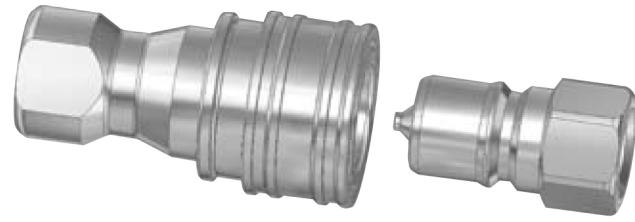


SP-COUPLER



SP coupler is a double-path, switching type coupler that has valves on both sides of the socket and plug.

Features

- Since both the socket and plug have check-valves, there are no fluid leaks upon connection and disconnection.
- Rubber packing materials are determined by applicable fluids.
- Prevents hose twisting and distortion.
- A wide range of packing materials can be applied to each use, according to the types of fluids.

Specifications

Application Size	1/8" 1/4" 3/8" 1/2" 3/4" 1"		
	1 1/4" 1 1/2" 2"		
Body Material	Brass, Stainless steel, Steel		
Sealing Material / Operating Temperature	Sealing Material	Operating Temperature	Notes
	Nitrile rubber (NBR)	-20°C ~ +80°C	Standard material
	Viton	-20°C ~ +180°C	Option available

Pressure

Material	Brass			
Size	1/8" 1/2" 3/8"	1/2" 3/4" 1"	1 1/4" 1 1/2"	2"
Max. Working Pressure	5 MPa (51kg/cm ²)	3 MPa (31kg/cm ²)	2 MPa (20kg/cm ²)	1.5 MPa (15kg/cm ²)
Proof Pressure	7.5 MPa (76kg/cm ²)	4.5 MPa (46kg/cm ²)	3 MPa (31kg/cm ²)	2.3 MPa (24kg/cm ²)

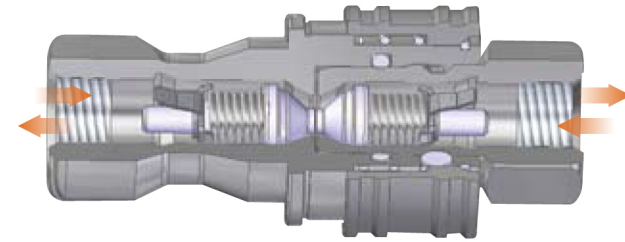
Material	Stainless steel, Steel			
Size	1/8" 1/2" 3/8"	1/2" 3/4" 1"	1 1/4" 1 1/2"	2"
Max. Working Pressure	7.5 MPa (76kg/cm ²)	4.5 MPa (46kg/cm ²)	3 MPa (31kg/cm ²)	2MPa (20kg/cm ²)
Proof Pressure	10MPa (102kg/cm ²)	6.5 MPa (66kg/cm ²)	4.5 MPa (46kg/cm ²)	3 MPa (31kg/cm ²)

Maximum Recommended Torque: N-m(kgf-cm)

Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
Torque	Steel									
	9(92)	14(143)	22(224)	60(612)	90(918)	120(124)	260(2652)	280(2856)	500(5100)	
	Brass									
	5(51)	9(92)	12(122)	30(306)	50(510)	65(663)	150(1530)	150(1530)	260(2652)	
	Stainless Steel									
	9(92)	14(143)	22(224)	60(612)	90(918)	12(1224)	260(2652)	280(2856)	500(5100)	

Direction of fluid flow

Fluid can flow from either the socket or plug side.



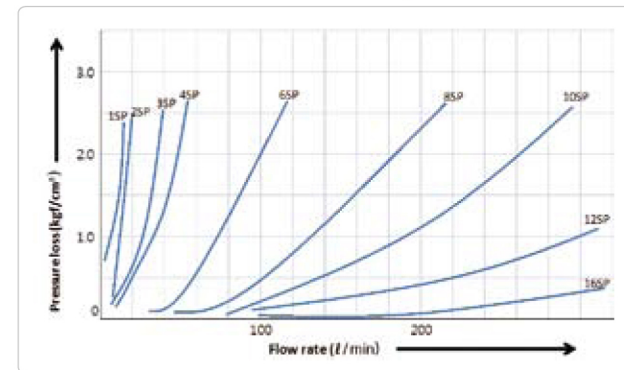
Use

Material	Brass	Stainless steel	Steel
Applicable fluids	Gasoline, Heavy oil, Kerosene, Water, Air	Acid, Alkali, Salt water	Hydraulic fluid
Use	<ul style="list-style-type: none"> • Chemical Plant • Shipbuilding • Nuclear energy / other various pipes 		

Minimum Cross-Sectional Area (mm²)

Model	1SP	2SP	3SP	4SP	6SP	8SP	10SP	12SP	16SP
Min. Cross-Sectional Area	13	22	51	59	116	170	358	552	801

Flow Rate-Pressure Loss Graph

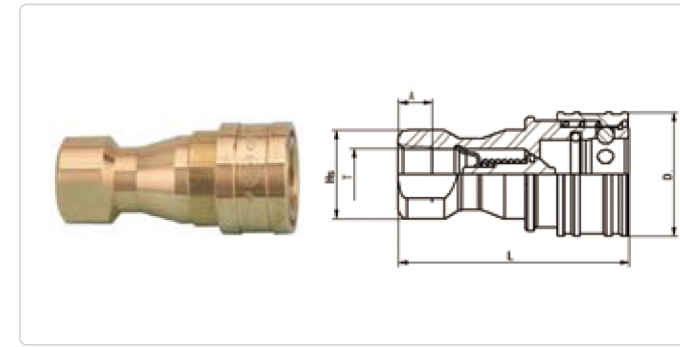


Instructions for use

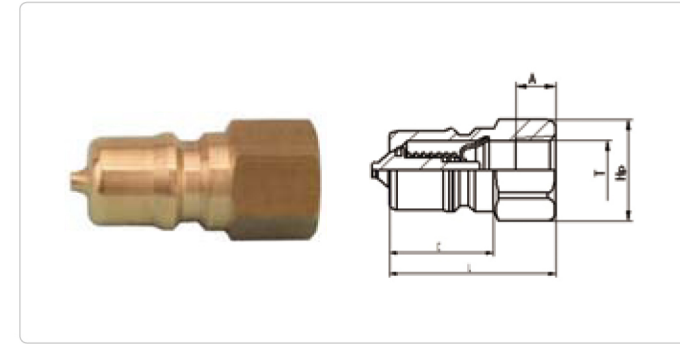
- Please select the appropriate sealing materials in accordance with the type of fluid and temperature.

SP-COUPLER DIMENSIONS

* Material: BSBM, SUS303 (O-RING's material is NBR)



S (SOCKET)						
Model	Application	Dimensions (mm)				
		L	D	Hs	A	T
1S	PT 1/8"	48	24	Two flats 14xø18	11	PT 1/8"
2S	PT 1/4"	58	28	Two flats 19xø22	13	PT 1/4"
3S	PT 3/8"	65	35	Two flats 21xø25	13	PT 3/8"
4S	PT 1/2"	72	45	Two flats 29xø35	15	PT 1/2"
6S	PT 3/4"	88	55	Two flats 35xø41	17	PT 3/4"
8S	PT 1"	102	65	Two flats 41xø48	20	PT 1"
10S	PT 1 1/4"	115	79	Two flats 54xø59	24	PT 1 1/4"
12S	PT 1 1/2"	124	89	Two flats 63xø69	24	PT 1 1/2"
16S	PT 2"	132	109	Two flats 77xø84	27	PT 2"



P (PLUG)						
Model	Application	Dimensions (mm)				
		L	C	Hp	A	T
1P	PT 1/8"	29	19	Hex 14xø16.2	11	PT 1/8"
2P	PT 1/4"	36	22	Hex 17xø19.6	13	PT 1/4"
3P	PT 3/8"	40	25	Hex 21xø24.2	13	PT 3/8"
4P	PT 1/2"	44	28	Hex 29xø33.3	15	PT 1/2"
6P	PT 3/4"	52	36	Hex 35xø40.4	17	PT 3/4"
8P	PT 1"	62	40	Hex 41xø47.4	20	PT 1"
10P	PT 1 1/4"	70	45	Two flats 54xø59	24	PT 1 1/4"
12P	PT 1 1/2"	75	49	Two flats 63xø69	24	PT 1 1/2"
16P	PT 2"	80	52	Two flats 77xø84	27	PT 2"

SP-COUPLER (310-TYPE)



S (SOCKET)		
Type	Model	Thread Size
310-TYPE	make-to-order	PT 1/4"



P (PLUG)		
Type	Model	Thread Size
310-TYPE	make-to-order	PT 1/4"

Application example

