



The LILLY Line

Electronic process and test devices for temperature and pressure

The instruments of the LILLY line are based on the proven and robust case design of high-quality industrial pointer-type measuring instruments for temperature and pressure and can easily replace those in various applications. The stainless steel cases with bayonet ring feature excellent corrosion resistance and provide protection against electromagnetic interferences.

Furthermore, the instruments of the LILLY line have, in contrast to their mechanical counterparts, all the advantages of the electronic measuring technology, such as

- ◆ increased measurement accuracy
- ◆ faster response times
- ◆ transmission of measured values via electronic interfaces
- ◆ digital smoothing
- ◆ wider range of functions and better usability
- ◆ insensitivity to vibrations

No matter what requirements and needs your application has, together with our technicians we will find an ideal solution for you – Please contact us!

Your Partner for Pressure and Temperature Measurement

Customer-specific solutions for demanding measuring tasks

The ARMANO Messtechnik GmbH represents tradition and innovation in the production and distribution of precision pressure and temperature measuring instruments, which have an excellent reputation worldwide – for more than 100 years.

We are continually developing customer-specific solutions for a variety of applications requiring pressure and temperature measuring technology. Their use is manifold and there are always new applications.

Our products at a glance



We provide the right solutions for:

- ◆ abrasive media
- ◆ aggressive media
- ◆ mechanical stress
- ◆ difficult installation conditions
- ◆ extreme medium temperatures
- ◆ extreme ambient conditions
- ◆ high precision requirements
- ◆ requirements concerning high measuring rates

www.armano-messtechnik.com

Location Beierfeld · Germany
 Am Gewerbepark 9 · 08344 Grünhain-Beierfeld
 Tel.: +49 3774 58 - 0 · Fax: +49 3774 58 - 545
 mail@armano-beierfeld.com



Location Wesel · Germany
 Manometerstraße 5 · 46487 Wesel-Ginderich
 Tel.: +49 2803 9130 - 0 · Fax: +49 2803 1035
 mail@armano-wesel.com

Product Range LILLY Line

ARMANO Messtechnik GmbH



Pressure Measuring Instruments of the LILLY Line

The digital pressure gauge models LILLYpress PLUS are used for indicating and monitoring pressures of liquid and gaseous media. The electronic processing of the measuring signal enables functions such as the switching of measuring units, a TARE function for zero setting, adjustable damping or a temperature indication.

Model DPG 1030 is supplied by a battery. Models DPG 1500 and DPG 1510 require an external power source and are also equipped with a 4...20 mA analogue output. Thanks to their excellent stability and accuracy, these instruments are suitable as reference standards for calibrations. The large, high-contrast graphic display guarantees good readability. The stainless steel pressure measuring cells offer excellent chemical resistance and guarantee additional process safety due to their high burst pressure.



Models	DPG 1030	DPG 1500	DPG 1510
Supply	battery	12...30 V DC	12...30 V DC
Measuring ranges	0 – 2.5 bar to 0 – 700 bar (0 – 30 psi to 0 – 10000 psi) 0 – 1000 bar to 0 – 3000 bar (0 – 15000 psi to 0 – 40000 psi)	0 – 1000 bar to 0 – 3000 bar (0 – 15000 psi to 0 – 40000 psi)	0 – 2.5 bar to 0 – 700 bar (0 – 30 psi to 0 – 10000 psi)
Option vac. measurement	vacuum-proof	vacuum-proof	✓
Option data logger	DPG 1030-L	–	–
Type of pressure	gauge	gauge	gauge / absolute
Accuracy	±0.1 % FS ±0.25 % FS	≤ ±0.25 % FS / (0.1 % FS) ¹⁾	≤ ±0.1 % FS
Wetted parts	1.4542 1.4548	1.4542 1.4548	1.4435, 1.4571 FKM (PN > 160 bar)
Ambient temperature range	–20 °C to +70 °C (–4 °F to +158 °F)	–20 °C to +70 °C (–4 °F to +158 °F)	–20 °C to +70 °C (–4 °F to +158 °F)
Bargraph indication	✓	✓	✓
Sensor temp. indication	✓	✓	✓
Analogue output 4...20 mA	–	✓	✓
Pressure units	32 pressure units, 1 freely configurable user unit (factor and name)	bar, psi, kPa / MPa, kp/cm ²	bar, psi, kPa / MPa, kp/cm ²
Temperature units	°C, °F	°C, °F	°C, °F
IP (DIN EN 60529)	IP65	IP65	IP65
Damping	✓	✓	✓
Data sheet	9643	9651	9652

¹⁾ 0.1 % FS: 0 – 50 °C (32 – 122 °F)

for pressure and temperature in all industries



Highlights

Pressure

- » accuracy up to 0.1 % of the measuring span «
- » temperature-compensated «
- » various process connections «
- » high overload «
- » pressure range up to 3000 bar / 40000 psi «

Temperature

- » stainless steel sensor «
- » robust «
- » customer-specific process connection «
- » high-contrast graphic display «
- » MIN / MAX memory «
- » precision «

Temperature

- » –99.9 °C to +550 °C «
- » accuracy up to 0.1 % of the measuring span «
- » measuring rate adjustable 1 s to 30 s «
- » optional: turnable and adjustable version (with pivot) «
- » optional: replaceable temperature sensor via M 12 plug connector (cable sensor) «

Temperature Measuring Instruments of the LILLY Line

The battery-operated digital thermometer models of the LILLY line consist of an easy-to-read LC display and a platinum resistance thermometer built into a robust thermometer standard case made of stainless steel. They can be manufactured with the same construction types (according to DIN EN 13190) as mechanical thermometers. They can be applied as an alternative to mechanical thermometers when these reach their limits due to difficult installation conditions, vibrations or accuracy requirements. Due to their high accuracy, the instruments of the LILLY line are also suitable as an alternative for mercury-in-glass thermometers.



TDSch	TDKCh	TDPSch	TDPKCh	Models
battery	battery	battery	battery	Supply
–99.9 / +550 °C	–99.9 / +550 °C	–99.9 / +500 °C	–99.9 / +500 °C	Measuring range
4-digit LC display	4-digit LC display	LC graphic display	LC graphic display	Display
18 mm (0.71")	18 mm (0.71")	25 mm (0.98")	25 mm (0.98")	Digit height
100 mm (4")	100 mm (4")	100 mm (4")	100 mm (4")	Nominal case size
±0.3 % FS ±1 digit	±0.3 % FS ±1 digit	±0.1 % FS ±1 digit	±0.1 % FS ±1 digit	Accuracy
1.4571	1.4571	1.4571	1.4571	Wetted parts
rigid	connection cable	rigid	connection cable	Temperature sensor
°C	°C	°C / °F	°C / °F	Temperature units
IP65	IP65	IP65	IP65	IP (DIN EN 60529)
Pt1000 IEC 60751	Pt1000 IEC 60751	Pt1000 IEC 60751	Pt1000 IEC 60751	Measuring element
15 s	15 s	adjustable 1 s to 30 s	adjustable 1 s to 30 s	Measuring rate
5 – 7 years	5 – 7 years	> 1 year, depending on application	> 1 year, depending on application	Battery life
8301	8321	8302	8322	Data sheet