

High Flow Cupla

For Medium Pressure

Working pressure



1.0 MPa
(10 kgf/cm²)

Valve structure



Two-way shut-off

Applicable fluids

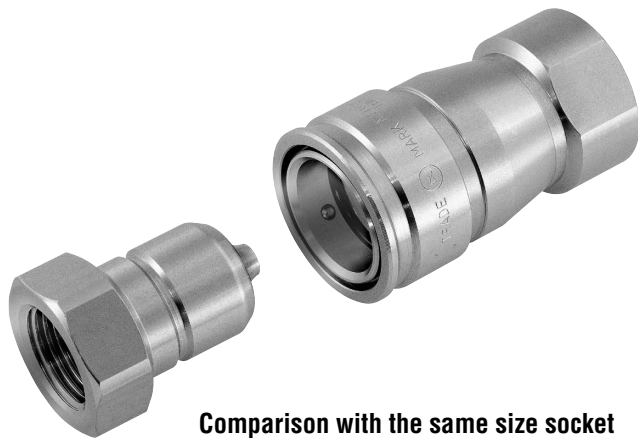


Water

Cooling water

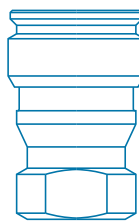
Drastically increases flow volume while minimising pressure drop.

- 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 High Flow Cupla is reduced by 22%.
- Installation and maintenance can be done within a short time.

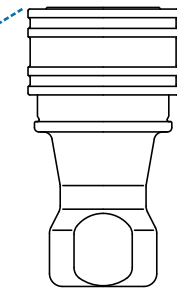


Comparison with the same size socket

Reduced



High 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 ²	bar	PSI
Working pressure	1.0	10	10	145
Seal material Working temperature range	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.

Max. Tightening Torque

Nm (kgf·cm)

Model	HFL-2P / HFL-2S	HFL-3P / HFL-3S	HFL-4P / HFL-4S
Torque			
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

Different sized sockets and plugs cannot be connected to each other.

Min. Cross-Sectional Area

(mm²)

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

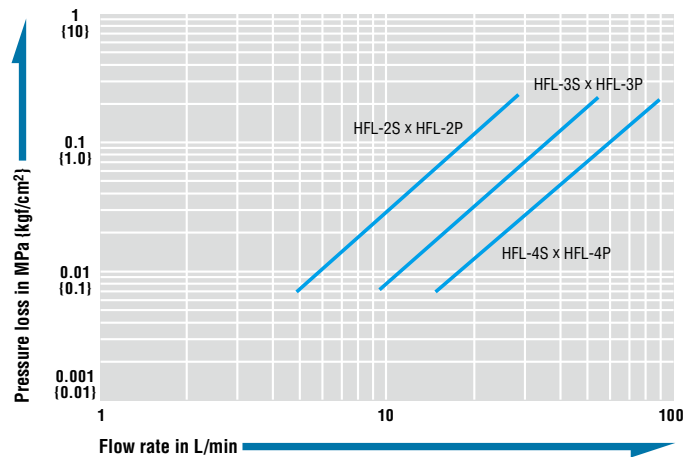
Suitability for Vacuum

1.3×10^{-1} Pa { 1×10^{-3} mmHg}

Socket only	Plug only	When connected
—	—	Operational

Flow Rate – Pressure Loss Characteristics

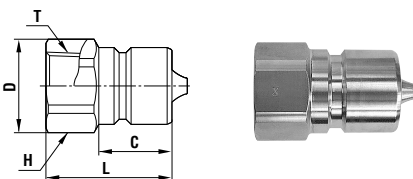
[Test conditions] • Fluid : Water • Temperature: 20°C ± 5°C



Models and Dimensions

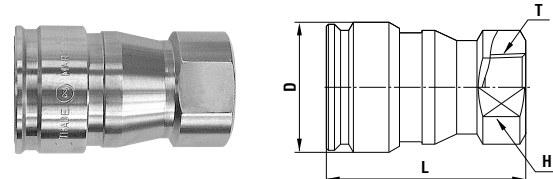
WAF : WAF stands for width across flats.

Plug Female thread



Model	Application	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	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

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