



## CALIBRATION INSTRUMENTS (Digital Reference Test Pressure Gauge LDM 70)

### Specifications:

**LDM 70-E25: Accuracy  $\pm 0.25\%$  F.S. / LDM 70-K50: Accuracy  $\pm 0.5\%$  F.S**

- Battery powered, rugged, rotatable housing (DS 70 mm)
- 4.5-digit LC display (digit height 11 mm)
- 6-digit additional display to show the selected pressure unit (height 7.5 mm)
- Pressure unit switchable (PSI-bar-mbar-mWs-inHg-cmHg-mmHg-kPa-MPa)
- Easy configuration via three push buttons
- Ingress protection IP 65
- Ranges from 0/1.45 psi to 0/8700 psi (0/100 mbar to 0/600 bar)
- MIN and MAX value storage



Technical Data	Type LDM 70-E25	Type LDM 70-K50
<b>Pressure Ranges:</b>	All Standard Ranges, Gauge Pressure, Absolute Pressure, Vacuum and Compound Ranges	<b>All Standard Ranges 0/1.6 bar to 0/400 bar</b>
<b>Nominal Case Diameter:</b>	<b>DS 70 mm / 27.6 inches</b>	
<b>Accuracy (As Per IEC 60770):</b>	$\pm 0.25\%$ F.S. (Ranges $\leq 5.8$ PSI / 400 mbar: $\pm 0.5\%$ F.S.)	<b><math>\pm 0.5\%</math> F.S.</b>
<b>Measuring Rate:</b>	<b>5 per second</b>	
<b>Thermal Error (zero-point and span within temperature compensated range)</b>	Tolerance Band: Ranges $\leq 0.1$ bar: $\leq \pm 2.0\%$ F.S. ; average TC: $\pm 0.3\%$ F.S. / 10 K Ranges $\leq 0.25$ bar: $\leq \pm 1.5\%$ F.S. ; average TC: $\pm 0.2\%$ F.S. / 10 K Ranges $\leq 0.4$ bar: $\leq 1.0\%$ F.S.; average TC: $\pm 0.14\%$ F.S. / 10 K Ranges $\leq 1.0$ bar: $\leq 0.1\%$ F.S.; average TC: $\pm 0.1\%$ F.S. / 10 K Ranges $> 1.0$ bar: $\leq \pm 0.75\%$ F.S.; average TC: $\pm 0.07\%$ F.S. / 10 K	<b><math>\leq \pm 0.2\%</math> F.S. / 10 K</b>
<b>Temp. Compensated Range:</b>	Ranges $\leq 0.4$ bar: 0...50°C; ranges $> 0.4$ bar: 0...70°C	<b>-25...+85°C</b>
<b>Permissible Temperatures:</b>	Medium: -4/+185°F=-20/85°C; Ambient: -4/+158°F=-20/70°C; Storage: -22/+176°F=-30/80°C	
<b>Material Display Housing:</b>	PA 6.6 Polycarbonate	
<b>Material Pressure Port:</b>	Stainless Steel 1.4571 / 1.4435	
<b>Material Diaphragm:</b>	Stainless Steel 1.4435	Ceramic Al <sub>2</sub> O <sub>3</sub> 96%
<b>Material Seals:</b>	Wetted Seals: FKM (optional: EPDM, NBR, others on request)	
<b>Display:</b>	LCD 1.57" x 1.18"= 40 x 30 mm; 4 1/2 digit 7-segment-main display, digit height 11 mm Indication range $\pm 19999$ ; 6-digit 14-segment additional display, digit height 7.5 mm	
<b>Electromagnetic Compatibility:</b>	Emission and immunity according to EN 61326	
<b>Mechanical stability:</b>	Vibration: 5 g RMS (20...2000 Hz); shock: 100 g / 11 msec.	
<b>Supply:</b>	3.6 V lithium batteries, 2 Pcs. (type 1/2 AA)	
<b>Data memory:</b>	EEPROM (non-volatile)	
<b>Ingress protection:</b>	IP 65	
<b>Installation position:</b>	Any (the LDM 70 is calibrated in vertical position with pressure port down. If this position is changed on installation, there can be slight deviations in the zero-point for LDM-70-E25 ranges $< 1$ bar	
<b>Other data:</b>	Weight 300 g; AD-converter solution: 10 Bit; mech. operational life: $> 100 \times 10^6$ pressure cycles Battery life: app.. 5 years in standby mode;	
<b>Pressure port:</b>	1/2" BSP male (Ex-stock), 1/4" BSP male, 1/2" NPT male, 1/4" NPT male	

\*\* Non-standard specifications from above can be customize on indent basis.

\*\*\* All information subject to changes without prior notice owing to continuous development