

**High Pressure Comparison Test Pump**  
**LR-Cal LSP-7000**

**Pressure Source for calibration purposes**  
**Operating fluid: oil**

Pressure Comparison Test Pumps are used to generate pressures for checking, adjusting and calibrating mechanical and electronic pressure measuring instruments by comparative measurements. These pressure tests may be carried out in laboratories, workshops or on site at the measuring point.



The comparison test pump **LR-Cal LSP-7000** is equipped with two connections for the test specimen and the reference instrument which can be used in any order. If the instrument to be tested and a sufficiently accurate reference measuring instrument are connected to the test pump, the same pressure is applied to the two measuring instruments when the pump is operated. By comparing the two measured values at random pressure values, the accuracy can be verified or the instrument under test can be adjusted. First the pressure is set via an integrated initial (priming) pressure pump. For further pressure generation and for fine adjustment by approaching the measuring points precisely an adjustable volume with precision spindle is available. Another important feature of the test pump **LR-Cal LSP-7000** is the rotating spindle that only runs inside the body of the pump. This eliminates the negative effect of a bending torque on a spindle turning outside the body and offers the advantage, especially for use in the field, that the dimensions of these pumps do not change during operation due to the spindle turning.

**Technical Data**

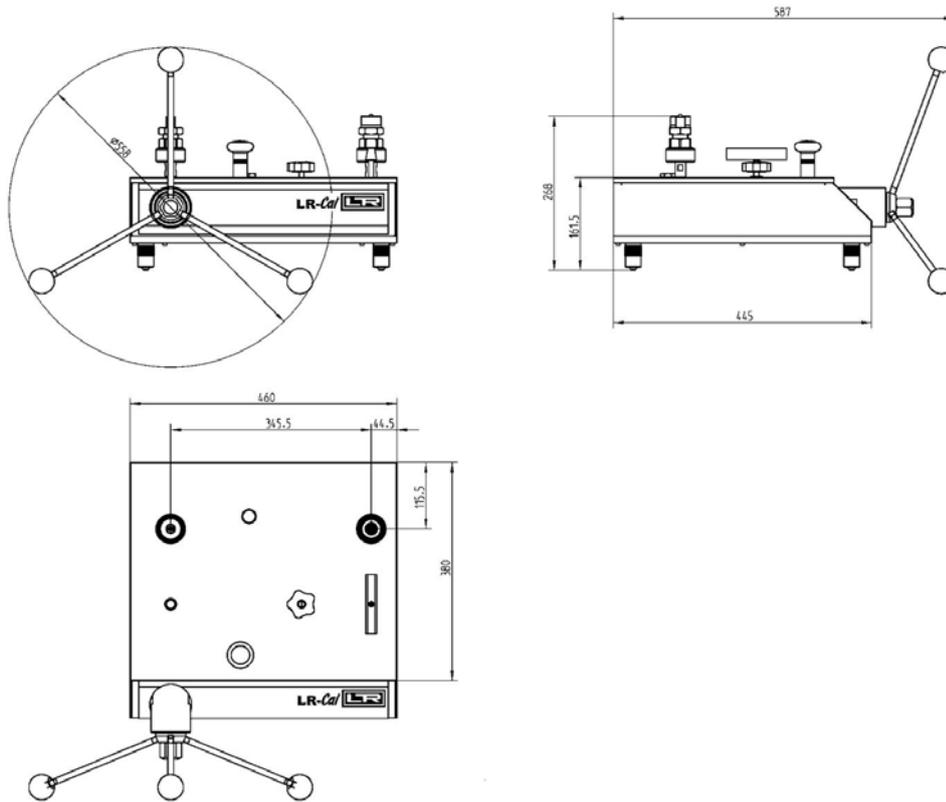
<b>Order-Code:</b>		<b>LSP-7000-HP</b>
Pressure Range:		0...7000 bar 0...101520 psi
Medium:		oil
Pressure connections:		2 x M16 x 1,5 male thread, rotating, changeable, with sealing cone
Distance of the test connections:		346 mm
Liquid reservoir:		250 cm <sup>3</sup>
Piston diameter:		7.5 mm
Swept volume per revolution:		approx. 0.08 cm <sup>3</sup>
Overall swept volume:		approx. 2.5 cm <sup>3</sup>
Required moment at	250 bar 500 bar 1000 bar 3000 bar 5000 bar 7000 bar	1.5 Nm 3.0 Nm 6.0 Nm 18 Nm 30 Nm 42 Nm
Material	Cylinder Piston Tubing Sealing gaskets	stainless steel hardened steel stainless steel 1.4404, 6 x 2 mm NBR
Dimensions:		W 460 x D 445 x H 265 mm
Weight:		32.5 kg
CE-Conformity:		97/23/EC Pressure equipment directive (Module A)

# LSP-7000

Pressure Comparison Pump  
up to 7,000 bar / 101,500 psi



### Dimensions:



### Optional Accessories:

Order-Code	Description
LSP-HP-FLUID	Operation liquid, 0.5 l in plastic bottle
LSP-HP-A-M16	Threaded adapter M16 x 1.5 male thread with sealing cone Material: hardened stainless steel
LSP-HP-A-M20	Threaded adapter M20 x 1.5 male thread with sealing cone Material: hardened stainless steel
LSP-HP-A-916	Threaded adapter 9/16-18 UNF male thread with sealing cone Material: hardened stainless steel
LSP-HP-A-G12	Threaded adapter 1/2" BSP female thread with O-ring, max. 1600 bar (max. 23200 psi). Material: stainless steel 1.4571

### Recommended Reference Instrument:

Electronic **pressure calibrator LR-Cal LPC 300** together with High-Pressure-Transmitter **LPC-S**. This special pressure transmitter are available e.g. with ranges **0-5000 bar** (0-72520 psi) or **0-8000 bar** (0-116000 psi). Used with the **LR-Cal LPC 300** calibrator, the total accuracy is better than **±0.15%** of full scale value. In this way, the functionality of the **LR-Cal LPC 300** calibrator is also available for this very high pressures.

Supply includes a traceable certificate of calibration.

Optional: DAkkS (DKD) certification.



Alternatively: pressure calibrator **LR-Cal PC 200**, up to 8000 bar (0...116000 psi)