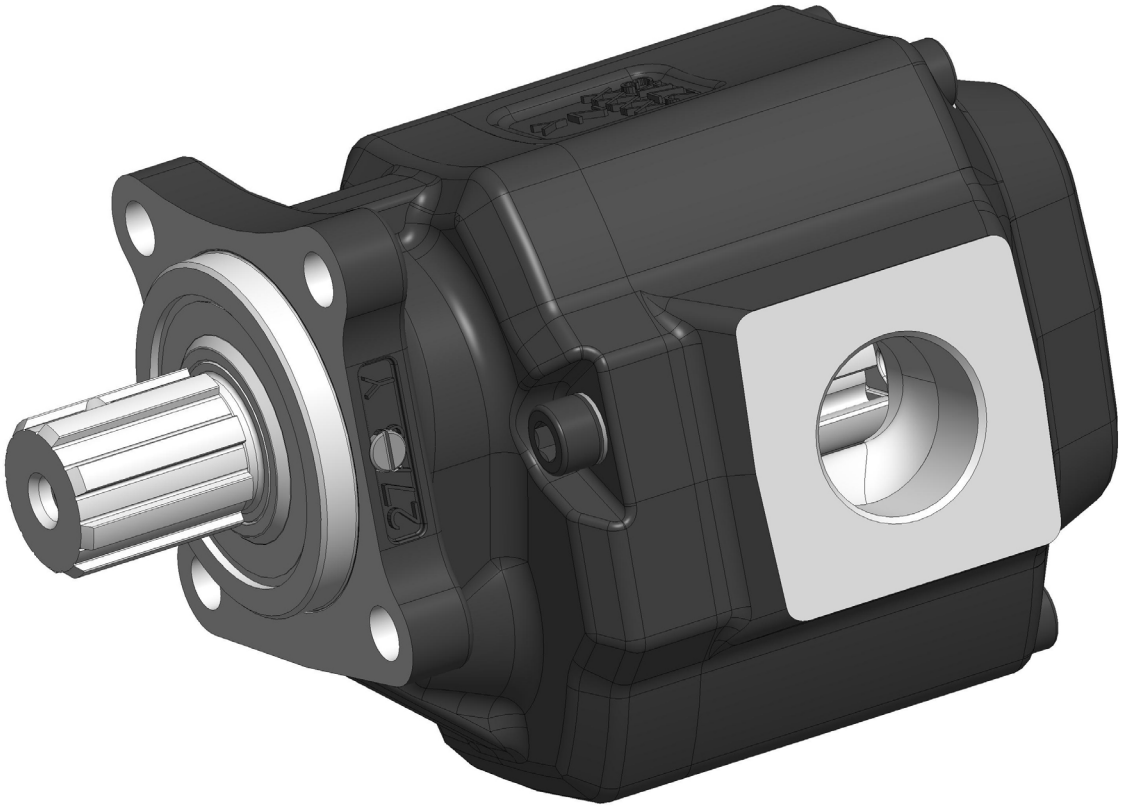
CVP ALPHA GEAR PUMP BI-4H3



MOUNTING INSTRUCTIONS

MOUNTING INSTRUCTIONS ALPHA GEAR PUMP BI-4H3

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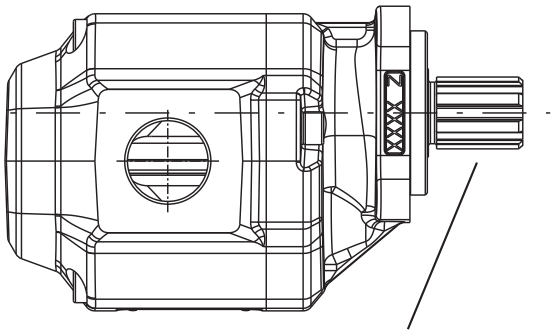
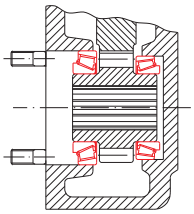
1. MOUNTING OPTIONS

ISO - 16Z0 - version 3



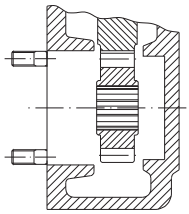
W 8x32x36 DIN-ISO

YES



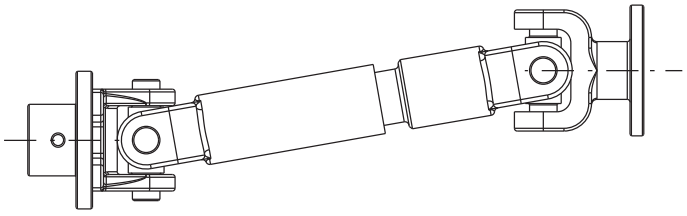
PTO with reinforced output (supported by 2 bearings)

NO



PTO with loose gearwheel

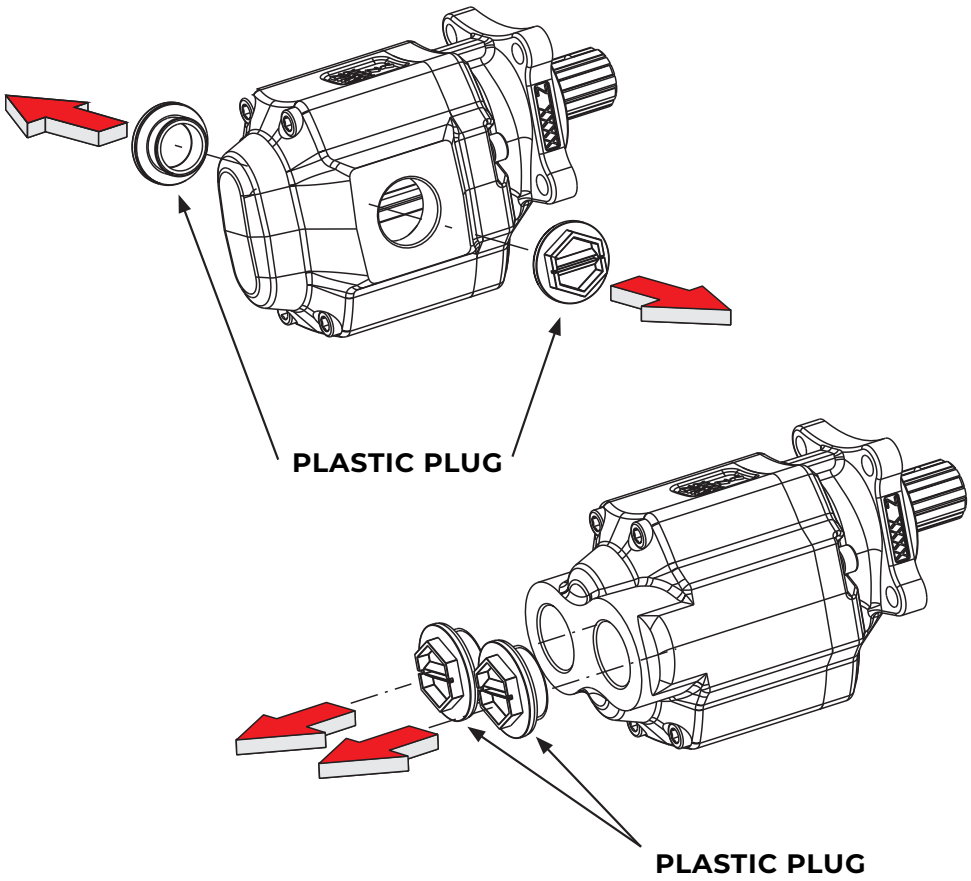
YES



Cardan shaft

Cardan shaft should be balanced before it is fitted.

2. INSTALLATION AND START-UP



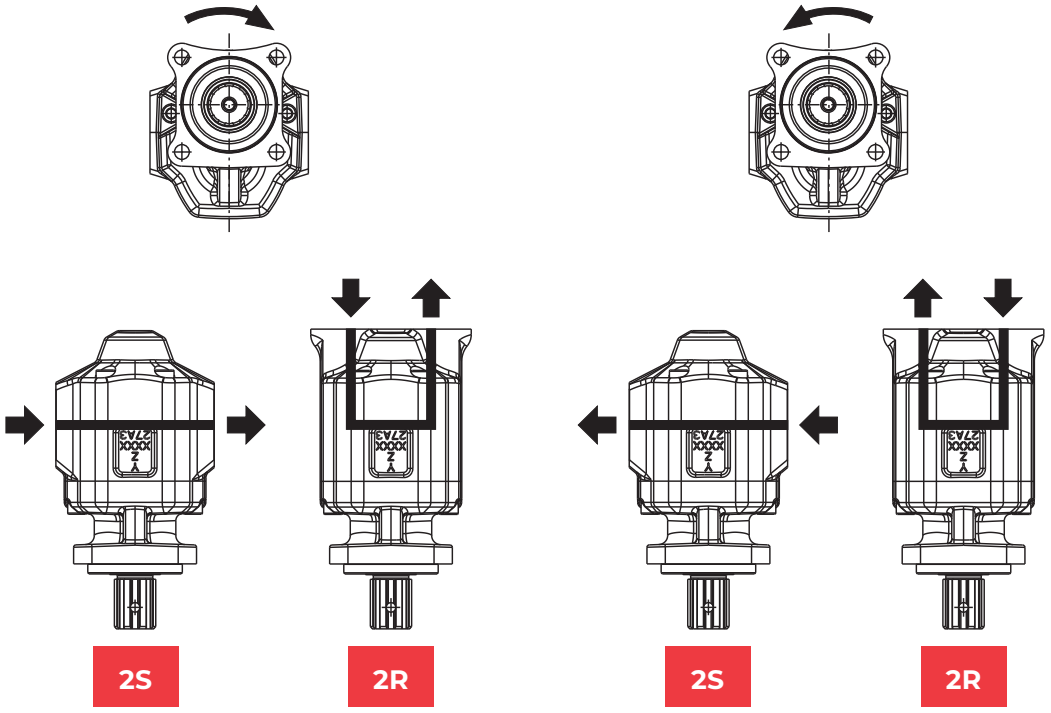
Remove the 2 plastic plugs before installing.

2.1. DIRECTION OF ROTATION AND PORTS POSITION

The direction of rotation is determined looking on the drive shaft of the pump. Reversible pumps allow clockwise and anti-clockwise rotation. The drawing below shows the inlet and outlet tubing position according to the direction of rotation.

Clockwise rotation
(Right pump)

Anti-clock rotation
(Left pump)



2.2. OIL TYPE AND OPERATING TEMPERATURE

For short term (cold start) a maximum oil viscosity of 750 cSt (1.163 in²/s) is allowed at max. pump speed of 1000 rpm. For oil selection see specification sheet OIL-0011.

2.3. INLET TUBING

To ensure proper operation, it is recommended to use the following tubing. The stated values are valid for short hoses [max 1 meter long (3.3 ft)] and if the pump is mounted below tank oil level. In any case the minimum inlet pressure must not exceed -0,3 bar (-4 psi) relative.
Flows up to 190 l/min (50.2 US gpm): 1” 3/4 hose.
Flows from 191 to 245 l/min (50.5 to 64.7 US gpm): 2” hose.
For application in cold climates [below -20 °C (-4 °F)] please contact Hyva.

2.4. OUTLET TUBING

Flows up to 140 l/min (37 US gpm): 3/4" hose.
Flows over 140 l/min (37 US gpm): 1" hose.

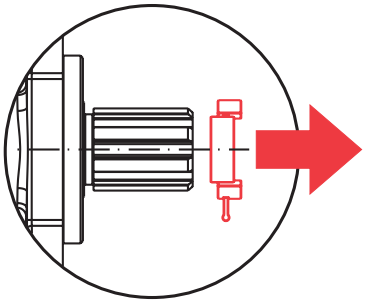
2.5. FILTRATION

Minimum filtration quality must be based on 25 µm (984 µin) absolute.
For intensive working conditions, certainly at pressure over 200 bar (2900 psi), Hyva recommends to use a filtration of 10 µm (394 µin) absolute.

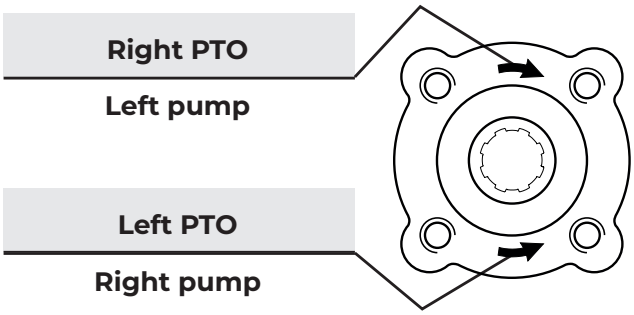
3. PTO INSTALLATION

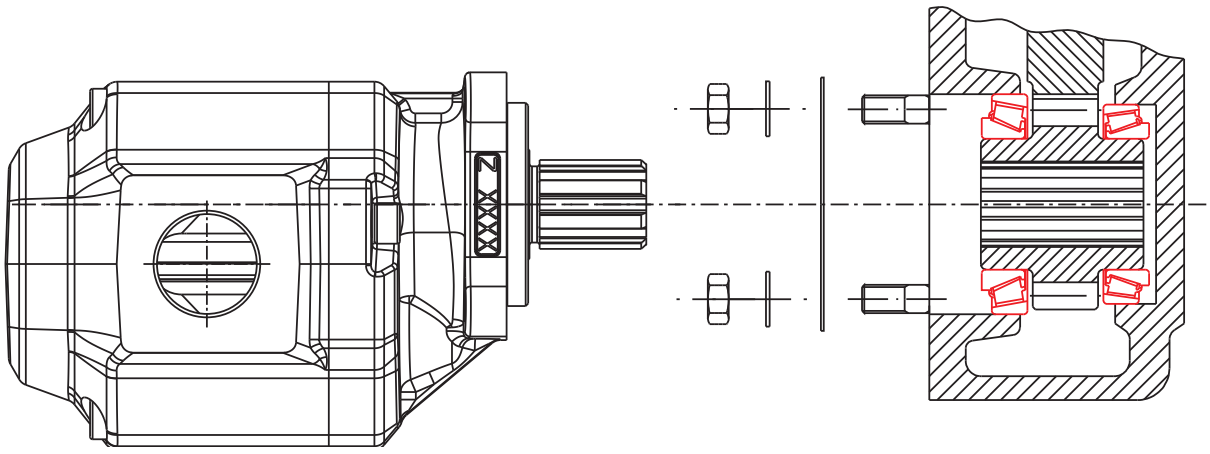
Please make sure the outlet shaft of the PTO is supported by 2 bearings in the PTO.

If present remove the plastic ring before fitting the pump.



The pump inlet and outlet tubing position depends on the PTOs direction of rotation. Please see the direction of rotation and ports position.





Fit the pump with 4 M12 Q10.9 studs with thread length of 35 mm (1.38 in), 1 seal, 4 locking washers type Nord-lock, Grower or Schnorr and 4 nuts M12-H=d-Q10. Tighten nuts with 80 Nm (59 lbf ft). Never mount pump with bolts on a PTO.

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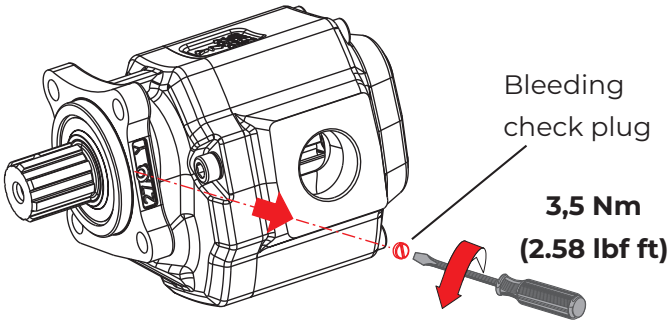
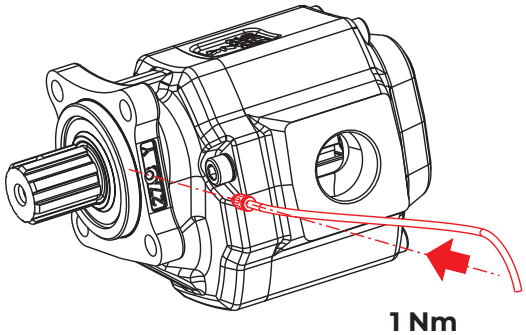
To prevent leakage problem some gear box manufacturers (example ZF) require that the pump does have a bleeding system that allows the oil between the shaft seals of the pump to escape. The bleeding system consists of air hose and air adaptor. To mount it remove bleeding check plug and mount air adaptor with air hose. Assure open hose end is facing down to prevent water entry.

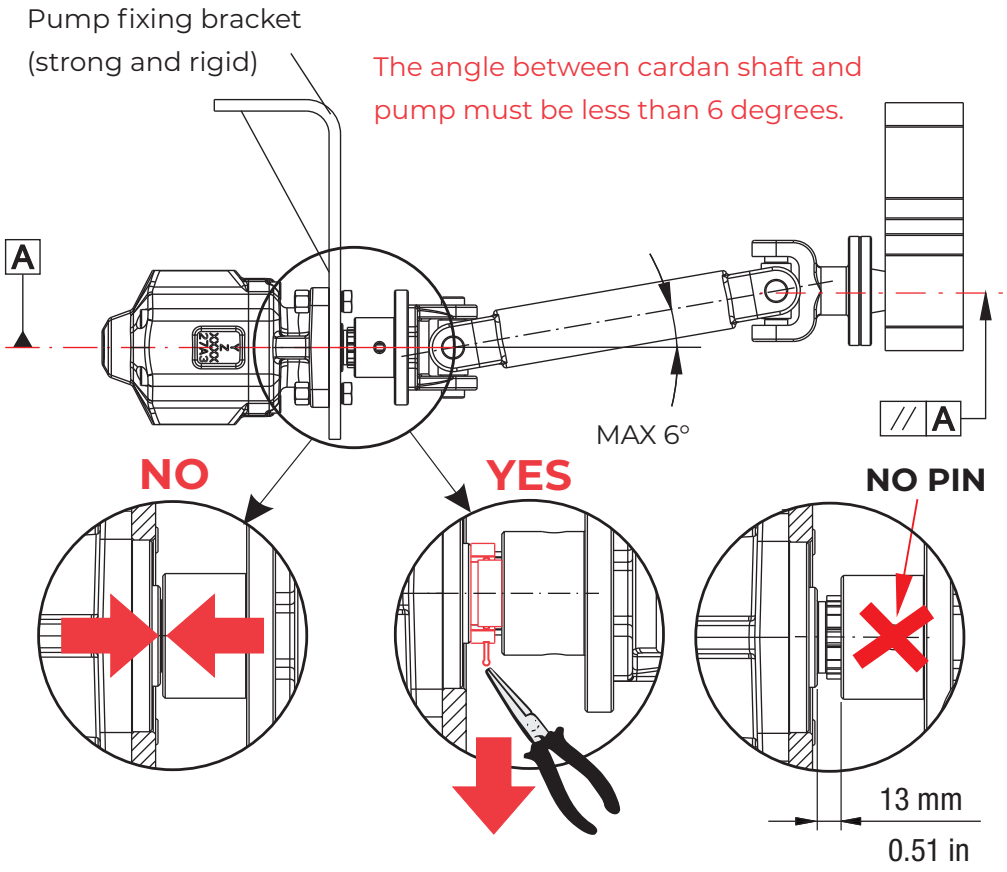




MOUNTING INSTRUCTIONS ALPHA GEAR PUMP BI-4H3

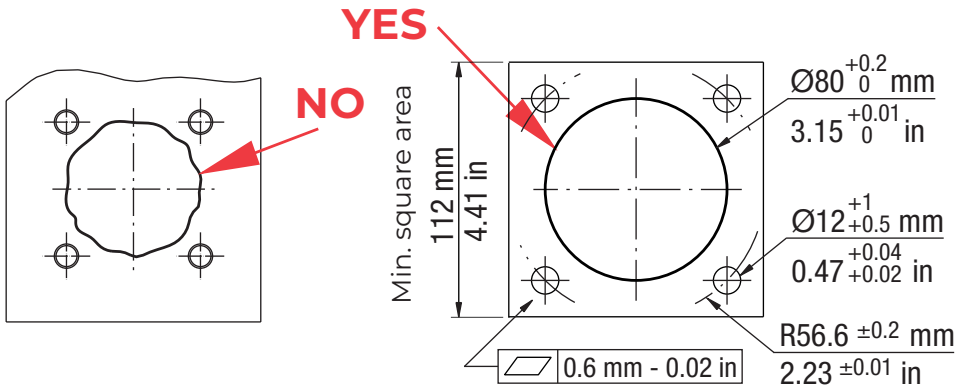
4. SINGLE PIECE CARDAN SHAFT MOUNT

Please make sure the outlet shaft of the PTO is supported by 2 bearings in the PTO.



DIMENSIONS FOR PUMP FIXING BRACKET

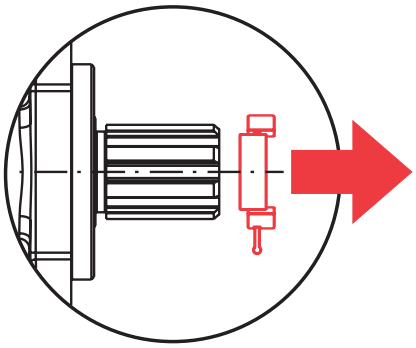
If present remove the plastic ring after the pump is fitted.

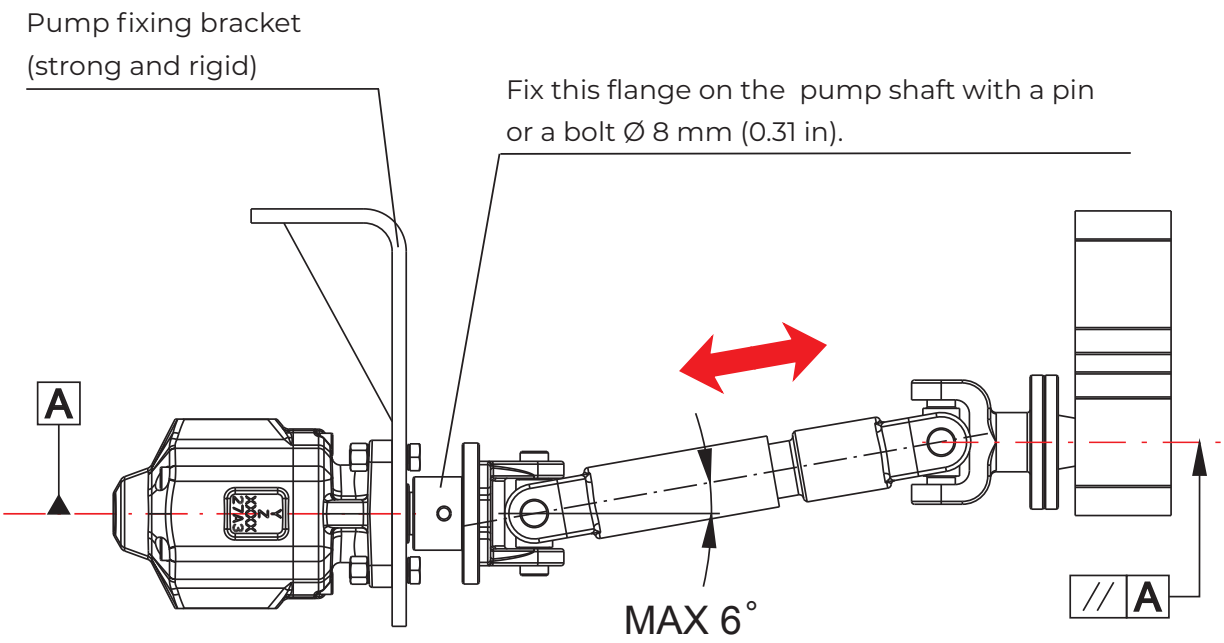


MOUNTING INSTRUCTIONS ALPHA GEAR PUMP BI-4H3

5. TELESCOPIC CARDAN SHAFT MOUNT

If present remove the plastic ring before fitting the pump.





The angle between cardan shaft and pump must be less than 6 degrees.

Fit the pump with 4 M12 Q10.9 (7/16" Grade 8) bolts [max bolt length =30 mm (1.18 in) + bracket thickness], 1 seal, 4 locking washers type Nord-Lock, Grower or Schnorr and 4 nuts M12-H=d-Q10 (7/16" Grade 8). Tighten nuts with 80 Nm (59 lbf ft).