

HP COUPLER

Application

- Used for plant piping of chemicals, steam and oil.

Feature

- Bi-directional shut-off coupler with an automatic shut-off valve incorporated on the both sides of CORK and HOLE.
- Excellent airtight effect, designed with high precision processing technology.

Specification

Fluid	Air, Water, Oil, Steam, Medicines, Gasolin (Another way air for Special Order)
Material	Brass
Working Pressure Range	0~70kgf/cm ² (7000kpa)
Temperature Range	-20~80℃

Product Code System

8 H

① ②

① Thread Size(T)

	Thread Size								
Code	1	2	3	4	6	8	10	12	16
Size	Rc1/8"	Rc1/4"	Rc3/8"	Rc1/2"	Rc3/4"	Rc1"	Rc1 1/4"	Rc1 1/2"	Rc2"

② Model

C	Plug
H	Socket

Valve Symbols Working Pressure Applicable fluids

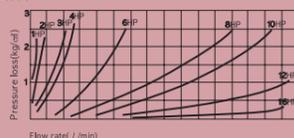
Two-way shut-off 70kgf/cm²

Water Oil Gasoline
Steam Chemicals Air

► Minimum Sectional Area

Products Code	1HP	2HP	3HP	4HP	6HP	8HP	10HP	12HP	16HP
Minimum Sectional Area(cc)	11	23	46	89	198	315	580	870	1240
Inflow air volume(l/min)	0.52	1.02	2.40	3.20	10.0	17.0	27.20	29.8	60.0

► Flow Rate



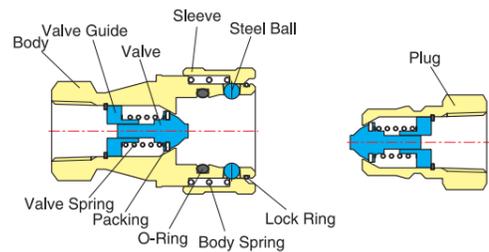
► Measuring Conditions

Fluid type : Water
Temperature : 30℃ ± 5℃
Motional viscosity : 50cm-Strokes
Specific gravity : 0.8727 × 10-3kg/cm³

► How to check table

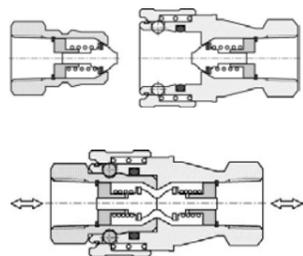
For example, when flowing 100l/min of fluid at 6HP, the intersection of the horizontal axis flow at 100l/min, makes a pressure loss of 2kg/cm².

Structural Diagram



► Automatic air flow control

When disconnecting, the valves in the socket and plug instantly seal the air flow to prevent leakage. On the contrary, when connected, the valves in the socket and plug are opened and permit free flow of fluid through the couplings.



HP Coupler

C

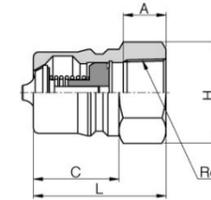
Plug Female



MODEL (T)

Tube (Metric) - Thread(R)

MODEL	L	C	Rc
HP 1C(BRASS)	29	19	Rc1/8
HP 2C(BRASS)	36	22	Rc1/4
HP 3C(BRASS)	40	25	Rc3/8
HP 4C(BRASS)	44	28.4	Rc1/2
HP 6C(BRASS)	52	36	Rc3/4
HP 8C(BRASS)	62	40	Rc1"
HP 10C(BRASS)	70	45	Rc1 1/4
HP 12C(BRASS)	75	49	Rc1 1/2
HP 16C(BRASS)	80	52	Rc2"



H

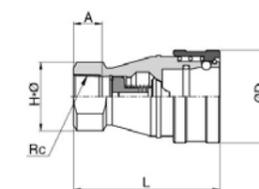
Socket Female



MODEL (T)

Tube (Metric) - Thread(R)

MODEL	L	ØD	Rc
HP 1H(BRASS)	48	23.6	Rc1/8
HP 2H(BRASS)	58	27.5	Rc1/4
HP 3H(BRASS)	65	34.5	Rc3/8
HP 4H(BRASS)	72	44.5	Rc1/2
HP 6H(BRASS)	88	54.5	Rc3/4
HP 8H(BRASS)	102	64.5	Rc1"
HP 10H(BRASS)	115	77.5	Rc 1 1/4
HP 12H(BRASS)	124	87.8	Rc 1 1/2
HP 16H(BRASS)	132	109	Rc2"



Common Using Precautions of Coupler Series

Never fail to check the following

⚠ WARNING

1. Avoid applying or removing when pressure is on. It causes the danger of jumping of plug body.
2. Never touch the equipment under pressure in the state of putting plug and socket on the body. It causes "opening" by touch.
3. Never use coupler in place of rotary joint or other revolving joint.
4. Secure to flow the fluid from socket to plug.
5. Avoid the instrument or machine giving strong bending weight, excessive vibration or shock.
6. To use the coupler on a vibration tool such as jet chisel, be sure to connect with 30cm rubber tube between tool and coupler.

⚠ CAUTION

1. When putting plug into socket, secure to push it until it stops. Otherwise it may cause leakage. In addition, be sure to check whether it will come out or not by pulling it out.
2. Be careful of plug body jumping by compressed air discharging when disconnecting.
3. Be sure not only to have dust or contamination with intended fluid but also to have flaws on body. It may cause leakage.
4. When pushing tube into the socket body, fix it with hose-band after wearing silicon.
5. Never fasten the thread over maximum limit of torque. It may cause breakage.