

Digital Test Pressure Gauge **LR-Cal LDM 70-E25**: with stainless steel sensor
Digital Test Pressure Gauge **LR-Cal LDM 70-K50**: with ceramic sensor

- 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 0/8,700 psi (0/100 mbar to 0/600 bar)
- MIN and MAX value storage



The display is continuously rotatable so that a clear readability is guaranteed even in unusual installation positions. The **LR-Cal LDM 70** can be operated menu-driven via three push-buttons. Besides showing information about the nominal pressure range as well as minimal and maximal pressure of the process, several pressure units (PSI, bar, mbar, mWC, inHg, cmHg, mmHg, kPa, MPa) and the position of the decimal point can be set. The instruments zero and span can be calibrated, the **LR-Cal LDM 70** can be set to factory default values via menu.

Technica data:	Type LDM 70-E25	Type LDM 70-K50
Pressure Ranges: (see tab. on back page)	all standard ranges, gauge pressure, absolute pressure, vacuum and compound ranges	all standard ranges 0/1.6 to 0/600 bar
Nominal case diameter:	DS 70 mm / 27.6 inches	
Accuracy (BFSL)	±0.125% f.s. (ranges ≤ 5.8 psi / 400 mbar: ±0.25% f.s.)	±0.25% f.s.
Measuring rate:	5 per second	
Thermal error (zero-point and span within temperature compensated range)	Tolerance band: Ranges ≤ 0.1 bar: ≤± 2.0% f.s.; average TC: ±0.3% f.s. / 10 K Ranges ≤ 0.25 bar: ≤±1.5% f.s.; average TC: ±0.2% f.s. / 10 K Ranges ≤ 0.4 bar: ≤1.0% f.s.; average TC: ±0.14% f.s. / 10 K Ranges ≤ 1.0 bar: ≤0.1% f.s.; average TC: ±0.1% f.s. / 10 K Ranges >1.0 bar: ≤±0.75% f.s.; average TC: ±0.07% f.s. / 10 K	≤±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 1.4404	
Material diaphragm:	stainless steel 1.4435	ceramic Al ₂ O ₃ 96%
Material seals:	FKM	
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 x 10 ⁶ pressure cycles; battery life: app.. 5 years in standby mode;	
Pressure port:	1/2" BSP male, 1/4" BSP male, 1/2" NPT male, 1/4" NPT male	



The Digital Test Pressure Gauges **LR-Cal LDM 70-K50** are available as complete pressure calibration kits (case, with calibration testpump **LR-Cal LPP 40**, **LR-Cal LPP 60** or **LR-Cal LPP 700**).

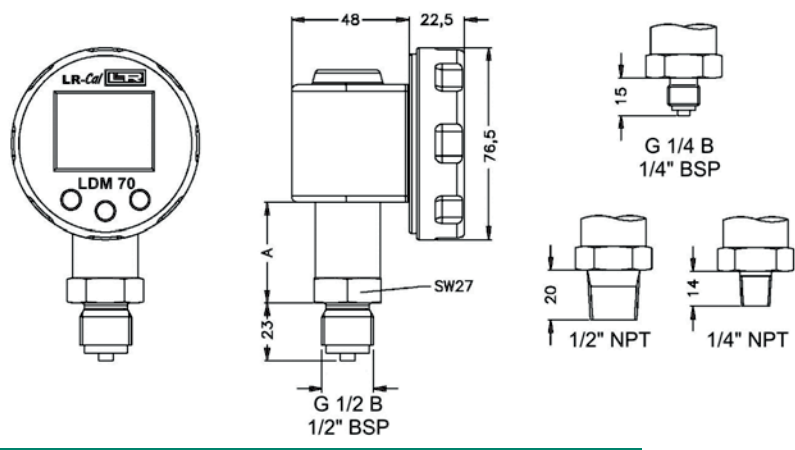
For a stationary use, as calibration pressure source we recommend our pressure comparators (spindle pumps) series **LR-Cal LSP**.

LDM 70 Digital Test Pressure Gauge LDM 70

battery operated, accuracy 0.125% or 0.25% FS



Dimensions:



dimension "A" for
type **LDM70-E25**: 35 mm

dimension "A" for
type **LDM70-K50**: 41.5 mm

Order-Codes and Pressure Ranges:

Order-Code		Pressure Range		Pressure Port Thread	
L	D M 7 0	-	-	-	-
with stainless steel sensor		E	2 5		
with ceramic sensor		K	5 0		
*)	Range 0...1.45 psi / 0...100 mbar	8	1 0 0	-	0
*)	Range 0...2.32 psi / 0...160 mbar	8	1 6 0	-	0
*)	Range 0...3.63 psi / 0...250 mbar	8	2 5 0	-	0
*)	Range 0...5.80 psi / 0...400 mbar	8	4 0 0	-	0
**)	Range 0...8.70 psi / 0...0.6 bar	0	0 0 0	-	6
**)	Range 0...14.5 psi / 0...1 bar	0	0 0 1	-	0
	Range 0...23.2 psi / 0...1.6 bar	0	0 0 1	-	6
	Range 0...36.3 psi / 0...2.5 bar	0	0 0 2	-	5
	Range 0...58.0 psi / 0...4 bar	0	0 0 4	-	0
	Range 0...87.0 psi / 0...6 bar	0	0 0 6	-	0
	Range 0...145.0 psi / 0...10 bar	0	0 1 0	-	0
	Range 0...232.1 psi / 0...16 bar	0	0 1 6	-	0
	Range 0...362.6 psi / 0...25 bar	0	0 2 5	-	0
	Range 0...580.2 psi / 0...40 bar	0	0 4 0	-	0
	Range 0...870.2 psi / 0...60 bar	0	0 6 0	-	0
	Range 0...1450 psi / 0...100 bar	0	1 0 0	-	0
	Range 0...2321 psi / 0...160 bar	0	1 6 0	-	0
	Range 0...3626 psi / 0...250 bar	0	2 5 0	-	0
	Range 0...5802 psi / 0...400 bar	0	4 0 0	-	0
	Range 0...8702 psi / 0...600 bar	0	6 0 0	-	0
**)	Range -30 / 0 in Hg / -1/0 bar	0	0 0 0	-	0
**)	Range -30 inHg / +8.7 psi / -1/+0.6 bar	9	0 0 0	-	6
	Range -30 inHg/+22 psi / -1/+1.5 bar	0	0 0 1	-	5
	Range -30 inHg/+43.5 psi / -1/+3 bar	0	0 0 3	-	0
	Range -30 inHg/+72.5 psi / -1/+5 bar	0	0 0 5	-	0
	Range -30 inHg / +130.5 psi / -1/+9 bar	0	0 0 9	-	0
	Range -30 inHg/+217.6 psi / -1/+15 bar	0	0 1 5	-	0
	Range -30 inHg/+348 psi / -1/+24 bar	0	0 2 4	-	0
	Range -30 inHg/+565.6 psi / -1/+39 bar	0	0 3 9	-	0
Pressure Port thread 1/2" BSP male (standard)		G	1 2		
Pressure Port thread 1/4" BSP male		G	1 4		
Pressure Port thread 1/2" NPT male		N	1 2		
Pressure Port thread 1/4" NPT male		N	1 4		

perm. overpressure (bar), type LDM70-		available as absolute range
-E25-	-K50-	
0,5	-	no
0,5	-	no
1	-	no
1	-	no
3	-	no
3	-	no
6	4	yes
6	4	yes
20	10	yes
20	10	yes
20	20	yes
60	40	yes
60	40	no
100	100	no
140	100	no
340	200	no
340	400	no
600	400	no
600	600	no
1000	1000	no
1	-	no
3	-	no
6	4	no
20	4	no
20	10	no
20	20	no
60	40	no
60	40	no
100	100	no

Order-Code for extra charge for Absolute version: **LDM70-MP-ABS**

*) = only with accuracy ±0.25% (BFSL) as type LDM-70-E25 available
 **) = only with accuracy ±0.125% (BFSL) as type LDM-70-E25 available

Accuracy ±0,125% FS (Class 0.125) as per BFSL is equal to ±0.25% FS (Class 0.25) as per IEC 60770
 Accuracy ±0.25% FS (Class 0.25) as per BFSL is equal to ±0.5% FS (Class 0.5) as per IEC 60770