



CALIBRATION INSTRUMENTS

(Digital Reference Test Pressure Gauge LDM 70)

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 |
|---|---|---|
| Pressure Ranges: | All Standard Ranges, Gauge Pressure, Absolute Pressure, Vacuum and Compound Ranges | All Standard Ranges 0/1.6 bar to 0/400 bar |
| Nominal Case Diameter: | DS 70 mm / 27.6 inches | |
| Accuracy (As Per IEC 60770): | $\pm 0.25\%$ F.S. (Ranges ≤ 5.8 PSI / 400 mbar: $\pm 0.5\%$ F.S.) | $\pm 0.5\%$ F.S. |
| Measuring Rate: | 5 per second | |
| Thermal Error (zero-point and span within temperature compensated range) | Tolerance Band: Ranges ≤ 0.1 bar: $\leq \pm 2.0\%$ F.S. ; average TC: $\pm 0.3\%$ F.S. / 10 K Ranges ≤ 0.25 bar: $\leq \pm 1.5\%$ F.S. ; average TC: $\pm 0.2\%$ F.S. / 10 K Ranges ≤ 0.4 bar: $\leq 1.0\%$ F.S.; average TC: $\pm 0.14\%$ F.S. / 10 K Ranges ≤ 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 | $\leq \pm 0.2\%$ F.S. / 10 K |
| Temp. Compensated Range: | Ranges ≤ 0.4 bar: 0...50°C; ranges > 0.4 bar: 0...70°C | -25...+85°C |
| Permissible Temperatures: | Medium: -4/+185°F=-20/85°C; Ambient: -4/+158°F=-20/70°C; Storage: -22/+176°F=-30/80°C | |
| Material Display Housing: | PA 6.6 Polycarbonate | |
| Material Pressure Port: | Stainless Steel 1.4571 / 1.4435 | |
| Material Diaphragm: | Stainless Steel 1.4435 | Ceramic Al2O3 96% |
| Material Seals: | Wetted Seals: FKM (optional: EPDM, NBR, others on request) | |
| Display: | LCD 1.57" x 1.18" = 40 x 30 mm; 4 1/2 digit 7-segment-main display, digit height 11 mm Indication range ± 19999 ; 6-digit 14-segment additional display, digit height 7.5 mm | |
| Electromagnetic Compatibility: | Emission and immunity according to EN 61326 | |
| Mechanical stability: | Vibration: 5 g RMS (20...2000 Hz); shock: 100 g / 11 msec. | |
| Supply: | 3.6 V lithium batteries, 2 Pcs. (type 1/2 AA) | |
| Data memory: | EEPROM (non-volatile) | |
| Ingress protection: | IP 65 | |
| Installation position: | 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 | |
| Other data: | 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; | |
| Pressure port: | 1/2" BSP male (Ex-stock), 1/4" BSP male, 1/2" NPT male, 1/4" NPT male | |