

For Low Pressure

Mold Cupla

General purpose and mold coolant port coupling

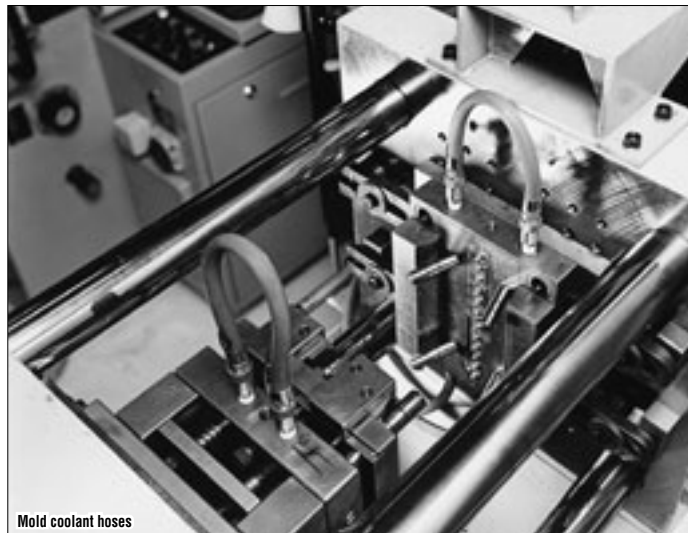
Working pressure: **1.0** (1.0MPa (10kgf/cm²))

Valve structure: One-way shut-off, Straight through

Applicable fluids: Water, Heated oil

Designed for quick replacement for die and mold !
Rust resistant models having many variations.

- Space saving design for molds with closely spaced coolant ports.
 - Long sleeve socket facilitates connection/disconnection with plug embedded in mold.
 - Various sizes and end configurations to suit a wide variety of mold applications.
 - Can be connected with Super Cuplas, excluding K3 and K4 types.
 - Push-to-connect design. (Built-in automatic shut-off valve)
- Also available is Cupla without valve. (please specify the basic model).



| Specifications | | | | |
|--|--------------------|-------------|---------------------------|----------------------|
| Body material | Brass | | | |
| Size | 1/8" • 1/4" • 3/8" | | | |
| Working pressure MPa (kgf/cm ²) | 1.0 (10) | | | |
| Pressure resistance MPa (kgf/cm ²) | 1.5 (15) | | | |
| Seal material Working temperature range | Seal material | Mark | Working temperature range | Remarks |
| | Nitrile rubber | NBR (SG) | -20°C~+80°C | Standard material |
| | Fluoro rubber | FKM (X-100) | -20°C~+180°C | Available on request |

| Max. Tightening Torque | | N·m (kgf·cm) | | |
|------------------------|--------|--------------|----------|--|
| Size | 1/8" | 1/4" | 3/8" | |
| Torque | 5 (51) | 9 (92) | 11 (112) | |

Flow Direction

Fluid may flow in either direction from plug or from socket side when coupled.

Interchangeability

Sockets and plugs can be connected regardless of end configurations and sizes. Can be connected to Super Cupla.

| Min. Cross-Sectional Area | | (mm ²) | | | | | | |
|---------------------------|--------|--------------------|-------|-------|-------|-------|--------|--------|
| Plug | Socket | K02SH | K03SH | K02SM | K03SM | K02SF | K02SHL | K03SHL |
| K02PH | | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| K03PH | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K01PM | | 15.5 | 23 | 23 | 23 | 23 | 15.5 | 23 |
| K02PM | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K03PM | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K01PF | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K02PF | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K03PF | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K01PML | | 15.5 | 19 | 19 | 19 | 19 | 15.5 | 19 |
| K02PML | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |
| K03PML | | 15.5 | 28 | 28 | 28 | 28 | 15.5 | 28 |

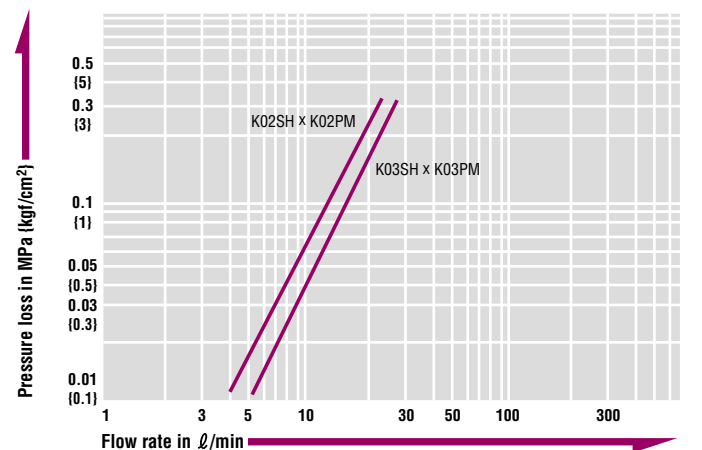
Suitability for Vacuum

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

| Plug Embedment Dimensions | | (mm) | | | | Remarks |
|---------------------------|------------|------|----|--|--|---------|
| Model | D* | C* | L | | | |
| K01PM | 20 or more | 0~3 | 28 | * Socket interference prevents connection/disconnection when C exceeds 3mm. * Size D should be bigger than the outer diameter of the socket wrench to be used. (See JISB4636-1, JISB4636-2) | | |
| K02PM | 20 or more | 0~3 | 29 | | | |
| K03PM | 20 or more | 0~3 | 30 | | | |

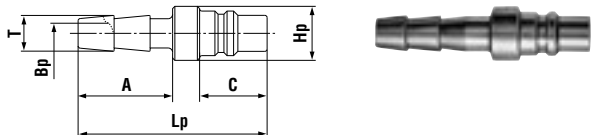
Flow Rate – Pressure Loss Characteristics

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



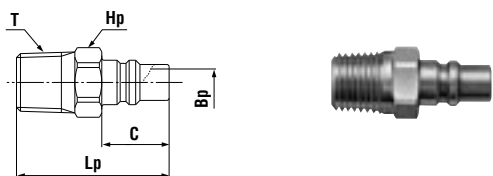
Models and Dimensions

Plug PH type (Hose barb)



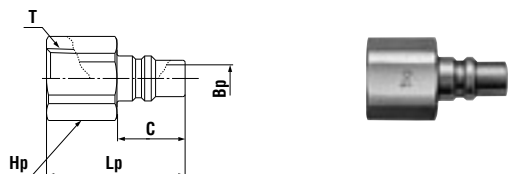
| Model | Application (Hose) | Mass (g) | Dimensions (mm) | | | | | |
|-------|--------------------|----------|-----------------|----|----|-----|----|-----|
| | | | Lp | A | C | øHp | øT | øBp |
| K02PH | 1/4" | 17 | 42 | 21 | 15 | 12 | 8 | 4.5 |
| K03PH | 3/8" | 19 | 42 | 21 | 15 | 15 | 12 | 6 |

Plug PM type (Male thread)



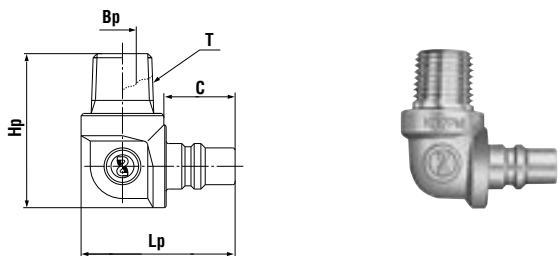
| Model | Application | Mass (g) | Dimensions (mm) | | | | |
|-------|-------------|----------|-----------------|---------|----|-------|-----|
| | | | Lp | Hp(WAF) | C | T | øBp |
| K01PM | Rc 1/8 | 14 | 31 | Hex.12 | 15 | R 1/8 | 5.5 |
| K02PM | Rc 1/4 | 20 | 34 | Hex.14 | 15 | R 1/4 | 6 |
| K03PM | Rc 3/8 | 35 | 35 | Hex.17 | 15 | R 3/8 | 6 |

Plug PF type (Female thread)



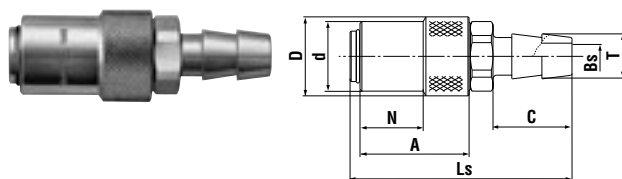
| Model | Application | Mass (g) | Dimensions (mm) | | | | |
|-------|-------------|----------|-----------------|---------|----|--------|-----|
| | | | Lp | Hp(WAF) | C | T | øBp |
| K01PF | R 1/8 | 16 | 28 | Hex.14 | 15 | Rc 1/8 | 6 |
| K02PF | R 1/4 | 22 | 30.5 | Hex.17 | 15 | Rc 1/4 | 6 |
| K03PF | R 3/8 | 35 | 32 | Hex.21 | 15 | Rc 3/8 | 6 |

Plug PML type (With L-shaped male thread)



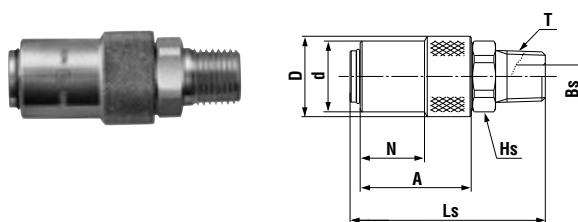
| Model | Application | Mass (g) | Dimensions (mm) | | | | |
|--------|-------------|----------|-----------------|----|------|-------|-----|
| | | | Lp | C | Hp | T | øBp |
| K01PML | Rc 1/8 | 43 | 33.5 | 15 | 30.5 | R 1/8 | 5 |
| K02PML | Rc 1/4 | 53 | 33.5 | 15 | 33.5 | R 1/4 | 6 |
| K03PML | Rc 3/8 | 71 | 33.5 | 15 | 33.5 | R 3/8 | 6 |

Socket SH type (Hose barb)



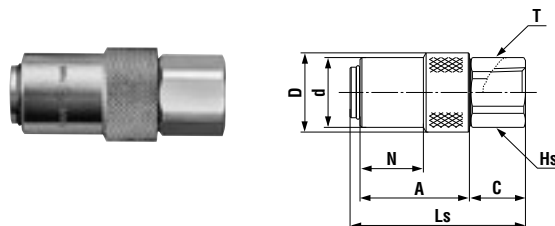
| Model | Application (Hose) | Mass (g) | Dimensions (mm) | | | | | | | |
|-------|--------------------|----------|-----------------|----|------|------|----|----|----|-----|
| | | | Ls | øD | ød | N | A | C | øT | øBs |
| K02SH | 1/4" | 52 | (67) | 21 | 18.5 | 16.8 | 29 | 29 | 8 | 5 |
| K03SH | 3/8" | 60 | (59) | 21 | 18.5 | 16.8 | 29 | 21 | 12 | 7 |

Socket SM type (Male thread)



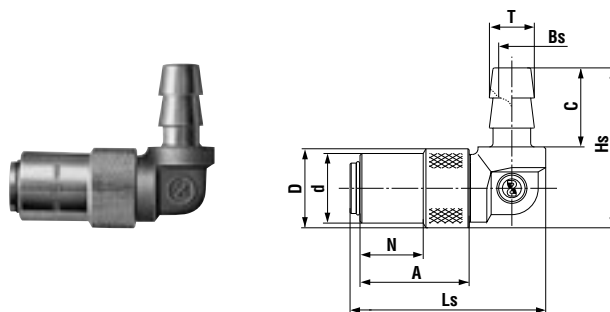
| Model | Application | Mass (g) | Dimensions (mm) | | | | | | | |
|-------|-------------|----------|-----------------|----|------|------|----|---------|-------|-----|
| | | | Ls | øD | ød | N | A | Hs(WAF) | T | øBs |
| K02SM | Rc 1/4 | 70 | (51) | 21 | 18.5 | 16.8 | 29 | Hex.17 | R 1/4 | 6 |
| K03SM | Rc 3/8 | 82 | (52) | 21 | 18.5 | 16.8 | 29 | Hex.19 | R 3/8 | 6 |

Socket SF type (Female thread)



| Model | Application | Mass (g) | Dimensions (mm) | | | | | | | |
|-------|-------------|----------|-----------------|----|------|------|----|------|--------|---------|
| | | | Ls | øD | ød | N | A | C | T | Hs(WAF) |
| K02SF | R 1/4 | 57 | (46.5) | 21 | 18.5 | 16.8 | 29 | 14.5 | Rc 1/4 | Hex.17 |

Socket SHL type (With L-shaped hose barb)



| Model | Application | Mass (g) | Dimensions (mm) | | | | | | | | |
|--------|-------------|----------|-----------------|----|------|------|----|----|----|--------|-----|
| | | | Ls | øD | ød | N | A | C | øT | Hs | øBs |
| K02SHL | 1/4" | 79 | (52) | 21 | 18.5 | 16.8 | 29 | 21 | 8 | (42.5) | 4.5 |
| K03SHL | 3/8" | 87 | (52) | 21 | 18.5 | 16.8 | 29 | 21 | 12 | (42.5) | 7 |

Notes: Also available without socket valve, identified by product code TS (e.g. K03SH without valve is K03TSH).
Also available are Cuplas with sleeve stopper (Made-to-order item).