

For Low Pressure

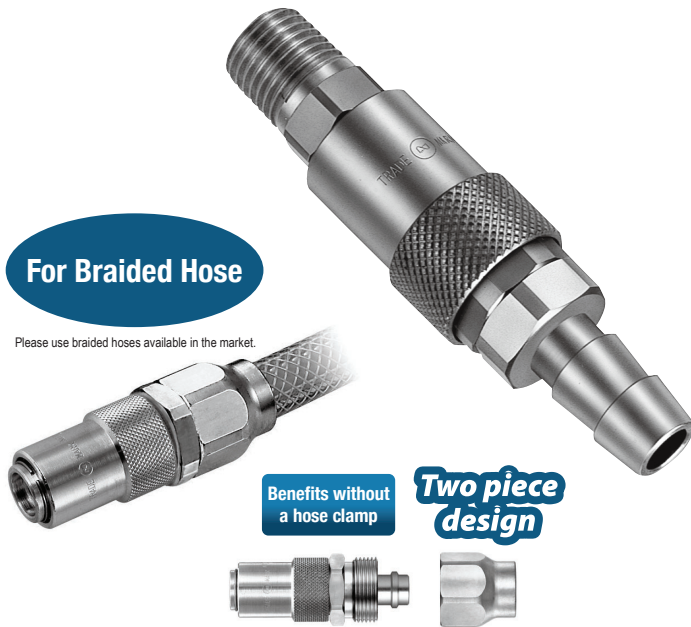
# MOLD CUPLA

General purpose and mold coolant port coupling

<b>Working pressure</b> 1.0 MPa (10 kgf/cm <sup>2</sup> )	<b>Valve structure</b> One-way shut-off	<b>Applicable fluids</b> Water Heated oil
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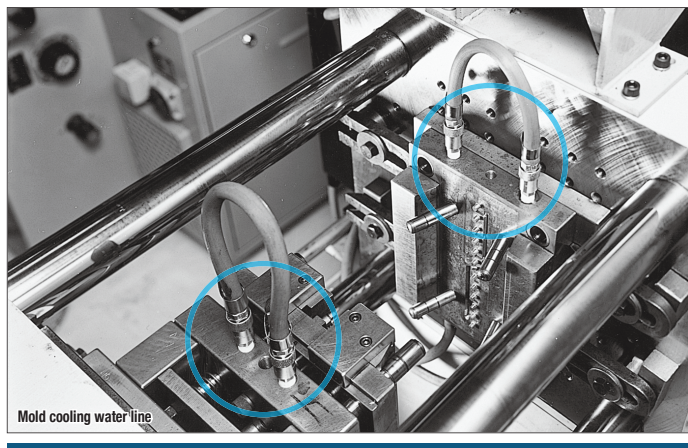
Designed for quick replacement for die and mold !  
Rust resistant models having many variations.

- Space saving design for molds with closely spaced coolant ports.
- Long sleeve socket facilitates connection/disconnection with plug embedded in mold.
- Enables quick mold cooling water line connection/disconnection.
- Various sizes and end configurations to suit a wide variety of mold applications.
- Can be connected with SUPER CUPLA, excluding K3 and K4 types.
- Push-to-connect design. (Built-in automatic shut-off valve in the socket)  
Also available is CUPLA without valve (Please specify in ordering).
- CUPLA for braided hose connection requires no hose clamp. (Model K-90SN)



For Braided Hose

Please use braided hoses available in the market.



Mold cooling water line

## Specifications

Body material	Brass			
Size	Thread	1/8", 1/4", 3/8"		
	Hose barb	Hose: 1/4", 3/8" / Braided hose: ø9 mm x ø15 mm		
Pressure unit	MPa	kgf/cm <sup>2</sup>	bar	PSI
Working pressure	1.0	10	10	145
Seal material Working temperature range	Seal material	Mark	Working temperature range	Remarks
	Nitrile rubber	NBR (SG)	-20°C to +80°C	Standard material
	Fluoro rubber	FKM (X-100)	-20°C to +180°C	Available on request

Maximum working pressure and working temperature range of CUPLA for braided hoses depend upon the specifications of braided hoses to be used.

## Maximum Tightening Torque Nm (kgf·cm)

Size (Thread)	1/8"	1/4"	3/8"
Torque	5 {51}	9 {92}	11 {112}

Tighten the nut until it is flush against the hose barb base after pushing a braided hose to the end.

## Flow Direction

Fluid flow can be bi-directional when socket and plug are connected.



## Interchangeability

Sockets and plugs can be connected regardless of end configurations and sizes. K-0 series are not interchangeable with high flow type K3 and K4 series. Can be connected with SUPER CUPLA.

## Minimum Cross-Sectional Area (mm<sup>2</sup>)

Socket Plug	K-02SH	K-02TSH	K-03SH	K-03TSH	K-02SM	K-02TSM	K-03SM	K-03TSM	K-02SF	K-02TSF	K-02SHL	K-03SHL	K-03TSHL	K-90SN
K-02PH	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
K-03PH	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-01PM	19	19	23	23	23	23	23	23	23	23	15.5	23	23	23
K-01PM-HH	19	19	23	23	23	23	23	23	23	23	15.5	23	23	23
K-02PM	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-02PM-HH	19	19	23	23	23	23	23	23	23	23	15.5	23	23	23
K-03PM	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-01PF	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-02PF	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-03PF	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-01PML	19	19	19	19	19	19	19	19	19	19	15.5	19	19	19
K-02PML	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28
K-03PML	19	19	28	28	28	28	28	28	28	28	15.5	28	28	28

## Suitability for Vacuum

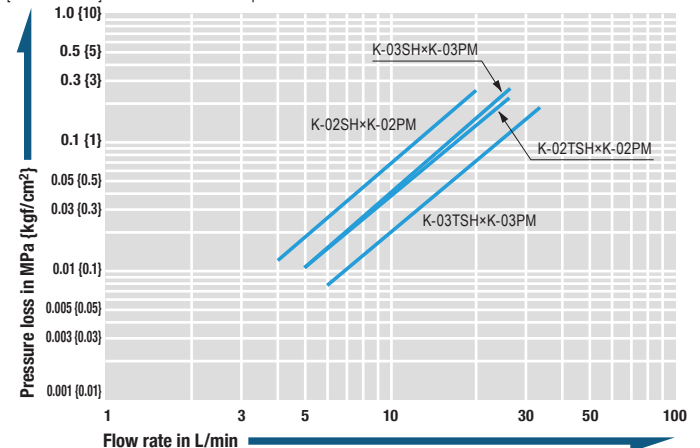
Not suitable for vacuum application in either connected or disconnected condition.

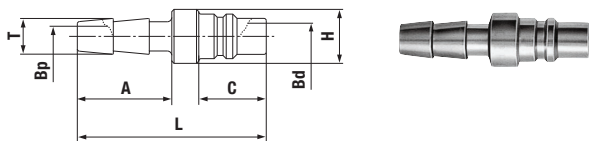
## Plug Embedment Dimensions (mm)

Model	D*	C*	L	Remarks
K-01PM	20 or more	0 to 3	28	* Socket interference prevents connection/disconnection when C exceeds 3 mm.
K-01PM-HH	20 or more	0 to 3	24	
K-02PM	20 or more	0 to 3	29	* Size D should be bigger than the outer diameter of the socket wrench to be used.
K-02PM-HH	20 or more	0 to 3	24	
K-03PM	20 or more	0 to 3	30	(See JISB4636-1, JISB4636-2)

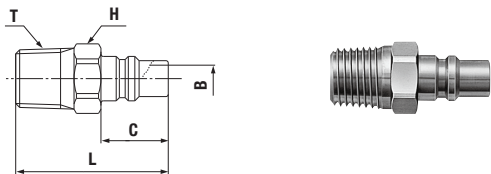
## Flow Rate – Pressure Loss Characteristics

[Test conditions] • Fluid : Water • Temperature : 25°C±5°C

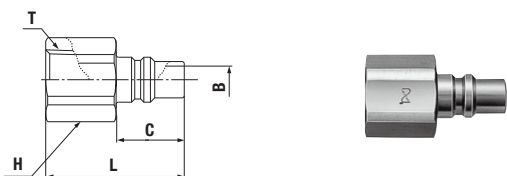


**Plug PH type (Hose barb)**

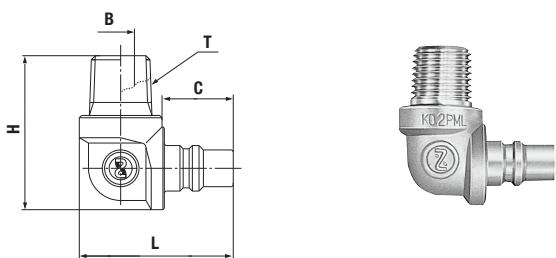
Model	Application (Hose)	Mass (g)	Dimensions (mm)						
			L	A	C	øH	øT	øBp	øBd
K-02PH	1/4"	17	42	21	15	12	8	4.5	6
K-03PH	3/8"	19	42	21	15	15	12	7	6

**Plug PM type (Male thread)**

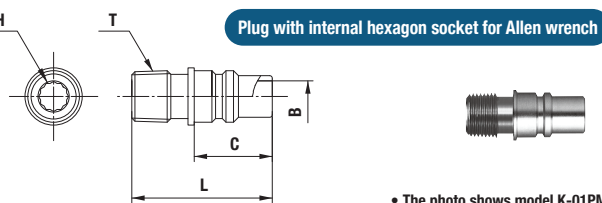
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	H(WAF)	C	T	øB
K-01PM	Rc 1/8	14	31	Hex.12	15	R 1/8	5.5
K-02PM	Rc 1/4	20	34	Hex.14	15	R 1/4	6
K-03PM	Rc 3/8	35	35	Hex.17	15	R 3/8	6

**Plug PF type (Female thread)**

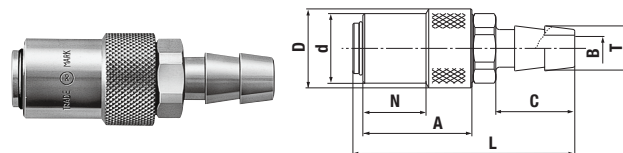
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	H(WAF)	C	T	øB
K-01PF	R 1/8	16	28	Hex.14	15	Rc 1/8	6
K-02PF	R 1/4	22	30.5	Hex.17	15	Rc 1/4	6
K-03PF	R 3/8	35	32	Hex.21	15	Rc 3/8	6

**Plug PML type (Male thread)**

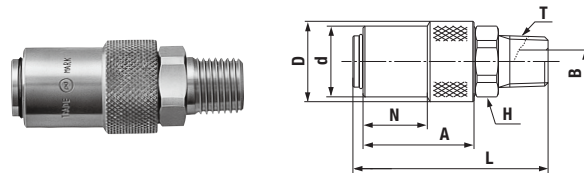
Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	C	H	T	øB
K-01PML	Rc 1/8	43	33.5	15	30.5	R 1/8	5
K-02PML	Rc 1/4	53	33.5	15	33.5	R 1/4	6
K-03PML	Rc 3/8	71	33.5	15	33.5	R 3/8	6

**Plug PM-HH type (Male thread)**

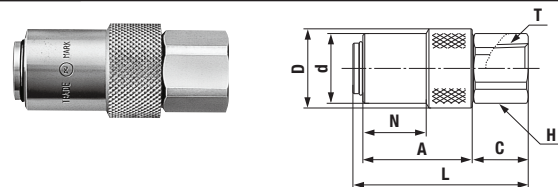
Model	Application (Thread)	Mass (g)	Dimensions (mm)					
			Outside Diameter	L	H	C	T	øB
K-01PM-HH	Rc 1/8	9	ø11	27	5	15	R 1/8	6
K-02PM-HH	Rc 1/4	15	(ø13.4)	29	5	15	R 1/4	6

**Socket SH type (Hose barb)**

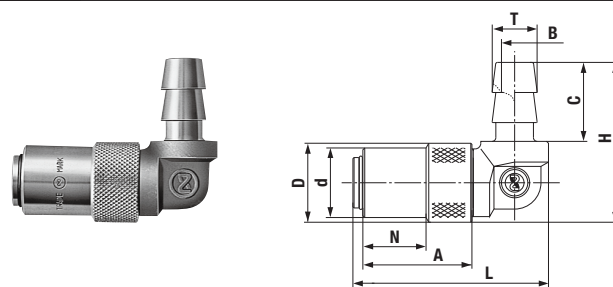
Model	Application (Hose)	Mass (g)	Dimensions (mm)							
			L	øD	ød	N	A	C	øT	øB
K-02SH	1/4	52	(67)	(21)	18.5	16.8	29	29	8	5
K-02TSH <sub>-1</sub>	1/4	52	(67)	(21)	18.5	16.8	29	29	8	5
K-03SH	3/8	60	(59)	(21)	18.5	16.8	29	21	12	7
K-03TSH <sub>-1</sub>	3/8	60	(59)	(21)	18.5	16.8	29	21	12	7

**Socket SM type (Male thread)**

Model	Application (Thread)	Mass (g)	Dimensions (mm)							
			L	øD	ød	N	A	H(WAF)	T	øB
K-02SM	Rc 1/4	70	(51)	(21)	18.5	16.8	29	Hex.17	R 1/4	6
K-02TSM <sub>-1</sub>	Rc 1/4	70	(51)	(21)	18.5	16.8	29	Hex.17	R 1/4	6
K-03SM	Rc 3/8	82	(52)	(21)	18.5	16.8	29	Hex.19	R 3/8	6
K-03TSM <sub>-1</sub>	Rc 3/8	82	(52)	(21)	18.5	16.8	29	Hex.19	R 3/8	6

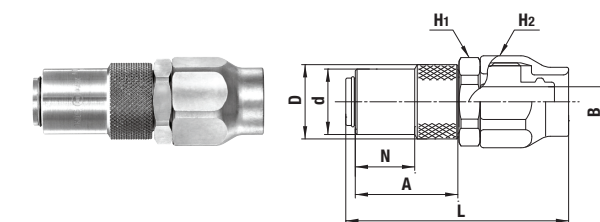
**Socket SF type (Female thread)**

Model	Application (Thread)	Mass (g)	Dimensions (mm)							
			L	øD	ød	N	A	C	T	H(WAF)
K-02SF	R 1/4	57	(46.5)	(21)	18.5	16.8	29	14.5	Rc 1/4	Hex.17
K-02TSF <sub>-1</sub>	R 1/4	57	(46.5)	(21)	18.5	16.8	29	14.5	Rc 1/4	Hex.17

**Socket SHL type (Hose barb)**

Model	Application (Hose)	Mass (g)	Dimensions (mm)								
			L	øD	ød	N	A	C	øT	H	øB
K-02SHL	1/4	79	(52)	(21)	18.5	16.8	29	21	8	(42.5)	4.5
K-03SHL	3/8	87	(52)	(21)	18.5	16.8	29	21	12	(42.5)	7
K-03TSHL <sub>-1</sub>	3/8	87	(52)	(21)	18.5	16.8	29	21	12	(42.5)	7

\*1: Also available without socket valve (Made-to-order item), identified by product code TS (e.g. K-03SH without valve is K-03TSH). Also available are sockets with sleeve stopper (Made-to-order item).

**Socket SN type (For braided hose connection)**

Model	Application (Hose) (mm)	Hose wall thickness (mm)	Mass (g)	Dimensions (mm)							
				L	øD	ød	N	A	H1(WAF)	H2(WAF)	øB
K-90SN	ø9 x ø15	3±0.3	122	(63)	(21)	18.5	16.8	29	Hex.23	Hex.24	8.5