THHP 300

SKF Hydraulic Pump

Easy-to-assemble hydraulic pump develops oil pressures up to 300 MPa *(43 500 psi)*

The SKF THHP 300 is a high pressure, hand-operated hydraulic pump that is suitable for many applications using the SKF Oil Injection Method.
It can be used straight from the case: mount the appropriate THPN nipple on the application and then screw on the quick connection nipple. Connecting the hose to the nipple on the application enables a supply of high pressure oil. The pump includes a 0-300 MPa *(0-43 500 psi)* pressure gauge, high pressure hose and quick connection coupling. Connection nipples enable both G1/4 and G3/4 connections.



The SKF Oil Injection Method helps technicians to install and remove components with an interference fit, in a fast, safe, controllable way.

Injecting a thin film of oil – under pressure – separates the mating surfaces, which virtually eliminates friction between them. This allows smaller mounting and dismounting forces to be used.
Pumps to supply this high pressure oil are typically complicated to assemble. However, the THHP 300 is ready to use with minimal preparation – allowing oil injection to be applied straight away, speeding up mounting and dismounting. Oil is automatically returned to the reservoir once pressure has been released, minimising the risk of leakage.

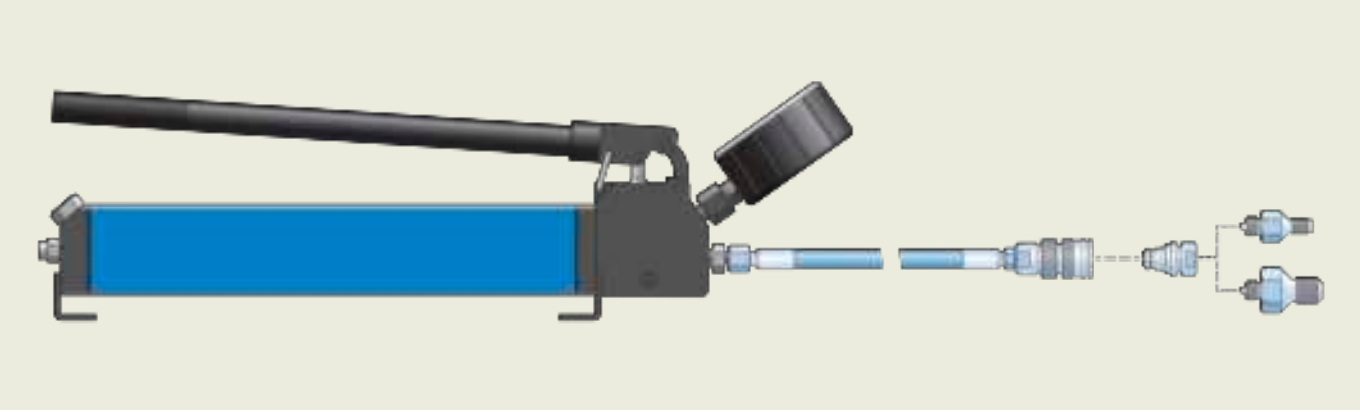
The pump can be used for mounting and dismounting such items as railway wheels and tyres, propellers and gears and similar type applications. For example, railway wheels are often heated and then mounted on a cylindrical shaft. After cooling the wheel has a tight fit on the shaft, without the need of having a key way. Later the wheel can be easily and quickly removed by using the SKF Oil Injection Method, by injecting oil at high pressure between the wheel and the shaft. The oil pressure breaks the interference fit and the greatly reduces friction. This simplifies the task of removing the wheel and helps to prevent shaft damage.

- Easy to use – with high pressure hose and quick connection coupling included
- Large, mounted gauge shows pressures from 0 to 300 MPa (*0 to 43 500 psi*)
- Applicable in wide range of industries including rail and marine.
- G1/4 and G3/4 nipples are supplied, while other sizes are available
- Design minimises the risk of oil leaking into the environment
- Can be used for applications requiring a maximum pressure of up to 300 MPa *(43 500 psi)*



Technical data

Designation	THHP 300
Maximum pressure	300 MPa *(43 500 psi)*
Volume per stroke 1st Stage	40 cm^3 *(2.43 in^3)* – below 1.6 MPa *(232 psi)*
Volume per stroke 2nd Stage	0.5 cm^3 *(0.03 in^3)* – above 1.6 MPa *(232 psi)*
Oil reservoir capacity	1.8 litres *(110 in^3)* / 1.6 litres *(97.6 in^3)* usable
Pressure gauge	0-300 MPa *(0-43 500 psi)* Diameter 100 mm *(4 in)* Accuracy 1% of full scale
Hose length	2 m *(78 in)*
Hose connection threads	G1/4 female to pump M16 male thread with special sealing design to attach to the quick connection coupling
Maximum torque for M16 thread	40~50 Nm *(29.5~36.9 ft-lb)*
Main dimensions of the pump (without hose and gauge)	574 × 130 × 200 mm *(22.6 × 5.1 × 7.9 in)*
Case dimensions	920 × 318 × 380 mm *(36.2 × 12.5 × 15.0 in)*
Unit weight	7.5 kg *(16.5 lb)*
Total weight (incl. case)	22.8 kg *(50.3 lb)*
Case contents	1 × Hydraulic pump body 1 × High pressure hose 1 × Pressure gauge and protection sleeve 1 × Quick connection coupling 1 × Quick connection nipple 1 × Connection nipple M16 (m) - G1/4 (m) 1 × Connection nipple M16 (m) - G3/4 (m) 1 × Mounting fluid (1 litre)
Optional connection nipples	
THPN M16G1/8	Connection nipple M16 (m) - G1/8 (m)
THPN M16G3/8	Connection nipple M16 (m) - G3/8 (m)
THPN M16G1/2	Connection nipple M16 (m) - G1/2 (m)



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PUB MP/P8 19112 EN · March 2021