

## Pressure Test Pump LR-Cal LPP 10, pneumatic operated Generating pressure up to +10 bar (145 psi), switchable to generating vacuum down to -0.85 bar (-25 inHg)

The pressure test pump **LR-Cal LPP 10** is used to generate pressure and vacuum for checking, adjusting and calibrating mechanical and electronic pressure measuring instruments by comparative measurements in the low-pressure and vacuum range. These pressure tests may be carried out in laboratories, workshops or on site at the measuring point.

If the instrument to be tested and a sufficiently accurate reference measuring instrument are connected up to the pressure test pump, the same pressure is applied to the two measuring instruments when the pump is operated. By comparing the two measure values at random pressure values, the accuracy can be verified or the unit under test can be adjusted.



The **LR-Cal LPP 10** is a pneumatic pressure test pump for low-pressure ranges up to 10 bar with change-over switch to vacuum down to -850 mbar. Despite its compact dimensions, the pressure test pump is easy to operate and allows for exact generation of the required test pressures. The maximum pressure or vacuum achievable depends on the attached test volume. The smooth-running pressure generation and the integrated fine adjustment valve allow a safe and precise setting of very small positive resp. negative pressure values in the range of mbar. The unit under test and the reference instrument can be easily connected with the supplied accessories (T-piece and two pieces of pressure hose with threaded adapters).

### Specification:

Pressure:	0 to 10 bar = 0 to 145 psi, switchable to
Vacuum:	0 to -0.85 bar = 0 to -25 inHg
Pressure ports:	T-piece to be mounted to the pump, with 1 x hose 0.5 m with pluggable port 1/2" BSP female for reference instrument and 1 x hose 0.5 m with pluggable port 1/4" BSP female for test item. Optional sets of threaded adapters „ <b>LPP-ADAPTER-...</b> “ available.
Medium:	Ambient air
Pressure fine adjustment:	Pressure adjustment valve (very sensitive volume variator)
Volume per stroke:	approx. 0.038 cm <sup>3</sup>
Dimensions:	approx. L 173 mm x W 100 mm x D 58 mm (without T-piece, hoses, adapters)
Weight:	approx. 697 g (without T-piece, hoses, adapters)

### Included in scope of standard delivery:

- Pressure test pump **LR-Cal LPP 10**
- T-piece for direct mounting to the pump, with 2 „Push&Pull“ hose connectors
- 1 x pneum. hose 0.5 m. One side to be plugged to the T-piece, other side with thread 1/2" BSP female, to connect reference pressure instrument/calibrator
- 1 x pneum. hose 0.5 m. One side to be plugged to the T-piece, other side with thread 1/4" BSP female, to connect item under test (optional sets of threaded adapters available)
- Operating manual

### Optional accessories:

- Several sets of threaded adapters for connecting items under test
- Carrying- and storage case
- Reference pressure instruments, digital gauges, pressure calibrators, with different functionalities and pressure ranges.

# LPP 10 Pressure Test Pump LPP 10 (pneumatic) Pressure +10 bar (145 psi) / Vacuum -0.85 bar



Order-Code	Description / Included in standard delivery
<b>LPP-10</b>	Pressure Test Pump <b>LR-Cal LPP 10</b> (-0,85...+10 bar) incl. T-piece, 2 hoses 4 x 2.5 mm, length each 0.5 m 1 Adapter (brass, chromium plated) to 1/2" BSP female and 1 Adapter (brass, chromium plated) to 1/4" BSP female, as well as necessary connectors and operating manual.
<b>LPP-10-PUMPE</b>	Pressure Test Pump <b>LR-Cal LPP 10</b> (-0,85...+10 bar): OEM version WITHOUT any accessories, just the pump.
<b>Accessories and Spare parts</b>	
<b>LPP-KOFFER</b>	Transport and storage case for <b>LR-Cal LPP 10</b> with foams, with space for accessories and a reference pressure instrument (e.g. <b>LR-Cal LDM 80</b> or <b>LR-Cal TLDMM 2.0</b> or <b>LR-Cal LDM 70</b> or <b>DM 80(-UMS)</b> )
<b>LPP-10-T-STUECK</b>	SPARE PART: T-piece for mounting on <b>LR-Cal LPP 10</b> , with 2 hose connectors (Push&Pull) for hose 4 x 2.5 mm
<b>LPP-10-PN-STECK</b>	SPARE PART: Hose connector (Push & Pull) for hose 4 x 2.5 mm, 1/8" BSP male
<b>LPP-10-ADAPT-G12</b>	SPARE PART: Adapter (brass, chromium plated) 1/8" BSP female x 1/2" BSP female (for reference)
<b>LPP-10-ADAPT-G14</b>	SPARE PART: Adapter (brass, chromium plated) 1/8" BSP female x 1/4" BSP female (for test item)
<b>LPP-10-SCHLAUCH-0050</b>	SPARE PART: pneumatic hose 4 x 2.5 mm, length 0.5 m
<b>SCHLAUCH-025ID-04AD</b>	Pneumatic hose 4 x 2.5 mm, per meter
<b>LPP-ADAPTER-BSP</b>	Set of BSP adapters and set of spare o-rings, for test item port: 1/4" BSP male x 1/8" BSP female + 3/8" BSP female + 1/2" BSP female + 1/2" BSP male
<b>LPP-ADAPTER-NPT</b>	Set of NPT adapters, for test item port: 1/4" BSP x 1/8" NPT female + 1/4" NPT female + 3/8" NPT female + 1/2" NPT female
<b>LPP-ADAPTER-M</b>	Set of metric adapters and set of spare o-rings, for test item port: 1/4" BSP male x M12x1.5 female + M20x1.5 female + MINIMESS1620
<b>Reference pressure instruments / Pressure calibrators</b>	
<b>LR-Cal LDM 80</b>	Ranges 0...100 mbar, 0...250 mbar, 0...500 mbar, 0...1 bar, 0...2.5 bar, 0...5 bar, 0...10 bar, -1...+1 bar, -1...+2.5 bar or -1...+5 bar, as well as 0...500 mbar abs., 0...1 bar abs., 0...2.5 bar abs. or 0...5 bar abs. Accuracy $\pm 0.2\%$ FS or (with option LDM80-KL01:) $\pm 0.1\%$ FS
<b>LR-Cal LHM</b>	Ranges 0...100 mbar, 0...500 mbar, 0...1 bar, 0...2.5 bar, 0...5 bar, -100...+100 mbar, -500...+500 mbar, -1...+1 bar, -1...+2.5 bar or -1...+5 bar pressure, vacuum, differential pressure or absolute pressure Accuracy $\pm 0.1\%$ FS or $\pm 0.05\%$ FS
<b>LR-Cal Serie 3000</b>	Ranges 25 mbar, 150 mbar, 1 bar or 8 bar pressure, vacuum and differential pressure. Accuracy up to $\pm 0.003$ mbar or or $\pm 1\%$ of measured value $\pm 1$ digit. For connecting to the pump, an adapter with Order-Code <b>3000-ADAPT-I25</b> is required.
<b>LR-Cal HMG 1</b>	Ranges 1 mbar, 2.5 mbar, 5 mbar, 10 mbar, 25 mbar, 50 mbar, 100 mbar, 1000 mbar, 1999 mbar, 10 bar pressure, vacuum and differential pressure or 700...1100 mbar absolute pressure. Accuracy up to $\pm 0.1\%$ FS



## Dimensions mm:

