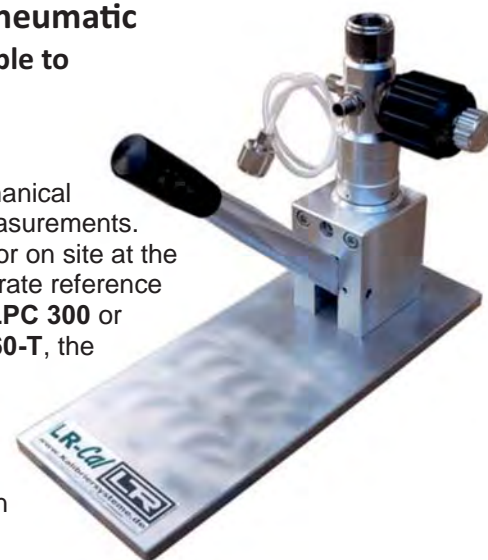


Pressure Comparison Test Pump **LR-Cal** LPP 60-T, pneumatic

Generation of test pressure up to +60 bar (870 psi), switchable to Generation of vacuum to -0.95 bar (-28 inHg)

The Calibration Test Pump **LR-Cal** LPP 60-T is used to generate pressures and vacuum for checking, adjusting and calibrating mechanical and electronic pressure measuring instruments by comparative measurements. These pressure tests may be carried out in laboratories, workshop or on site at the measuring point. If the instrument under test and a sufficiently accurate reference measuring instrument (e.g. Electronic Pressure Calibrator **LR-Cal** LPC 300 or **LR-Cal** LPC 200, $\pm 0.025\%$ FS) are connected to the **LR-Cal** LPP 60-T, the same pressure / vacuum is applied to the two instruments when the pump is operated.



Despite its compact dimensions, the calibration test pump **LR-Cal** LPP 60-T is easy to operate and allows for exact generation of the required test pressures. A change-over switch enables the generation of vacuum as well. The **LR-Cal** LPP 60-T is fitted with a fine adjustment valve for the precise adjustment of pressures. The reference instrument is screwed directly on to the top of the pump and the unit under test is connected by means of a connection tube incorporating an adapter 1/4" BSP rotating female (optional 1/4" NPT female) port.

Specification:

Pressure generation:	0...60 bar = 0...870 psi (or equivalent), switchable to
Vacuum generation:	0...- 0,95 bar = 0...-28 inHG (or equivalent)
Pressure ports:	1/2" BSP female rotating (with seal) for reference instrument on the top of the pump (Type LPP-60-T-N14 : 1/4" NPT female, type LPP-60-T-G14 : 1/4" BSP female rotating) 1/4" BSP female for unit under test (at connection tube) (Type LPP-60-T-N14 : 1/4" NPT female)
Volume per stroke:	appr. 11 cm ³
Materials:	anodized aluminum, brass (chromium plated)
Fine adjustment:	Fine adjustment valve
Dimension:	appr. 150 x 300 x 215 mm
Weight:	appr. 2.55 kg

Included in standard supply:

- Calibration test pump **LR-Cal** LPP 60-T
- Connection tube with female rotating pressure port
- Operating manual

Optional accessories:

- Set of adapters and seals for unit under test
- Carrying case with custom foams
- Tool for a simple operation of the adjustment valve (**LPP-VOLUMEN-TOOL**)

Recommended Reference Instruments:

• Accuracy $\pm 0.025\%$ FS:	Electronic Process Calibrator	LPC 300	datasheet "LPC 300"
• Accuracy $\pm 0.025\%$ FS:	Electronic Pressure Calibrator	LPC 200	datasheet "LPC 200"
• Accuracy $\pm 0.050\%$ FS:	Electronic Pressure Calibrator	TLDMM	datasheet "TLDMM 2.0"
• Accuracy $\pm 0.1\%$ FS:	Digital Test Pressure Gauge	TLDMM-A01	datasheet "LDM 80"
• Accuracy $\pm 0.2\%$ FS:	Digital Test Pressure Gauge	TLDMM-A02	datasheet "LDM 80"
• Accuracy $\pm 0.125\%$ F	Digital Test Pressure Gauge	LDM70-E25	datasheet "LMD 70"
• Accuracy $\pm 0.25\%$ F	Digital Test Pressure Gauge	LDM70-K50	datasheet "LDM 70"
• Accuracy $\pm 0.6\%$ FS:	Analogue Pressure Gauge	LPP-MANO-K06	see reverse page
• Accuracy $\pm 1.0\%$ FS:	Analogue Pressure Gauge	LPP-MANO	see reverse page

LPP 60-T

Pressure Comparison Pump LPP 60-T
Generating pressure -0,95...+60 bar (870 psi)

LR-Cal



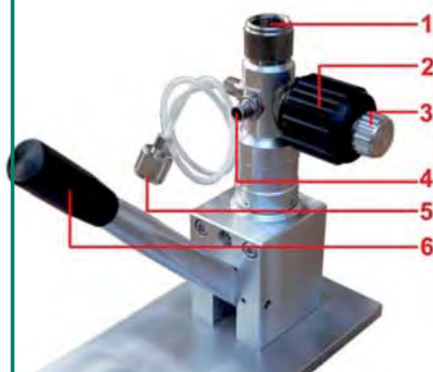
Order-Codes:

Description	Order Code
LR-Cal/ LPP 60-T Calibration Test Pump -0,95...+60 bar (-28 in Hg...+870 psi) NOTE: if you dismount the reference connector, you get 3/8" BSP female port	LPP-60-T
ditto, but reference port 1/4" BSP female rotating	LPP-60-T-G14
ditto, but reference port and test port 1/4" NPT female	LPP-60-T-N14
Set of BSP adapters and set of seals 1/8" BSP, 3/8" BSP and 1/2" BSP	LPP-ADAPTER-BSP
Set of metric adapters and set of seals M12x1,5 M20x1,5 and Minimes®	LPP-ADAPTER-M
Set of NPT adapters 1/8" NPT, 1/4" NPT, 3/8" NPT, 1/2" NPT	LPP-ADAPTER-NPT
Tool to simplify operation of the fine adjustment valve	LPP-VOLUMEN-TOOL
Carrying case with foams	LPP-60-T-KOFFER
LPP-MANO-K06 analogue reference gauge DS 100 ±0.6% FS, all stainless steel, fine graduation dial. Incl. certificate Available ranges: 0...4 bar/PSI; 0...25 bar/PSI; 0...40 bar/PSI; -1...0 bar/inHg; -1...+39 bar/PSI	LPP-MANO-....-K06
LPP-MANO analogue reference gauges DS 63 ±1% FS, fine graduation dial. Available ranges: 0...2 bar/PSI; 0...11 bar/PSI; 0...25 bar/PSI; 0...40 bar/PSI; -1...0 bar/inHg; -1...+39 bar/PSI	LPP-MANO-....
Spare part: Test tube with 1/4" BSP female port	LPP-SCHLAUCH-S-0050
Spare part: Fine adjustment valve with relief valve	LPP-VENTIL
Service Kit for LR-Cal/ LPP 60-T (O-rings, seals, etc.)	LPP-WARTUNG



NOTE:

To mount the reference instruments **LR-Cal/ LPC 300**, **LPC 200**, **TLDMM 2.0**, **LDM 80**, **LDM 70** or **LPP-MANO** you do **not** need any adapter if you use the calibration handpump type **LR-Cal/ LPP 60-T**, order-code **LPP-60-T**.



- (1) pressure port for mounting reference pressure instrument
- (2) fine volume adjustment, for generating high pressure appr. 40...60 bar and fine pressure adjustment
- (3) pressure relief valve
- (4) Switch pressure generation / vacuum generation
- (5) pressure port for test item
- (6) pump to generate pressure up to appr. 40 bar