



For High Pressure

280 CUPLA

For hydraulic pressure up to 27.5 to 31.5 MPa {281 to 321 kgf/cm²}

Working pressure 27.5 to 31.5 27.5 to 31.5 MPa {281 to 321 kgf/cm ² }	Valve structure  Two-way shut-off	Applicable fluid  Hydraulic oil
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Generic CUPLA copes with high pressure lines in hydraulic equipment! Low pressure loss is ideal for hydraulic equipment.

- Conforms to international standard ISO 7241-1A.
- General purpose hydraulic CUPLA with the working pressure up to 27.5 to 31.5 MPa {281 to 321 kgf/cm²}.
- Structure keeps pressure loss extremely low, particularly ideal for hydraulic applications requiring high flow rates.
- Both socket and plug have built-in automatic shut-off valves to prevent fluid spill out when disconnected.
- Special steel body material is adopted for its excellent strength and additional quenching treatment is done to withstand hydro pressure impacts.



Specifications				
Body material	Special steel (Bright chromate conversion coating : silver color)			
Size (Thread)	1/4", 3/8"	1/2", 3/4", 1"		
Working pressure	MPa	31.5	27.5	
	kgf/cm ²	321	281	
	bar	315	275	
	PSI	4570	3990	
Seal material	Nitrile rubber	Mark	NBR (SG)	Working temperature range
Working temperature range	-20 °C to +80 °C		Standard material	

Maximum Tightening Torque					
Nm {kgf·cm}					
Size (Thread)	1/4"	3/8"	1/2"	3/4"	1"
Torque	28 {286}	40 {408}	80 {816}	100 {1020}	180 {1836}

Flow Direction

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



Interchangeability

Socket and plug of different sizes cannot be connected. Can be connected with products whose mating part dimensions are in compliance with ISO7241-1A.

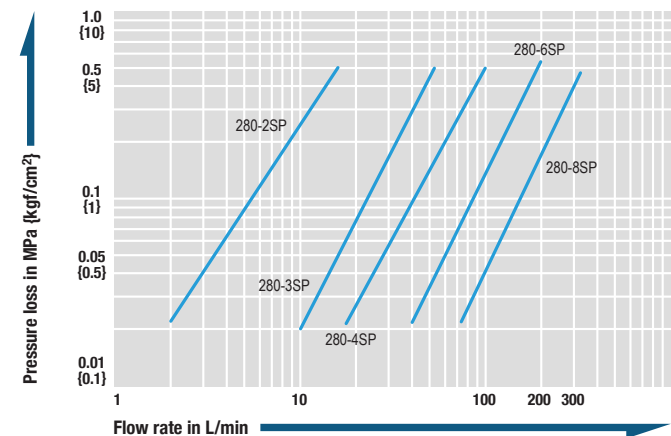
Minimum Cross-Sectional Area					
(mm ²)					
Model	280-2SP	280-3SP	280-4SP	280-6SP	280-8SP
Minimum cross-sectional area	11.4	42.8	79.1	146.5	235.6

Suitability for Vacuum		
1.3 Pa {1 × 10 ⁻² mmHg}		
Socket only	Plug only	When connected
—	—	Operational

Admixture of Air on Connection					
May vary depending upon the usage conditions.					
(mL)					
Model	280-2SP	280-3SP	280-4SP	280-6SP	280-8SP
Volume of air	0.37	1.02	2.63	8.83	16.04

Flow Rate – Pressure Loss Characteristics

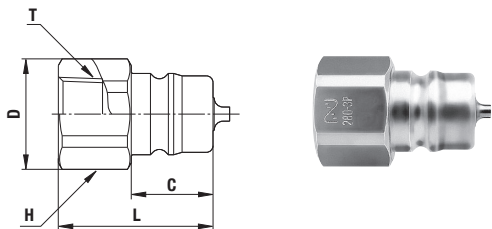
[Test conditions] • Fluid : Hydraulic oil • Temperature : 30°C±5°C
• Fluid viscosity : 32 × 10⁻⁶ m²/s • Density : 0.87 × 10³ kg/m³



⚠ Precautions for use

There is no interchangeability between 280 CUPLA and HSP CUPLA or 210 CUPLA. Do not connect each other even if some sizes are approximate.

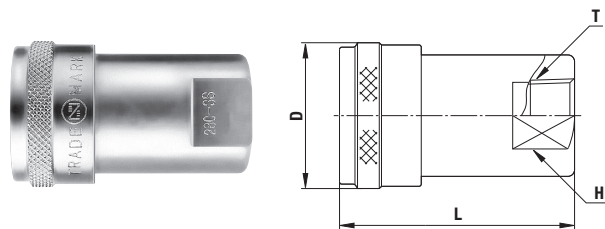
Plug Female thread



Model	Application (Thread)	Mass (g)	Dimensions (mm)				
			L	øD	C	H(WAF)	T
280-2P	R 1/4	35	31.5	20.5	15	Hex.19	Rc 1/4
280-3P	R 3/8	59	35	25	18.5	Hex.23	Rc 3/8
280-4P	R 1/2	115	44	32	24.5	Hex.29	Rc 1/2
280-6P	R 3/4	178	52.5	35	28	Hex.32	Rc 3/4
280-8P	R 1	331	63.5	44	35	41	Rc 1

* Internal structural design of 280-6S and 280-8S is partly different from the above drawing.

Socket Female thread



Model	Application (Thread)	Mass (g)	Dimensions (mm)			
			L	øD	H(WAF)	T
280-2S	R 1/4	110	(46)	(27)	19	Rc 1/4
280-3S	R 3/8	185	(53)	(33)	23	Rc 3/8
280-4S	R 1/2	335	66.5	(39)	29	Rc 1/2
280-6S	R 3/4	571	(81)	(48)	35	Rc 3/4
280-8S	R 1	871	98	(55)	41	Rc 1

Application Example

