





# HAND-PUMPS FOR PRESSURE GENERATION

# Suitable for Use with Digital Keller-Manometers\*

- Simple, portable pressure generation
- Pressure generation: from vacuum (negative pressure) up to 700 bar
- Connection for reference pressure meter

(pump is supplied without reference pressure meter)

Hand-pump K/P Pressure generation: -0,85...25 bar Medium: Air

Negative pressures/vacuums and pressures of up to 25 bar (max. 40 bar) can be generated with this pneumatic hand-pump. Thanks to the fine adjustment valve (which is integrated in the pump) and the relief valve, a calibration pressure can be set accurately and quickly. This hand-pump is therefore highly suitable for testing manometers and pressure transmitters. The pump is supplied without the carrying case, which is available as an option.

Weight:  $\approx 1.1 \text{ kg}$  Dimensions: 240 mm x 170 mm x 50 mm

Hand-pump HTP1 Pressure generation: 0...700 bar Medium: Oil or Water

Pressures of up to 700 bar can be generated with this hydraulic hand-pump. Hydraulic oil or distilled water can be used as pressure medium (the pump is supplied without fluid). The reservoir has a capacity of approx. 1 dl (100 ccm), thus allowing the pump to be used with larger dead volumes. The hand-pump with its integrated fine adjustment and relief valve is highly suitable for testing manometers and pressure transmitters. The pump is supplied complete with accessories (hose, adaptor, etc.) in a stable carrying case.

Weight: ≈ 1,7 kg Dimensions: 255 mm x 176 mm x 70 mm

#### Reference devices

The reference device for accurate measurement of the actual pressure is screwed directly onto the hand-pump and is available as an option. The matching reference devices for the pumps are listed below. Please note the pressure range required for the pump:

K/P hand-pump = -1...30 bar HTP1 hand-pump = 0...700 bar

## Carrying Case

Solid carrying case with interior foam cutout to fit one pump with manometer attached. Addi-tional compartments for tools, adapters etc. are provided.

For pump K/P: Weight:  $\approx 900 \text{ g}$  Dimensions: 400 mm x 365 mm x 110 mm (optional) For pump HTP1: Weight:  $\approx 1,1 \text{ kg}$  Dimensions: 370 mm x 330 mm x 130 mm (inclusive)

# K/P HTP1



Hand-pump K/P (pneumatic)



Hand-pump HTP1 (hydraulic)

### \* Matching reference devices for use with the K/P or HTP1 hand-pump (available as options):

Reference device	LEX 1	LEO 1	LEO 2	dV-2
	18959 LEX1 - 18962 Marie	0959	0959	0960
Accuracy	0,05 %FS	0,2 %FS	0,1 %FS	0,10,5 %FS
Resolution 130 bar 0700 bar	1 mbar 50 mbar	10 mbar 200 mbar	10 mbar 200 mbar	10 mbar 100 mbar

Carrying Case for handpump HTP1 (inclusive)



Carrying Case for handpump K/P



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