# For Low Pressure (Air)

## Hi Cupla for Connection to Braided Hoses
## Nut Cupla
## Nut Cupla 200
## Rotary Nut Cupla

### For connection to urethane hose

**Working pressure**


1.5 MPa {15 kgf/cm²}  1.0 MPa {10 kgf/cm²}

**Valve structure**

One-way shut-off

**Applicable fluids (Steel applies to air only)**

Air  Water

# 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.**

*Nut Cupla*  *Nut Cupla 200*  *Nut Cupla 200 with hose guard nut*

*Rotary Nut Cupla*



*Hi Cupla for Connection to Braided Hoses*

## Specifications (Nut Cupla / Nut Cupla 200 / Rotary Nut Cupla)

| | | | | |
|---|---|---|---|---|
| **Body material** | Steel (Chrome plated) | | | |
| **Urethane hose size** | For ø5 mm x ø8 mm, ø6 mm x ø9 mm hose<br>For ø6.5 mm x ø10 mm, ø8 mm x ø12 mm hose<br>For ø8.5 mm x ø12.5 mm, ø11 mm x ø16 mm hose | | | |
| **Pressure unit** | **MPa** | **kgf/cm²** | **bar** | **PSI** |
| **Working pressure** | 1.5 | 15 | 15 | 218 |
| **Seal material / Working temperature range** | **Seal material** | **Mark** | **Working temperature range** | **Remarks** |
| | Nitrile rubber | NBR (SG) | −20°C to +60°C | Standard material |

## Specifications (Hi Cupla for Connection to Braided Hoses)

| | | | | | |
|---|---|---|---|---|---|
| **Body material** | | Steel (Chrome plated) | | Brass | |
| **Braided hose size** | | For ø9 mm x ø15 mm hose | | | |
| **Working pressure** | **MPa** | 1.5 | | 1.0 | |
| | **kgf/cm²** | 15 | | 10 | |
| | **bar** | 15 | | 10 | |
| | **PSI** | 218 | | 145 | |
| **Seal material / Working temperature range** | | **Seal material** | **Mark** | **Working temperature range** | **Remarks** |
| | | Nitrile rubber | NBR (SG) | −20°C to +80°C | Standard material |

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

## Tightening Torque Range  Nm {kgf•cm}

| **Model** | **SN, PN, SNR Type** | **65SNG, PNG, SNRG Type** | **85SNG, 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 and 40.
Interchangeable with each corresponding Hi Cupla Series models.

## Min. Cross-Sectional Area  (mm²)

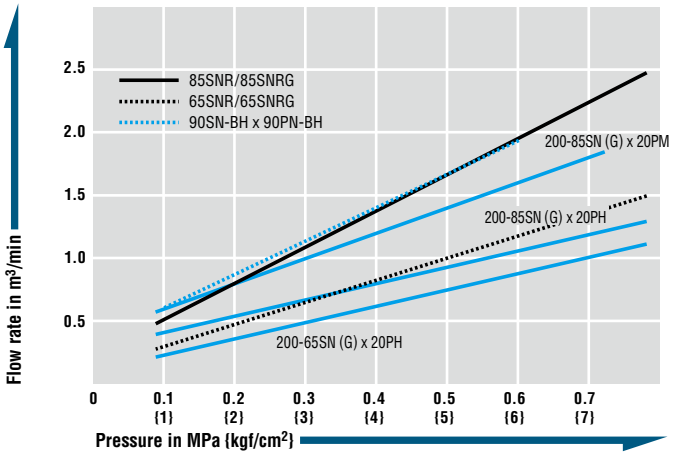
| Socket \ Plug | 17PH | 20PH | 30PH | 40PH | 10PM | 20PM | 30PM | 40PM | 20PF | 30PF | 40PF | 90PN-BH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **200-50SN** | 16 | 16 | 16 | 16 | 13 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| **200-60SN** | 16 | 20 | 22 | 22 | 13 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| **200-65SN** | 16 | 20 | 22 | 22 | 13 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| **200-80SN** | 16 | 20 | 41 | 41 | 13 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| **200-85SN** | 16 | 20 | 41 | 41 | 13 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| **200-110SN** | 16 | 20 | 41 | 41 | 13 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| **200-50SNG** | 16 | 16 | 16 | 16 | 13 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| **200-65SNG** | 16 | 20 | 22 | 22 | 13 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| **200-85SNG** | 16 | 20 | 40 | 41 | 13 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| **90SN-BH** | 16 | 20 | 33 | 33 | 13 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |

## Suitability for Vacuum

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

## Pressure - Flow Characteristics

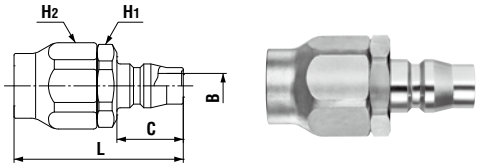
[Test conditions]  •Fluid : Air  •Temperature : Room temperature



## Models and Dimensions (Nut Cupla / Nut Cupla 200)

**WAF** : WAF stands for width across flats.

### Plug PN type (Hi Cupla for connection to braided hoses)

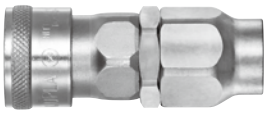


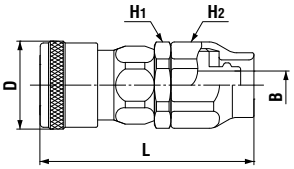



Grease is applied to the threaded part of steel nut to prevent galling.

| Model | Application (Hose) | Wall Thickness (mm) | Body material•Mass (g) | | Dimensions (mm) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Steel | Brass | L | H1(WAF) | H2(WAF) | C | øB |
| 90PN-BH | ø9 x ø15 | 3±0.3 | 86 | 88 | (51) | Hex.23 | Hex.24 | 20 | 7.5 |

### Socket SN type (Hi Cupla for connection to braided hoses)

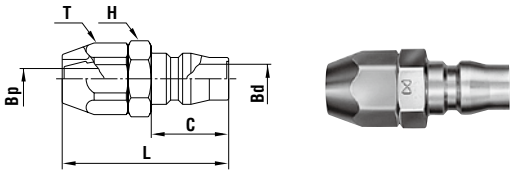





Grease is applied to the threaded part of steel nut to prevent galling.

| Model | Application (Hose) | Wall Thickness (mm) | Body material•Mass (g) | | Dimensions (mm) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Steel | Brass | L | øD | H1(WAF) | H2(WAF) | øB |
| 90SN-BH | ø9 x ø15 | 3±0.3 | 147 | 154 | (64.5) | (26.5) *1 | Hex.24 | Hex.24 | 8.5 |

### Plug PN type (For urethane hose connection)

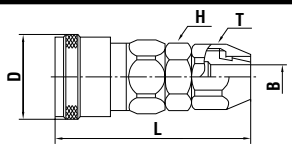





Grease is applied to the threaded part of stainless steel nut to prevent galling.

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

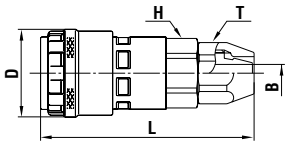
### Socket SN type (For urethane hose connection)




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

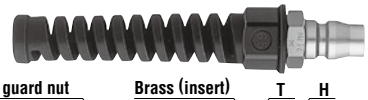
| Model | Application (Hose) | Body material•Mass (g) | | Dimensions (mm) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Steel | Stainless steel | L | øD | øB | H(WAF) | T(WAF) |
| 50SN | ø5 x ø8 | 117 | – | (60) | (26.5) | 4.5 | Hex.19 | Hex.17 |
| 60SN | ø6 x ø9 | 115 | – | (59.5) | (26.5) | 5.3 | Hex.19 | Hex.17 |
| 65SN | ø6.5 x ø10 | 115 | 110 | (59.5) | (26.5) *2 | 5.3 | Hex.19 | Hex.17 |
| 80SN | ø8 x ø12 | 120 | 114 | (61.5) | (26.5) *2 | 7.5 | Hex.19 | Hex.19 |
| 85SN | ø8.5 x ø12.5 | 120 | 115 | (61.5) | (26.5) *2 | 7.5 | Hex.19 | Hex.19 |
| 110SN | ø11 x ø16 | 153 | – | (64.5) | (26.5) | 10 | Hex.23 | Hex.24 |

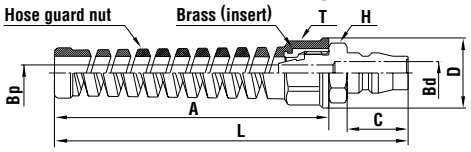
### Socket SN type (For urethane hose connection)




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

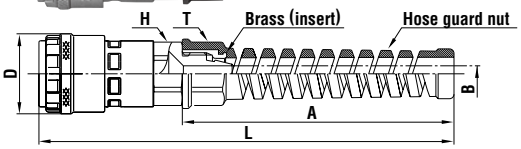
### Plug PNG type (For urethane hose with hose guard nut connection)





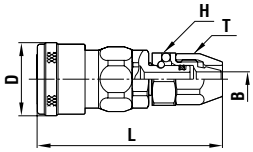

| Model | Application (Hose) | Mass (g) | Dimensions (mm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | L | C | A | øD | øBp | øBd | H(WAF) | T(WAF) |
| 50PNG *3 | ø5 x ø8 | 41 | (116) | 20 | 90 | 23 | 4.5 | 7.5 | Hex.17 | Hex.19 |
| 65PNG | ø6.5 x ø10 | 43 | (116) | 20 | 90 | 23 | 5.3 | 7.5 | Hex.17 | Hex.19 |
| 85PNG | ø8.5 x 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)



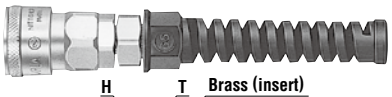

| Model | Application (Hose) | Mass (g) | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | L | A | øD | øB | H(WAF) | T(WAF) | |
| 200-50SNG *3 | ø5 x ø8 | 105 | (137.5) | 90 | (26.5) | 4.5 | Hex.19 | Hex.19 | |
| 200-65SNG | ø6.5 x ø10 | 107 | (137.5) | 90 | (26.5) | 5.3 | Hex.19 | Hex.19 | |
| 200-85SNG | ø8.5 x ø12.5 | 116 | (137.5) | 90 | (26.5) | 7.5 | Hex.19 | Hex.22 | |

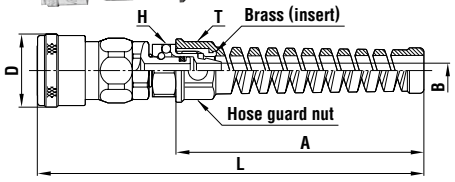
### Socket SNR type (With ball bearing swivel mechanism)




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

### Socket SNRG type (With ball bearing swivel mechanism)






| Model | Application (Hose) | Mass (g) | Dimensions (mm) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | L | A | øD | øB | H(WAF) | T(WAF) |
| 65SNRG | ø6.5 x ø10 | 121 | (140.3) | 90 | (26.5) | 5.3 | Hex.19 | Hex.19 |
| 85SNRG | ø8.5 x 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: Brass: øD=25.4 *2: Stainless steel: øD=25.4 *3: Made-to-order item

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