

## Pneumatic pressure comparison test pump Type LR-Cal LPP 140-P, manual

- Test pressure source for calibration purposes
- Pneumatic (ambient air, manual)
- Pressure generation up to 2,030 psi (140 bar), switchable to vacuum generation down to -12 psi (-0.85 bar)

This pneumatic pressure comparison test pump is used to generate test pressure for checking, adjusting and calibrating all types of mechanical and electronic pressure measuring devices by means of comparative measurements. The LR-Cal LPP 140-P pressure comparison test pump requires a solid base (e.g. a workbench).

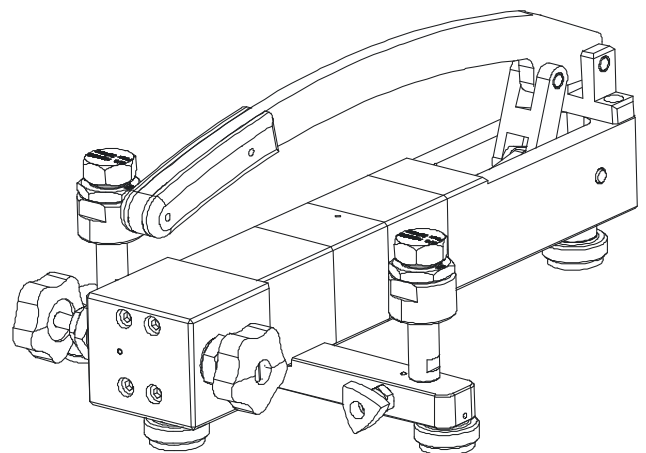
If the pressure measuring device to be tested and a sufficiently accurate reference pressure measuring device are connected to the pressure comparison test pump, the same pressure acts on both measuring devices when the pump is actuated. By comparing the two measured values at any pressure value, the accuracy or adjustment of the unit under test can be checked.



LR-Cal LPP 140-P

The LR-Cal LPP 140-P pressure comparison test pump is equipped with a fine adjustment valve for precise approach of the measuring points.

The test pump uses ambient air as the test medium. It is characterized by its simple and effective handling and works independently, so no external pressure source is required.



# LPP 140-P Pneumatic pressure comparison test pump

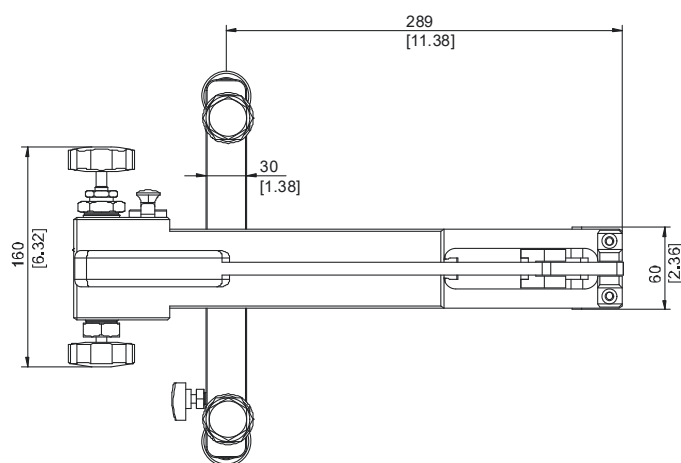
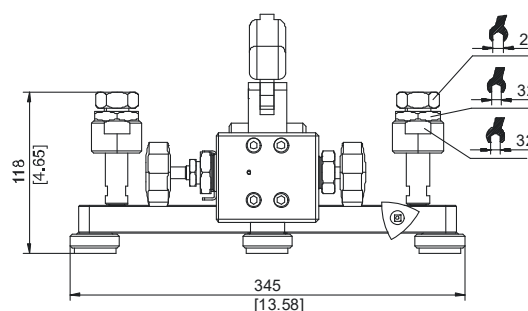
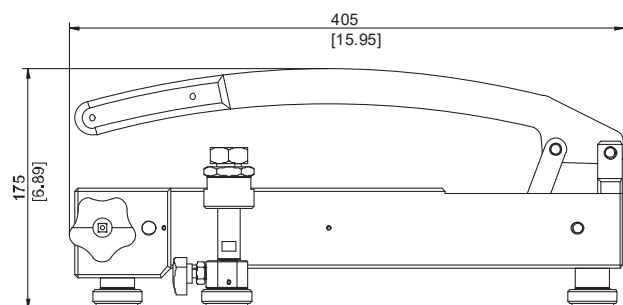
Pressure -0.85...+140 bar (2,030 psi)



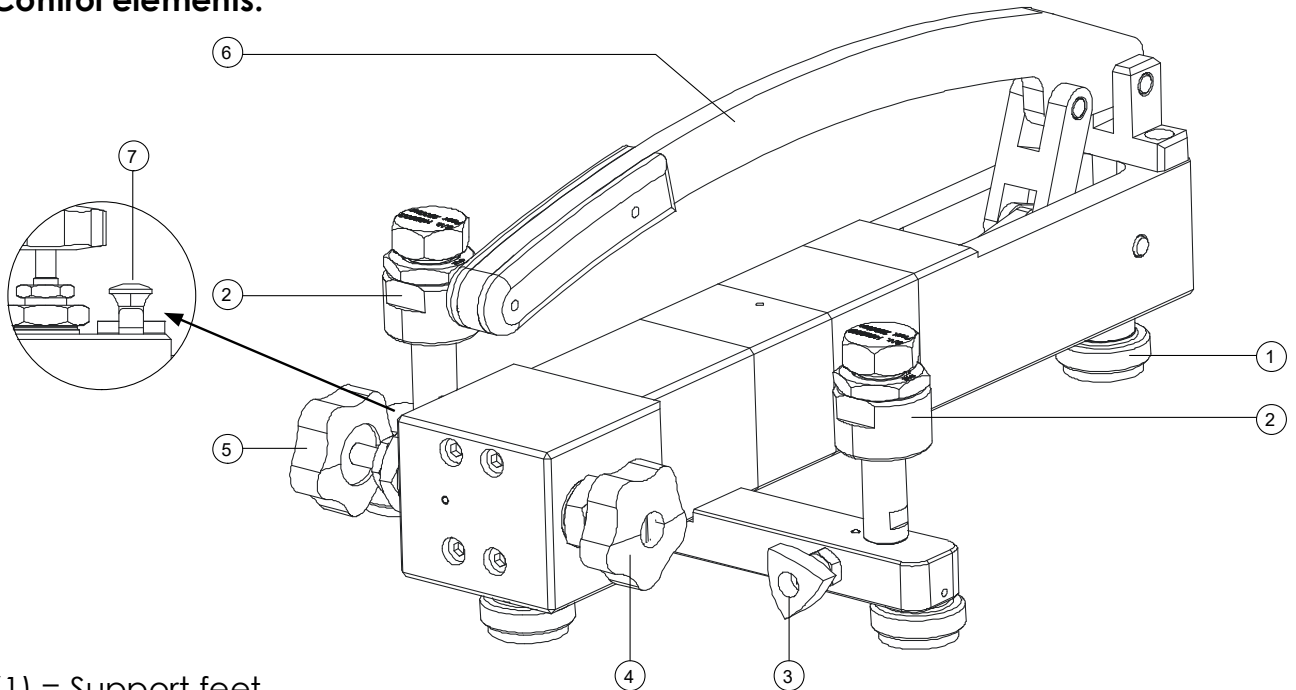
## Technical data:

Pressure generation area:	-0.85...+140 bar / -12...+2,030 psi
Pressure transmission medium:	Ambient air
Pressure ports:	2 ports (reference + unit under test) M 28 x 1.5 female in st.st. (free rotatable) incl. thread insert 1/2" BSP female in st.st.
Test pressure generation:	Lever pump
Test pressure fine adjustment:	Fine adjustment valve
Resolution:	Better than 1 mbar
Materials:	Aluminum alloy, copper and stainless steel
Dimensions:	W 345 x H 175 x D 405 mm
Weight:	Approx. 6.5 kg
Operation temperature:	18...28°C / 64...82°F
Storage temperature:	-10...+50°C / 14...122°F
Permissible medium:	Air
Order-Code:	LPP-140-P

## Dimensions in mm [in]:



### Control elements:



- (1) = Support feet
- (2) = Pressure ports for reference and unit under test
- (3) = Pressure release valve
- (4) = Fine adjustment valve
- (5) = Pressure maintaining/shut-off valve
- (6) = Pump lever handle
- (7) = Pressure/vacuum changeover switch

### Recommended reference instruments:

**LR-Cal TLDMM-3.0** Accuracy  $\pm 0.025/\pm 0.05\%$  FS



**LR-Cal LHM** Accuracy  $\pm 0.05/\pm 0.1\%$  FS



**LR-Cal LDM 80** Accuracy  $\pm 0.1/\pm 0.2\%$  FS



**LR-Cal LDM 70** Accuracy  $\pm 0.125/\pm 0.25\%$  BFSL



**LR-Cal DM 80-UMS** Accuracy  $\pm 0.25\%$  BFSL



**LR-Cal DM 80** Accuracy  $\pm 0.25\%$  BFSL



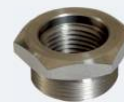
### Accessories for the LR-Cal LPP 140-P:

**Order-Code:**

**Description:**

LPP-140-P-AS-G14

Thread insert in st.st. for pressure ports  
1/4" BSP female



LPP-140-P-AS-N12

Thread insert in st.st. for pressure ports  
1/2" NPT female



LPP-140-P-AS-N14

Thread insert in st.st. for pressure ports  
1/4" NPT female



LPP-140-P-KOFFER

Rigid transport and storage case  
with foam insert



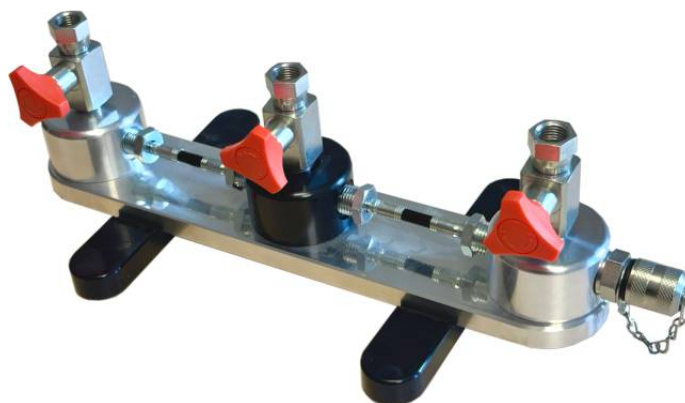
LPP-140-P-WARTUNG

Set of O-rings (NBR) for maintenance  
2 x 8.0x2.0 + 1 x 3.0x1.5 + 2 x 7.0x1.5  
1 x 13.0x2.0 + 1 x 8.0 x 2.0



### Calibration pressure manifold with three test item connections Type LR-Cal KDV-P-03

- Test up to 3 test specimens simultaneously
- Suitable for ambient air as medium
- The 3 test item connections can be individually shut off



The calibration pressure distributor LR-Cal KDV-P-03 enables simultaneous testing of up to three test specimens at the same time.

Pressure ports: 3 x 1/4" BSP female for test items (can be shut off individually by means of a valve)

Connection to the pressure comparison test pump LR-Cal LPP 140-P via connection pieces and measuring line system MINIMESS®.

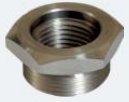





Order-Code: [KDV-P-03](#)



**Spare parts for the LR-Cal LPP 140-P:**

**Order-Code:**

**Description:**

LPP-140-P-AS-G12	Thread insert in st.st. for pressure ports 1/2" BSP female	
BLINDSTOPFEN-G12-VA	Blind plug in st.st. for pressure ports with 1/2" BSP thread insert	
LPP-140-P-ET-DAVT	Assembly: Pressure release valve (incl. 1 O-ring 3 x 1.5 mm)	
LPP-140-P-ET-DFRV	Assembly: Pressure fine adjustment valve (incl. 1 O-ring 13 x 2 mm + 1 O-ring 8 x 2 mm)	
LPP-140-P-ET-DABV	Assembly: Pressure maintaining/shut-off valve	
LPP-140-P-ET-DVUS	Assembly: Pressure/vacuum changeover switch (incl. 2 O-rings 7 x 1.5 mm)	

**Scope of standard delivery:**

- 1 x Pressure comparison test pump LR-Cal LPP 140-P
- 2 x Threaded inserts 1/2" BSP female
- 2 x Blind plugs 1/2" BSP male
- 1 x Operating manual (DE/EN)



**Important note:**

The performance of the pressure comparison test pump LR-Cal LPP 140-P depends on the total volume of the calibration circuit.

The lower the volume, the higher the performance.

The larger the volume, the more sensitively the test pressure can be adjusted.

