

## For Low Pressure (Air)

# HI CUPLA for Connection to Braided Hoses

## NUT CUPLA

## NUT CUPLA 200

## ROTARY NUT CUPLA

For connection to urethane hose, braided hose

Working pressure	Valve structure	Applicable fluids (Steel applies to air only)

**No hose clamp required!**  
**Fitted with hose guard nut to prevent possible kinking.**  
**HI CUPLA for connection to braided hoses is now available.**

- Nut types are available in HI CUPLA Series and HI CUPLA 200 Series. Hose guard nut type available to prevent hose kinking.
- To mount on hose, simply slide it over the nipple and tighten the nut.
- The design to tighten outside of hose reduces hose slip away or fluid leaks.
- Also available are ROTARY NUT CUPLA equipped with ball bearing swivel mechanism to prevent and relieve tension on operator's hands.



Specifications (NUT CUPLA / NUT CUPLA 200 / ROTARY NUT CUPLA)				
Body material	Steel (Chrome plated), Stainless Steel (SUS304)			
Urethane hose size	For ø5 mm×ø8 mm, ø6 mm×ø9 mm hose For ø6.5 mm×ø10 mm, ø8 mm×ø12 mm hose For ø8.5 mm×ø12.5 mm, ø11 mm×ø16 mm hose			
Pressure unit	MPa	kgf/cm <sup>2</sup>	bar	PSI
Working pressure	1.5	15	15	218
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.

Specifications (HI CUPLA for Connection to Braided Hoses)				
Body material	Steel (Chrome plated)		Brass	
Braided hose size	For ø9 mm×ø15 mm hose			
Working pressure	MPa	1.5	1.0	
	kgf/cm <sup>2</sup>	15	10	
	bar	15	10	
	PSI	218	145	
Seal material	Seal material	Mark	Working temperature range	Remarks
Working temperature range *1	Nitrile rubber	NBR	-20°C to +60°C	Standard material

- Maximum working pressure and temperature range of PN/SN type for braided hoses depends upon the specification of the braided hose to be used.

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

Tightening Torque Range			Nm {kgf·cm}
Model	SN, PN, SNR Type	ø5SNG, PNG, SNRG Type	ø5SNG, PNG, SNRG Type
Torque	9 to 11 {92 to 112}	5 to 6 {51 to 61}	7 to 8 {71 to 82}

To mount on braided hose or urethane hose, slide it over to the hose barb and tighten the nut until it is flush against the hose barb base. It is recommended that grease is applied to the inside of the nut (threaded part and hose contact part) for easy tightening.

**Flow Direction**

Fluid must run from socket to plug.

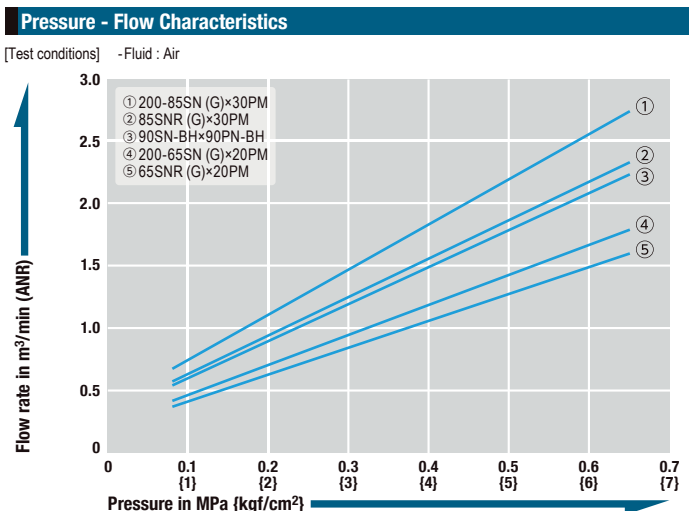
**Interchangeability**

Interchangeable with HI CUPLA models 10, 17, 20, 30, 40, and 60.  
 Interchangeable with each models of NUT CUPLA series and HI CUPLA series (except models 400, 600, and 800).  
 Please see page 21 for "HI CUPLA Series Interchangeability".

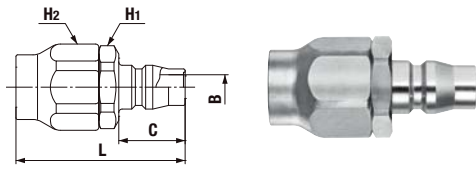
Minimum Cross-Sectional Area (mm <sup>2</sup> )													
Socket	Plug	17PH	20PH	30PH	40PH	10PM	20PM	30PM	40PM	20PF	30PF	40PF	90PN-BH
		200-50SN	16	16	16	16	13	16	16	16	16	16	16
200-60SN	16	20	22	22	13	22	22	22	22	22	22	22	22
200-65SN	16	20	22	22	13	22	22	22	22	22	22	22	22
200-80SN	16	20	41	41	13	41	41	41	41	41	41	41	41
200-85SN	16	20	41	41	13	41	41	41	41	41	41	41	41
200-110SN	16	20	41	41	13	41	41	41	41	41	41	41	41
200-50SNG	16	16	16	16	13	16	16	16	16	16	16	16	16
200-65SNG	16	20	22	22	13	22	22	22	22	22	22	22	22
200-85SNG	16	20	40	41	13	41	41	41	41	41	41	41	41
90SN-BH	16	20	33	33	13	33	33	33	33	33	33	33	33

**Suitability for Vacuum**

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



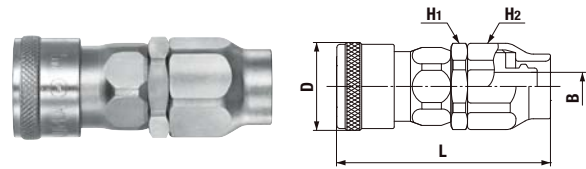
**Plug PN type (HI CUPLA for connection to braided hoses)**



Grease is applied to the threaded part of steel nut to prevent galling.

Model	Application (Hose) <sup>*1</sup>		Body material*Mass (g)		Dimensions (mm)				
	Size (mm)	Hose wall thickness (mm)	Steel	Brass	L	H1(WAF)	H2(WAF)	C	øB
90PN-BH	ø9×ø15	3±0.3	86	88	(51)	Hex.23	Hex.24	20	7.5

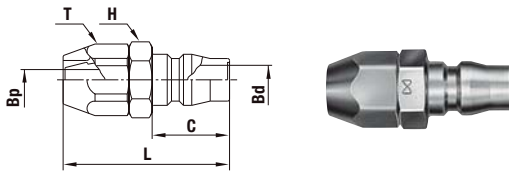
**Socket SN type (HI CUPLA for connection to braided hoses)**



Grease is applied to the threaded part of steel nut to prevent galling.

Model	Application (Hose) <sup>*1</sup>		Body material*Mass (g)		Dimensions (mm)				
	Size (mm)	Hose wall thickness (mm)	Steel	Brass	L	øD	H1(WAF)	H2(WAF)	øB
90SN-BH	ø9×ø15	3±0.3	147	154	(64.5)	(26.5) <sup>*2</sup>	Hex.24	Hex.24	8.5

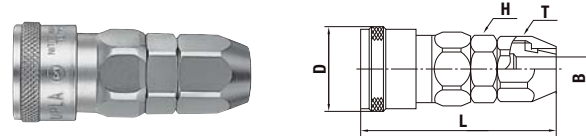
**Plug PN type (NUT CUPLA for urethane hose connection)**



Grease is applied to the threaded part of stainless steel nut to prevent galling.

Model	Application (Hose)	Body material*Mass (g)		Dimensions (mm)					
		Steel	Stainless steel	L	C	øBp	øBd	H(WAF)	T(WAF)
50PN	ø5×ø8	30	-	(43)	20	4.5	7.5	Hex.17	Hex.17
60PN	ø6×ø9	40	-	(43)	20	5.3	7.5	Hex.17	Hex.17
65PN	ø6.5×ø10	42	43	(43)	20	5.3	7.5	Hex.17	Hex.17
80PN	ø8×ø12	50	52	(45)	20	7.5	7.5	Hex.19	Hex.19
85PN	ø8.5×ø12.5	52	53	(45)	20	7.5	7.5	Hex.19	Hex.19
110PN	ø11×ø16	75	-	(52)	20	7.5	7.5	Hex.23	Hex.24

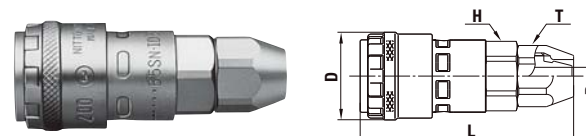
**Socket SN type (NUT CUPLA for urethane hose connection)**



Grease is applied to the threaded part of stainless steel nut to prevent galling.

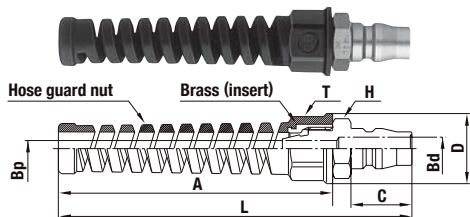
Model	Application (Hose)	Body material*Mass (g)		Dimensions (mm)				
		Steel	Stainless steel	L	øD	øB	H(WAF)	T(WAF)
50SN	ø5×ø8	117	-	(60)	(26.5)	4.5	Hex.19	Hex.17
60SN	ø6×ø9	115	-	(59.5)	(26.5)	5.3	Hex.19	Hex.17
65SN	ø6.5×ø10	115	110	(59.5)	(26.5) <sup>*3</sup>	5.3	Hex.19	Hex.17
80SN	ø8×ø12	120	114	(61.5)	(26.5) <sup>*3</sup>	7.5	Hex.19	Hex.19
85SN	ø8.5×ø12.5	120	115	(61.5)	(26.5) <sup>*3</sup>	7.5	Hex.19	Hex.19
110SN	ø11×ø16	153	-	(64.5)	(26.5)	10	Hex.23	Hex.24

**Socket SN type (NUT CUPLA 200 for urethane hose connection)**



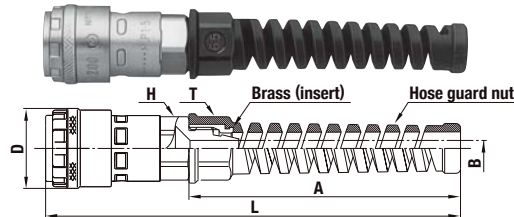
Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			L	øD	øB	H(WAF)	T(WAF)
200-50SN	ø5×ø8	105	(64.5)	(26.5)	4.5	Hex.19	Hex.17
200-60SN	ø6×ø9	105	(64.5)	(26.5)	5.3	Hex.19	Hex.17
200-65SN	ø6.5×ø10	106	(64.5)	(26.5)	5.3	Hex.19	Hex.17
200-80SN	ø8×ø12	112	(66.5)	(26.5)	7.5	Hex.19	Hex.19
200-85SN	ø8.5×ø12.5	113	(66.5)	(26.5)	7.5	Hex.19	Hex.19
200-110SN	ø11×ø16	127	(62)	(26.5)	10	Hex.23	Hex.24

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



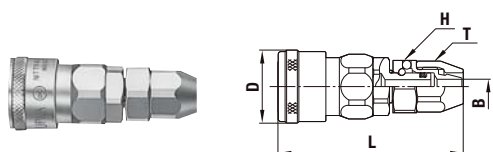
Model	Application (Hose)	Mass (g)	Dimensions (mm)							
			L	C	A	øD	øBp	øBd	H(WAF)	T(WAF)
50PNG <sup>*4</sup>	ø5×ø8	41	(116)	20	90	23	4.5	7.5	Hex.17	Hex.19
65PNG	ø6.5×ø10	43	(116)	20	90	23	5.3	7.5	Hex.17	Hex.19
85PNG	ø8.5×ø12.5	55	(116)	20	90	26	7.5	7.5	Hex.19	Hex.22

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



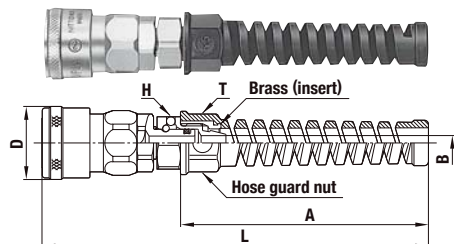
Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			L	A	øD	øB	H(WAF)	T(WAF)
200-50SNG <sup>*4</sup>	ø5×ø8	105	(137.5)	90	(26.5)	4.5	Hex.19	Hex.19
200-65SNG	ø6.5×ø10	107	(137.5)	90	(26.5)	5.3	Hex.19	Hex.19
200-85SNG	ø8.5×ø12.5	116	(137.5)	90	(26.5)	7.5	Hex.19	Hex.22

**Socket SNR type (ROTARY NUT CUPLA with swivel mechanism)**



Model	Application (Hose)	Mass (g)	Dimensions (mm)				
			L	øD	øB	H(WAF)	T(WAF)
65SNR	ø6.5×ø10	120	(67.3)	(26.5)	5.3	Hex.19	Hex.17
85SNR	ø8.5×ø12.5	136	(69.3)	(26.5)	7.5	Hex.21	Hex.19

**Socket SNRG type (ROTARY NUT CUPLA with swivel mechanism)**



Model	Application (Hose)	Mass (g)	Dimensions (mm)					
			L	A	øD	øB	H(WAF)	T(WAF)
65SNRG	ø6.5×ø10	121	(140.3)	90	(26.5)	5.3	Hex.19	Hex.19
85SNRG	ø8.5×ø12.5	139	(140.3)	90	(26.5)	7.5	Hex.21	Hex.22

The pictures of HI CUPLA for connection to braided hoses and PN type and SN type of NUT CUPLA show steel bodies.

\*1 Braided hoses for HI CUPLA for Connection to Braided Hoses should be made of soft PVC and woven by reinforcement thread. \*2: Brass: øD=25.4 \*3: Stainless steel: øD=25.4 \*4: Made-to-order item