Hydraulic and air coupler with zero hydraulic oil leak with special seal at tip section

Pal coupler socket Hydraulic pressure 7 MPa & air





Pal coupler plug Hydraulic pressure 7 MPa & air model WVP-2FPL

(WVP-2FPL) to be pressurized under disconnected state. Socket (WVP-2FSL) can retain residual

 Special seal installed on the tip of coupler socket and coupler plug can minimize the intrusion of air

and spill of working fluid during connection and

disconnection, furthermore, it prevents corruption

of coolant by being miscible with spilled working

Height of coupler is maintained low in order to

 This model is designed to use on flat mating faces with no protrusion from mount face.

The parts in the coupler are corrosion prevent-

ed (plating or stainless) and oil and air can be

fluid and air contamination of clamp circuit.

pressure of up to 0.3 MPa.

reduce thickness of pallet.

applied as a fluid.





Specifications

IN

Pressure range 0-7 MPa Circuit symbol 0.3MPa Proof pressure 10.5 MPa 10.2 mm² Orifice area General mineral based hydraulic Fluid used oil (ISO-VG32 equivalent) & air pressure & air Allowable eccentricity $\pm 0.5 \text{ mm}$ ^{hnect} : Incapabl Allowable inclination 0.3° or less 113 N per 1 MPa fluid pressure Reactive force* Max. spring force for no pressure 40 N 0−70 °C Operating temperature Mass WVP-2FSL: 31 g WVP-2FPL: 29 g

*: Reactive force (N) = Fluid pressure (MPa) ×113+40

Special soft seal at tip section enables plug

Pal coupler Oil & air

WVP-2FSL

Hydraulic pressure 7 MPa & air socket Recommended tightening torque : $15 \text{ N} \cdot \text{m}$



Hydraulic pressure 7 MPa & air plug Recommended tightening torque: 15 N·m

Dimensions



*****:When using Pal fix as a set, be sure to set depth to 19_{-02}^{0} . Refer to **pages** →**66**-**77** for details on Pal fix.





Caution in use

- Stop supplying fluid during disconnection and connection operations. Disconnecting or connecting coupler while fluid is flowing results in the leakage.
- Coupler has no built in filter. Ensure that foreign substances on connecting surfaces are removed by blowing air before connecting to prevent intrusion of foreign substances into piping.
- Make sure air bleeding in the hydraulic circuit is perfectly done when installation.
- Provide the stopper and the guide as shown in the diagram to protect coupler from damage unless it is used in combination with Pal fix. Do not use a coupler as a guide or stopper when connecting. It may cause the damage. Install the stopper to have the dimension $33.5_{-0.5}^{-0.5}$ (See diagram on the right). Observe allowable eccentricity and inclination value when installing the guide. (Refer to **page** \rightarrow **86** for details on allowable eccentricity and inclination value.)

Mounting sample without Pal fix

