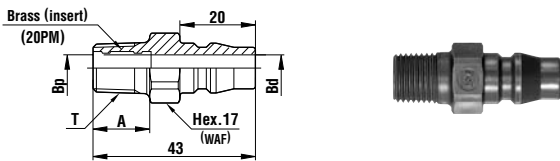
Models and Dimensions

Plug PH type (Plastic plug / Hose barb)



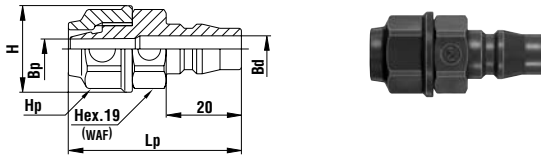
Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			Lp	øHp	A	øT	øBp	øBd
20PH-PLA	1/4"	3	49	14	21.5	9	5.5	7
30PH-PLA	3/8"	4	52	16	23.5	11.5	7	7

Plug PM type (Plastic plug / Male thread)



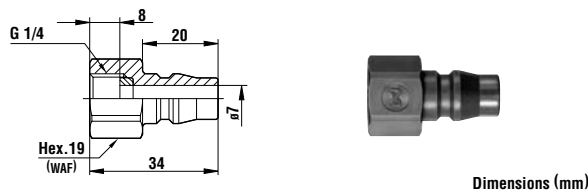
Model	Application	Mass (g)	Dimensions (mm)			
			A	T	øBp	øBd
20PM-PLA	Rc 1/4	8	15	R 1/4	7	7.4
30PM-PLA	Rc 3/8	6	15	R 3/8	10	7.4

Plug PN type (Plastic plug / For urethane hose with spring nut connection)



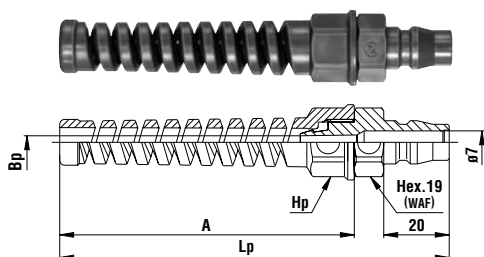
Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			Lp	øH	Hp(WAF)	øBp	øBd
50PN-PLA	ø5 mm x ø8 mm	9	(46)	23	Hex.19	4	7
60PN-PLA	ø6 mm x ø9 mm	9	(46)	23	Hex.19	4.7	7
65PN-PLA	ø6.5 mm x ø10 mm	9	(46)	23	Hex.19	5.3	7
80PN-PLA	ø8 mm x ø12 mm	12	(48.5)	26	Hex.22	6.5	6.5
85PN-PLA	ø8.5 mm x ø12.5 mm	12	(48.5)	26	Hex.22	7	7

Plug PFF type (Plastic plug / Female thread / Parallel thread)



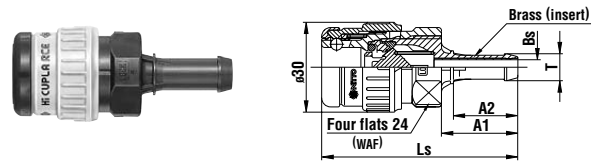
Model	Application	Mass (g)
20PFF-PLA	G 1/4	6

Plug PNG type (For hose with hose guard nut connection)



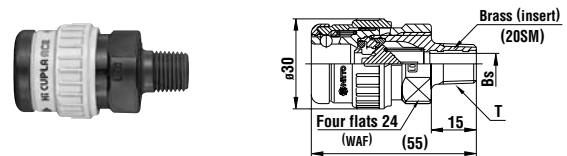
Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			Lp	Hp(WAF)	A	øBp
50PNG-PLA	ø5 mm x ø8 mm	14	119	Hex.19	90	4
65PNG-PLA	ø6.5 mm x ø10 mm	15	119	Hex.19	90	5.3
85PNG-PLA	ø8.5 mm x ø12.5 mm	17	119	Hex.22	90	7

Socket SH type (Hi Cupla Ace / Hose barb)



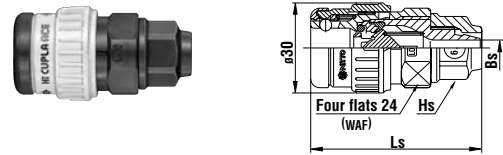
Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			Ls	A1	A2	øT	øBs
HA-20SH	1/4"	26	(65.5)	25.5	21.5	9	5
HA-30SH	3/8"	28	(68)	28	23.5	11.5	7

Socket PM type (Hi Cupla Ace / Male thread)



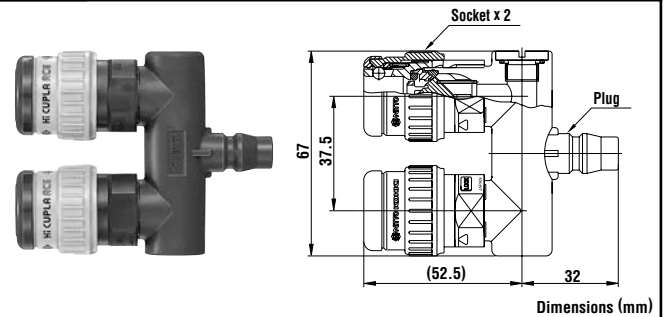
Model	Application	Mass (g)	Dimensions (mm)	
			T	øBs
HA-20SM	Rc 1/4	27	R 1/4	7
HA-30SM	Rc 3/8	26	R 3/8	8

Socket SN type (Hi Cupla Ace / For urethane hose with spring nut connection)



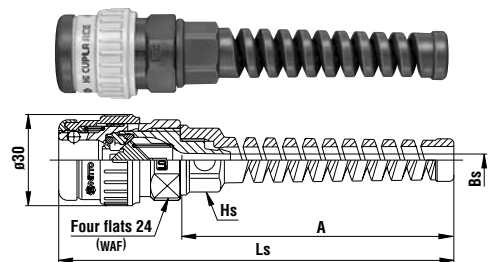
Model	Application (Hose)	Mass (g)	Dimensions (mm)		
			Ls	Hs(WAF)	øBs
HA-50SN	ø5 mm x ø8 mm	27	(57)	Hex.19	4
HA-60SN	ø6 mm x ø9 mm	27	(57)	Hex.19	4.7
HA-65SN	ø6.5 mm x ø10 mm	27	(57)	Hex.19	5.3
HA-80SN	ø8 mm x ø12 mm	29	(59.5)	Hex.22	6.5
HA-85SN	ø8.5 mm x ø12.5 mm	29	(59.5)	Hex.22	7

Socket T type (Hi Cupla Ace / For two branch lines)



Model	Inlet / Outlet	Mass (g)
HA-T	20P-PLA / HA-65S x 2	73

Socket SNG type (For hose with hose guard nut connection)



Model	Application (Hose)	Mass (g)	Dimensions (mm)			
			Ls	Hs(WAF)	A	øBs
HA-50SNG	ø5 mm x ø8 mm	31	130	Hex.19	90	4
HA-65SNG	ø6.5 mm x ø10 mm	33	130	Hex.19	90	5.3
HA-85SNG	ø8.5 mm x ø12.5 mm	35	130	Hex.22	90	7