

# HI FLOW CUPLA

## For Medium Pressure

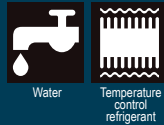
Working pressure



Valve structure

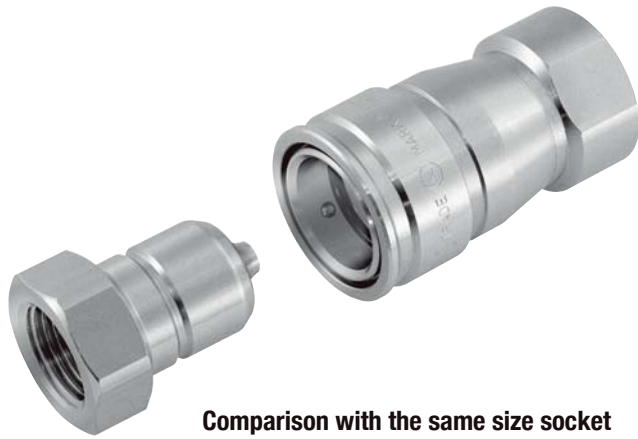


Applicable fluids

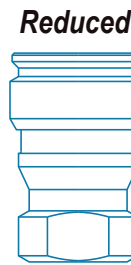


## Drastically increases flow volume while minimizing pressure drop.

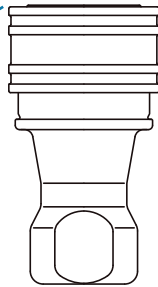
- Both socket and plug have built-in automatic shut-off valves.
  - High flow rate type to increase cooling effect.
  - Quick connection and disconnection of cooling pipes.
  - Compact and space-saving design.
- Compared with the coupled length of SP CUPLA type A, that of HI FLOW CUPLA is reduced by 22%.
- Installation and maintenance can be done within a short time.



Comparison with the same size socket



HI FLOW CUPLA  
HFL-4S



SP CUPLA Type A  
4S-A

## Specifications

Body material	Stainless steel, Brass			
Size (Thread)	1/4", 3/8", 1/2"			
Pressure unit	MPa	kgf/cm <sup>2</sup>	bar	PSI
Working pressure	1.0	10	10	145
Seal material Working temperature range *1	Seal material	Mark		Working temperature range
	Ethylene-propylene rubber	EPDM		-40°C to +150°C
	Fluoro rubber	FKM		-20°C to +180°C

- Standard seal material is fluoro rubber for brass body.  
\*1: The operable temperature range depends on the operating conditions.

## Maximum Tightening Torque

Nm {kgf·cm}

Model	HFL-2P / HFL-2S	HFL-3P / HFL-3S	HFL-4P / HFL-4S
Stainless steel	14 {143}	22 {224}	60 {612}
Brass	9 {92}	12 {122}	30 {306}

## Flow Direction

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



## Interchangeability

Socket and plug of different sizes cannot be connected.

## Minimum Cross-Sectional Area

(mm<sup>2</sup>)

Model	HFL-2P / HFL-2S	HFL-3P / HFL-3S	HFL-4P / HFL-4S
Minimum Cross-Sectional Area	32	53	91

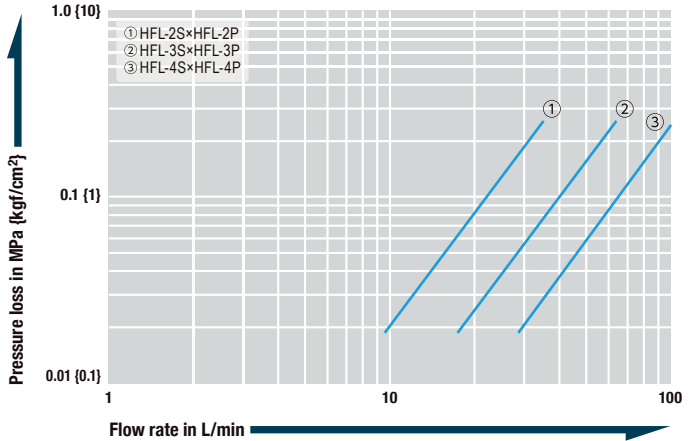
## Suitability for Vacuum

1.3×10<sup>-1</sup> Pa {1×10<sup>-3</sup> mmHg}

Socket only	Plug only	When connected
—	—	Operational

## Flow Rate – Pressure Loss Characteristics

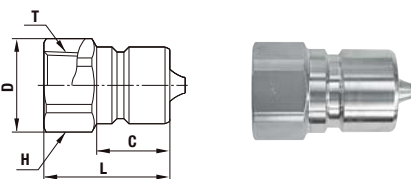
[Test conditions] - Fluid : Water - Temperature : 23°C±5°C



## Models and Dimensions

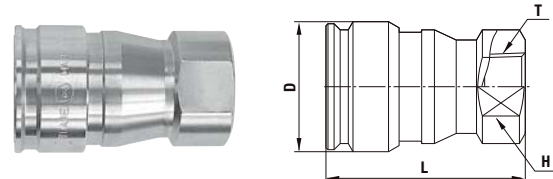
WAF : WAF stands for width across flats.

### Plug Female thread



Model	Application (Thread)	Mass (g)		Dimensions (mm)				
		Brass	Stainless steel	L	C	øD	H(WAF)	T
HFL-2P	R 1/4	31	28	30	16.5	18.5	Hex.17	Rc 1/4
HFL-3P	R 3/8	47	43	31	18	23	Hex.21	Rc 3/8
HFL-4P	R 1/2	91	82	37.5	22.5	32	Hex.29	Rc 1/2

### Socket Female thread



Model	Application (Thread)	Mass (g)		Dimensions (mm)			
		Brass	Stainless steel	L	øD	H(WAF)	T
HFL-2S	R 1/4	110	99	(47)	26	19	Rc 1/4
HFL-3S	R 3/8	165	150	(49)	32	24	Rc 3/8
HFL-4S	R 1/2	231	211	60	35	29	Rc 1/2