



# ***Instruction Manual***

## ***PMD01***

***Digital Pressure Gauge with LCD display,  
battery powered***



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## **Table of Contents**

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Safety Information.....	2
Installation and Commissioning.....	3
Supply.....	3
Operation.....	4
Dimensions.....	5
Maintenance:.....	5

## **Safety Information**

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### **General Instructions**

To ensure safe operation, the device should only be operated according to the specifications in the instruction manual. The requisite Health & Safety regulations for a given application must also be observed. This statement also applies to the use of accessories.

Every person who is commissioned with the initiation or operation of this device must have read and understood the operating instructions and in particular the safety instructions! The work safety instructions in this manual as well as the safety, accident prevention and environmental protection regulations generally valid for the work area must be observed.

The liability of the manufacturer expires in the event of damage due to improper use, non-observance of this operating manual, use of insufficiently qualified personnel and unauthorized modification of the device.

### **Proper Usage**

The pressure gauges PMD01 are designed to monitor the pressure of liquids or gases which do not attack the device materials. All other usage is regarded as being improper and outside the scope of the device.

In particular, applications in which shock loads occur (for example, pulsed operation) should be discussed and checked in advance with our technical staff.

The series PMD01 flow meter devices should not be deployed as the sole agents to prevent dangerous conditions occurring in plant or machinery. Machinery and plant need to be designed in such a manner that faulty conditions and malfunctions do not arise that could pose a safety risk for operators.

### **Dangerous substances**

For dangerous media such as e.g. Oxygen, Acetylene, flammable or toxic substances as well as refrigeration systems, compressors, etc. must comply with the relevant regulations beyond the general rules.

## ***Qualified Personnel***

The PMD01 devices may only be installed by trained, qualified personnel who are able to mount the devices correctly. Qualified personnel are persons, who are familiar with assembling, installation, placing in service and operating these devices and who are suitably trained and qualified.

## ***Inward Monitoring***

Please check directly after delivery the device for any transport damages and deficiencies. Additional with reference to the accompanying delivery note the number of parts must be checked.

Claims for replacement or goods which relate to transport damage can only be considered valid if the delivery company is notified without delay.

## ***Installation and Commissioning***

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- The pressure tapping points should be prepared in accordance with the indications given for the sockets. For more details, see e.g. regulation VDE/VDI 3511 and 3512, sheet 3, also DIN 837-1/2.
- The mounting position should not be subject to strong vibration and radiation heat.
- The digital pressure gauges are immediately ready for service after the pressure connection has been made.
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**Please set the zero offset at pressureless state before first use.**

## ***Supply***

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The two 1.5 V micro (AAA) batteries are not included

# Operation

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Please see below how to operate the pressure gauge:

## **Standard-Version PMD01.S:**

button	function	explanation
left button	on / off	press 5s to power off, short to power on
	switch units	press short to switch units
right button	zero offset correction	press 5s to set offset to zero
	backlight	press short to activate backlight

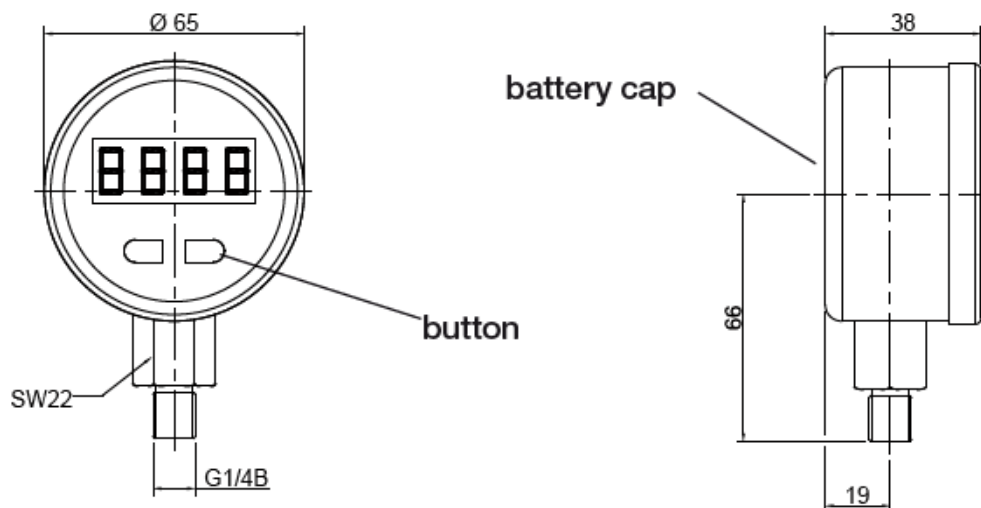
## **Pro-Version PMD01.P:**

button	function	explanation
left button	read data	press long to read the data logger
	switch units	press short to switch between units
right button	Backlight	press short to turn on for 20s
		press long to turn on permanent
lower button	zero offset correction	press long to set the offset
upper button	on/off	press to turn the device on and of

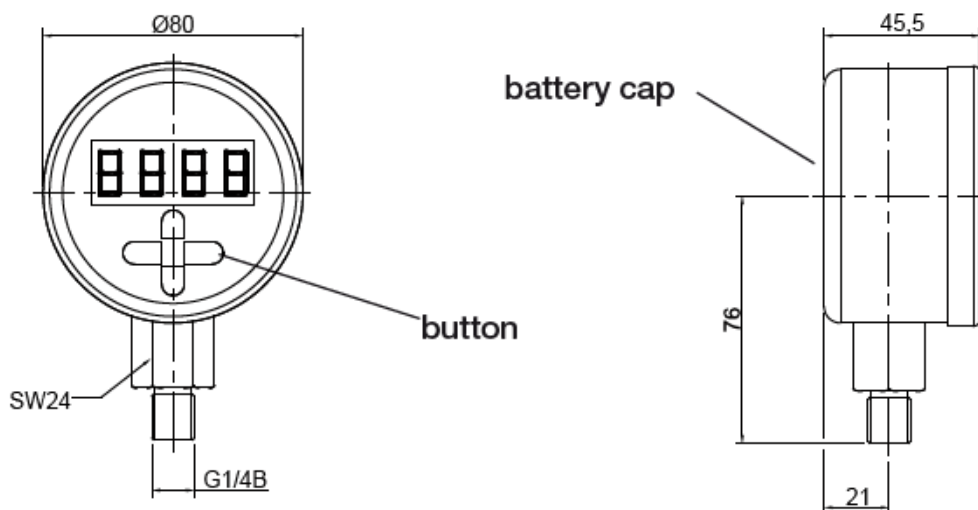
## Dimensions

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### Standard-Version PMD01.S:



### Pro-Version PMD01.P:



## Maintenance:

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The battery powered pressure gauge is maintenance free.  
To exchange the battery, please open the cap on the back of the gauge.

# PMD01

## Digital Pressure Gauge with LCD Display, Battery Powered

- ideal for mobile service
- easy to read LCD, 4 digit
- measuring range from -1...0 bar to 0..1000 bar
- max. temperature: 70 °C
- MIN / MAX indication at Pro version
- automatic power saving mode
- display light



### Description:

The PMD01 series digital pressure gauges can be used anywhere on site, independent of an external power supply. Thanks to the latest energy-saving technology, the average battery life is around 12 - 24 months. By means of thick-film technology, the pressure of the medium at the process connection is converted into an electrical signal, which is output on the display in the unit adjustable by the user – Pa, KPa, PSI, kg/cm<sup>2</sup>, bar, MPa.

The display is easy to read and is backlit.

### Typical applications:

The digital pressure gauges have proven themselves in the following areas of application:

- mechanical engineering
- plant engineering
- hydraulic and pneumatic systems
- measuring equipment monitoring

The PMD01 can also be used as a mobile test device due to its battery-powered operation.

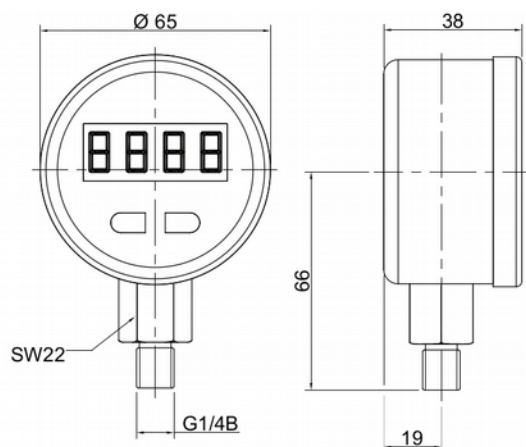
## Measuring Ranges:

Order code	Meas. range [bar]	PMD01.S Limit of surcharge [bar]	PMD01.P Limit of surcharge [bar]
A16	-1...0	0,5	0,5
A70	0...1,6	3,2	2,4
A72	0...2,5	5	3,7
A73	0...4	8	6
A74	0...6	12	9
A75	0...10	20	15
A76	0...16	32	24
A78	0...25	50	37,5
A79	0...40	80	60
A80	0...60	120	72
A81	0...100	150	120
A82	0...160	240	192
A84	0...250	375	300
A86	0...400*	/	480
A87	0...700*	/	720
A88	0...1000*	/	1200

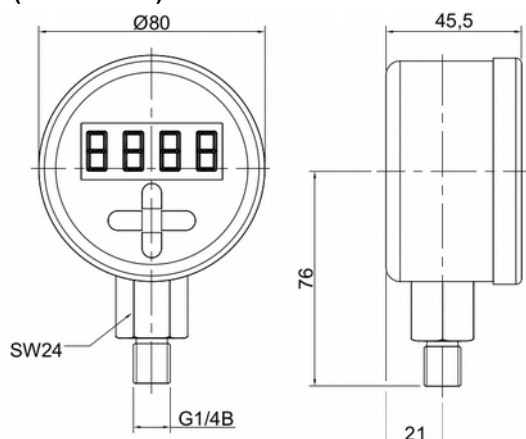
\* Measuring range not for Standard version PMD01.s

## Dimensions:

### PMD01.S (Standard-Version):



### MD01.P (Pro-Version):



## Order Code:

Order number: **PMD01.S.A16.0**

Digital pressure gauge with LCD display

### Version:

S = Standard-version: Ø 60 mm, accuracy 1 % FS  
P = Pro-version: Ø 80 mm, Min/Max memory, accuracy 0,2 % FS

### Measuring ranges:

see table „Measuring Ranges“

### Options:

0 = without  
9 = please specify in plain text

## Accessories:

Rubber housing for Standard-version: **PMD01-Z.S.G**

Rubber housing for Pro-version: **PMD01-Z.P.G**

## Technical Data:

**Housing:** stainless steel 1.4301

**Process connection:** G 1/4 B acc. to EN 837-1  
stainless steel 1.4301

**Pressure sensor:** ceramic membrane

### Measuring rate:

Standard: 2 measurements per second

Pro: 3 measurements per second

### Battery:

2 c micro AAA (not included)

lifetime ca. 12-24 months

### Accuracy:

Standard: 1,0 % FS

Pro: 0,2 % FS

### Long-term drift:

≤ 0,2 % FS / year

### Display:

LCD, 4 digit,  
height of digits 16 mm  
backlit  
battery level indicator  
peak pressure indicator at Pro-version

### Units:

Pa, KPa, PSI, kg/cm<sup>2</sup>, bar, MPa,  
adjustable

### Data memory:

Pro-version only:

1 x min value

1 x max value

### Temperature range:

Standard: -10...+70 °C (operating temperature)

18...30 °C (compensated range)

Pro: -10...+60 °C (operating temperature)

0...40 °C (compensated range)

### Protection class:

IP54

### Weight:

Standard: ca. 300 g

Pro: ca. 350 g