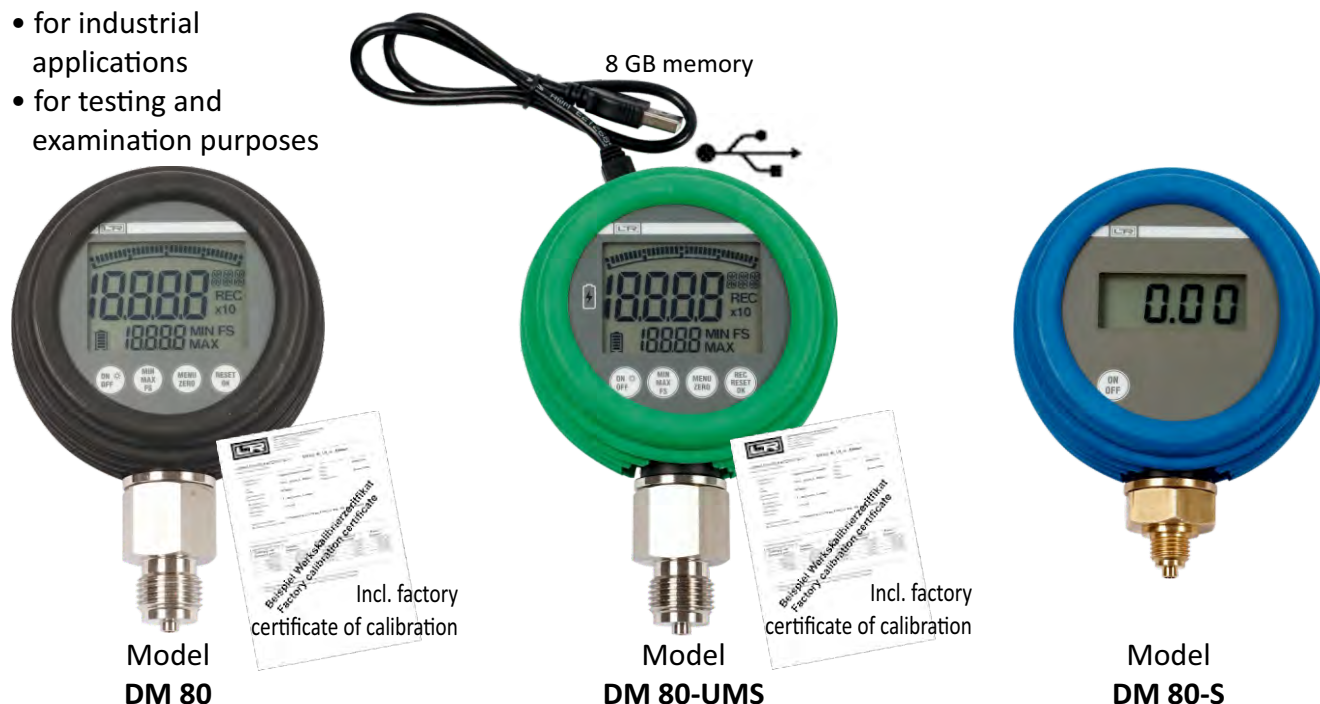


Digital Pressure Gauge Accuracy: $\pm 0.5\%$ FS as per IEC 60770

- for industrial applications
- for testing and examination purposes



The digital pressure gauges models **DM 80**, **DM 80-UMS** (and **DM 80-S**) are used for digital indication of measured pressure values, as well as for testing and diagnose purposes in stationary and mobile hydraulic applications.

	Model DM 80	Model DM 80-UMS	Model DM 80-S
Interface:	---	USB	---
Data storage (data transmission as CSV file):	---	8 GB	---
Ambient temperature:	-10...+50°C	-10...+50°C	-10...+50°C
Storage temperature:	-20...+60°C	-20...+60°C	-20...+60°C
Medium	ranges -50...+50 mbar and -200...+200 mbar:	-10...+50°C *)	---
temperature:	range 0...4 bar absolute:	-20...+80°C	---
	all other pressure ranges:	-40...+125°C	-20...+120°C
Maximal relative humidity:	85% r.h.	85% r.h.	85% r.h.
Material	ranges -50...+50 mbar and -200...+200 mbar:	CuZn39Pb3	---
pressure port:	range 0...4 bar absolute:	St.st. 1.4404	---
	all other pressure ranges:	St.st. 1.4301	Brass
Material	ranges from -50...+50 mbar to 0...4 bar abs.	Ceramic	---
membrane:	all other pressure ranges:	St.st. 1.4548	Ceramic
Material	ranges -50...+50 mbar and -200...+200 mbar:	Epoxy	---
gasket:	range 0...4 bar absolute:	EPDM	---
	all other pressure ranges:	welded **)	H-NBR
Temperature compensated range:	0...50°C	0...50°C	+10...+40°C
Error in temperature	ranges -50...+50 mbar and -200...+200 mbar:	$\leq \pm 0.03\%$ FS / °C	---
compensated	range 0...4 bar absolute:	$\leq 0.005\%$ FS / °C	---
range:	all other pressure ranges:	$\leq 0.035\%$ FS / °C	$\leq 0.02\%$ FS / °C
Minimum	ranges from -50...+50 mbar to 0...4 bar abs.:	10×10^6	---
load cycles:	all other pressure ranges:	100×10^6	10×10^6
Power supply:	2 x 1.5 VDC LR6-AA	built-in Li-Ion battery	2 x 1.5 VDC LR6-AA
Max. battery life time:	1500 h	20 h continuously	1500 h
	ranges -50...+50 mbar and -200...+200 mbar:	mbar	---
Pressure units:	ranges from 0...4 bar abs. to 0...60 bar:	bar, PSI, kPa, MPa, mbar	---
	ranges from 0...100 bar to 0...600 bar:	bar, PSI, kPa, MPa	---
	ranges from 0...700 bar to 0...2500 bar:	bar, PSI, MPa	---
Pressure port:	ranges -50...+50 mbar and -200...+200 mbar:	1/4" BSP M acc. EN 837 *)	---
	all other pressure ranges:	1/2" BSP M acc. EN 837	1/4" BSP M acc. EN 837
Indication:	LCD incl. bargraph	LCD incl. bargraph	LCD
PEAK function:	Min. / Max.	Min. / Max.	---
Weight:	approx. 400 g	approx. 410 g	approx. 390 g
Case	with rubber protection cap:	approx. 95-100 mm	approx. 95-100 mm
diameter:	without rubber protection cap:	approx. 80 mm	approx. 80 mm

*) For dry gaseous media only! **) no gasket, because of welded diaphragm membrane

How to order: Pressure ranges and Order-Codes

Model DM 80

Pressure conn.: 1/2" BSP M
Accuracy $\pm 0.5\%$ FS
incl. factory certificate
of calibration





Gauge pressure ranges:	Order-Code:
0...25 bar	DM80-0025-0-G12
0...40 bar	DM80-0040-0-G12
0...60 bar	DM80-0060-0-G12
0...100 bar	DM80-0100-0-G12
0...250 bar	DM80-0250-0-G12
0...400 bar	DM80-0400-0-G12
0...600 bar	DM80-0600-0-G12
0...700 bar	DM80-0700-0-G12
0...1000 bar	DM80-1000-0-G12
0...2500 bar	DM80-2500-0-G12
Compound pressure ranges:	Order-Code:
-50...+50 mbar (conn. 1/4" BSP)	DM80-8000-5-G14
-200...+200 mbar (conn. 1/4" BSP)	DM80-8002-0-G14
-1...+16 bar	DM80-9016-0-G12
-1...+25 bar	DM80-9025-0-G12
-1...+40 bar	DM80-9040-0-G12
-1...+60 bar	DM80-9060-0-G12
Absolute pressure ranges:	Order-Code:
0...4 bar absolute	DM80-0004-ABS-G12

To be ordered separately with each instrument DM 80:

Rubber protection cap, black **DM80-GSK-S**

Accessories for DM 80:

Threaded adapter M16x2 female x 1/2" BSP female	 DM80-AD-M16-I-G12
Threaded adapter M16x2 male x 1/2" BSP female	 DM80-AD-M16-A-G12

Model DM 80-S

Pressure conn.: 1/4" BSP M
Accuracy $\pm 0.5\%$ FS





Gauge pressure ranges:	Order Code:
0...60 bar	DM80-S-0060-0-G14
Compound pressure ranges:	Order Code:
-1...+3 bar	DM80-S-0003-0-G14
-1...+16 bar	DM80-S-9016-0-G14

To be ordered separately with each instrument DM 80-S:

Rubber protection cap, blue **DM80-GSK-B**

Accessories for DM 80-S

Factory certificate of calibration	DM80-S-WZERT
Threaded adapter M16x2 female x 1/4" BSP female	 DM80-AD-M16-I-G14
Threaded adapter M16x2 male x 1/4" BSP female	 DM80-AD-M16-A-G14

Model DM 80-UMS

Pressure conn.: 1/2" BSP M
Accuracy $\pm 0.5\%$ FS
incl. factory certificate
of calibration



with USB interface and **8 GB** data memory
(export as csv file, no special software needed)



Gauge pressure ranges:	Order-Code:
0...100 bar	DM80-UMS-0100-0-G12
0...400 bar	DM80-UMS-0400-0-G12
0...600 bar	DM80-UMS-0600-0-G12
0...1000 bar	DM80-UMS-1000-0-G12
Compound pressure ranges:	Order-Code:
-1...+16 bar	DM80-UMS-9016-0-G12



To be ordered separately with each instrument DM 80-UMS:	
Rubber protection cap, green	DM80-GSK-G
Accessories for DM 80-UMS:	Order-Code:
Mains charger 110...230 VAC	DM80-UMS-LG
Threaded adapter M16x2 female x 1/2" BSP female	DM80-AD-M16-I-G12
Threaded adapter M16x2 male x 1/2" BSP female	DM80-AD-M16-A-G12

The model **DM 80-UMS** is equipped with a 8 GB data memory and has a micro USB connector. The data transfer speed is according to the USB 2.0 standard.

The built-in rechargeable lithium-ion battery enables autonomous continuous operation of approx. 20 hours. The charging time of an empty battery is about 3 hours.

The measurement value storage rate can be set: every 10 ms, / 100 ms / 1 sec / 10 sec.
A data record can be also created by pushing the button „REC“.

Due to the extremely large storage capacity, the logging time is approximately as follows:

- with storage interval every 10 milliseconds: approx. 1 year
- with storage interval every 100 milliseconds: approx. 10.1 years
- with storage interval every 1 second: approx. 101.5 years
- with storage interval every 10 seconds: approx. 1015 years

The built-in data memory of the **DM 80-UMS** will be recognized by the computer as an external memory (like an USB drive). Enables extremely simple reading of the stored data (.csv file) without special software.

Scope of standard delivery of the digital pressure gauge and datalogger **DM 80-UMS**:

- Device **DM 80-UMS** (rubber protection cap, order-code **DM80-GSK-G** must be ordered separately!)
- USB- cable (Micro-USB to USB-A), PC connection to USB-A connector.
- Factory certificate of calibration
- Operating manual

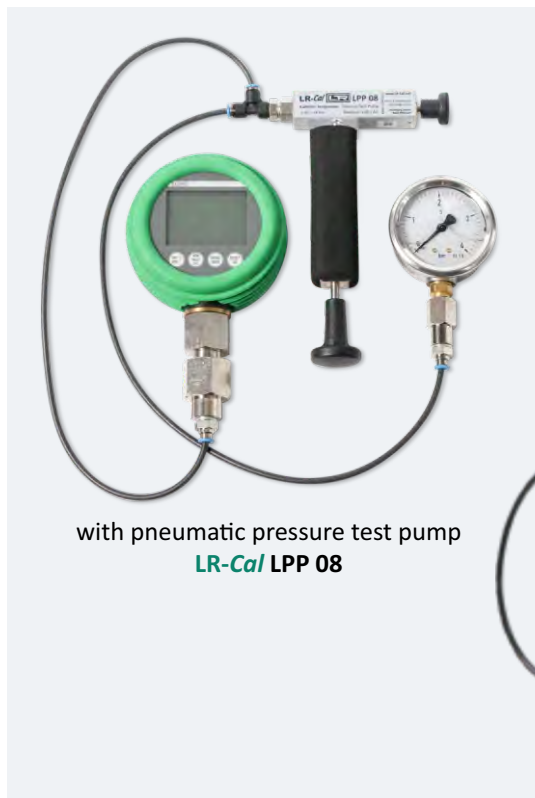
Recommended accessories:

- Green rubber protection cap order-code **DM80-GSK-G** (must be ordered with every **DM 80-UMS**!)
- Plug battery charger 110...240 VAC with USB-A connector: order-code **DM80-UMS-LG**

DM 80
DM 80-UMS
DM 80-S

LR SMART TECH Digital Pressure Gauge $\pm 0.5\%$ FS
DM 80 • DM 80-UMS • DM 80-S

The digital pressure gauges **DM 80**, **DM 80-UMS** as well as model **DM 80-S** are ideal not only for measurement of process pressures (**DM 80-UMS** with datalogger), but also - in combination with our pressure test pumps - perfect for testing and diagnostic works:



with pneumatic pressure test pump
LR-Cal LPP 08



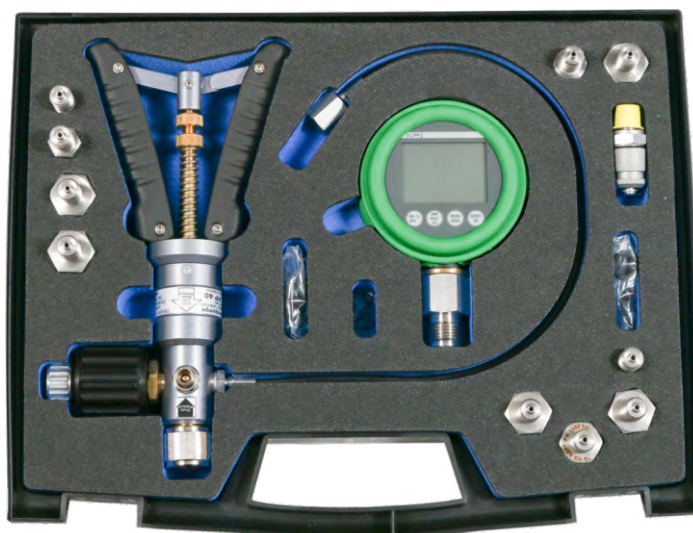
with pneumatic pressure test pump
LR-Cal LPP 40



with pneumatic pressure test pump
LR-Cal LPP 60-T



with hydraulic pressure test pump
LR-Cal LPP 700/1000



Diagnostic Case with pneumatic pressure test pump
LR-Cal LPP 40 and adapters