



PRESSURE

PAM Technology

# PMP-D343.01, PMP-D343.02

DATASHEET

## DIFFERENTIAL PRESSURE TRANSMITTERS

- OPTIMISED FOR LOW PRESSURE MEASUREMENT
- APPLICABLE FOR NON-AGGRESSIVE GASEOUS MEDIA
- MICROPROCESSOR SIGNAL CONDITIONING
- THE PRESSURE RANGE CAN BE ADAPTED IN THE INSTRUMENT VIA JUMPERS
- PRESSURE OFFSET CORRECTION IS AVAILABLE

### MAIN FEATURE

- **Differential pressure ranges:** from -1...1 mbar to 0...1 bar
- **Range switching:** via Jumper 1/2 range and 2x range
- **Mechanical connections\*:** pressure nipple with 5,6 mm diameter
- **Housing PMP-D343.01:** 65x50x35 mm IP65 with transparent cover
- **Housing PMP-D343.02:** 65x50x35 mm IP65 with PC grey cover
- **Electrical connection:** PCB Mount Terminal Block,3-pole
- **Accuracy (25°C):** typ  $\leq 1.5\%$  FS



\*others on request

### DESCRIPTION

The products are designed for differential pressure measurement in non-aggressive gaseous media. The transmitters can be used in the fields of pneumatics, HVAC, process engineering and building engineering. Applications include monitoring of air canals, filters or ventilators.

Thanks to the fully digital design possible to change over the measuring ranges and to return to zero position after installation. This allows offset errors can be compensated by the mounting position. It can be delivered with or without a 4-digit LCD display.

### APPLICATION



FILTERING



INDUSTRIAL PROCESS CONTROLE



HVAC



BUILDING AUTOMATION SYSTEMS

# TECHNICAL SPECIFICATIONS

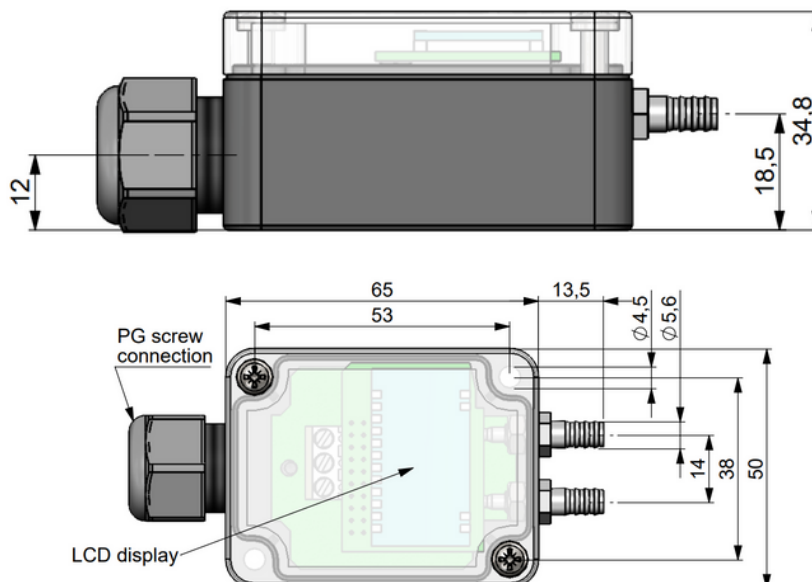
INPUT PARAMETERS			
Pressure type	gauge		
Mechanical connections *	pressure nipple with 5,6 mm diameter		
Wetted parts	silicon		
Housing PMP-D343.01	65x50x35 mm IP65 with transparent cover		
Housing PMP-D343.02	65x50x35 mm IP65 with PC grey cover		
OUTPUT SIZES			
Electrical connections	PCB Mount Terminal Block,3-pole		
Output signal**	4...20 mA	0/1...5 V	0...10 V
Supply voltage	10...32 V	10...32 V	14...32 V
Load resistance	$< (V_{\text{supply}} - 10) V / 0.02 \text{ A}$ (Ohm)	$\geq 2 \text{ kOhm}$	$\geq 2 \text{ kOhm}$
PERFORMANCE CHARACTERISTICS			
Accuracy (25°C)	typ $\leq 1.5 \% \text{ FS}$		
Overall accuracy (- 10°C...50°C)	typ $\leq 5 \% \text{ FS}$		
Long-term stability	$\leq 0.2 \% \text{ FS}$ per year in referential conditions		
Ambient temperature	- 10...+ 50°C		
Medium temperature	- 10...+ 50°C		
Storage temperature	- 20...+ 70°C		
Protection class	IP65		
Zero point setting	manually via a push button on the printed circuit board		
Range switching	manually via Jumper 1/2 range and 2x range		
ELECTRICAL PROTECTION			
Reverse polarity	yes		
OTHER			
Weight***	~ 250 g		

\*other on request

\*\*output is calibrated at zero and full-scaled

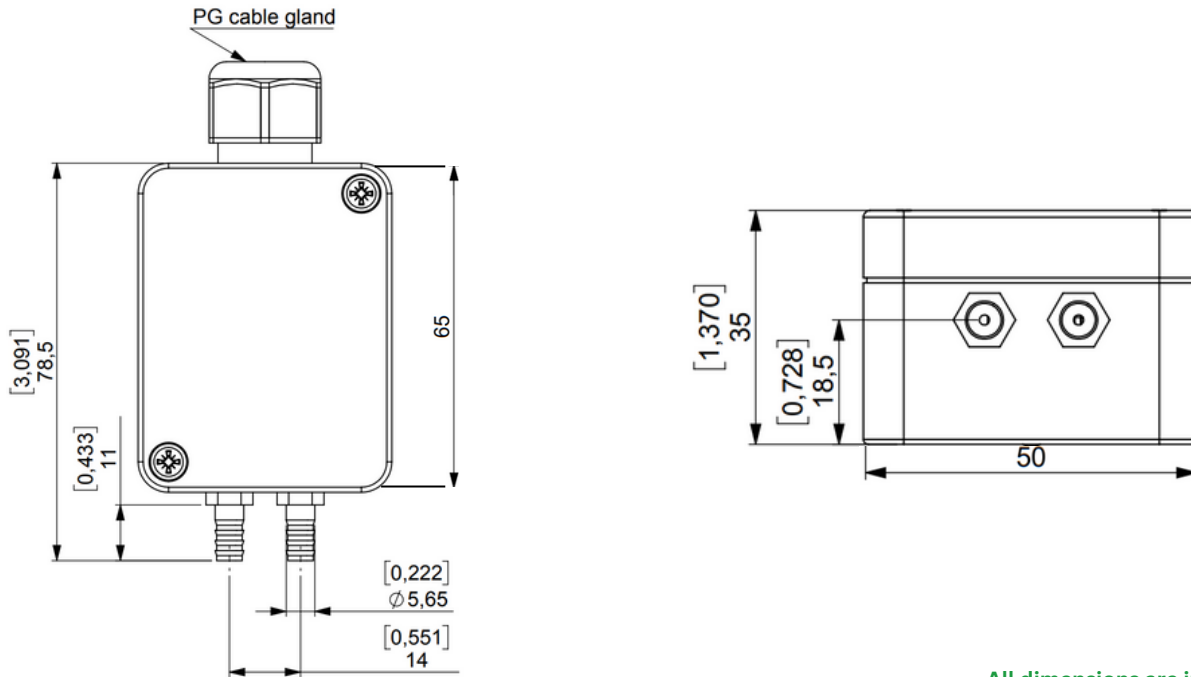
\*\*\*depend of product version

## PMP-D343.01: PRODUCT CONSTRUCTION



All dimensions are in mm

## PMP-D343.02: PRODUCT CONSTRUCTION



All dimensions are in mm

## ELECTRICAL CONNECTION

Refer to the Installation manuals for detailed information on electrical connections.



Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Non compliance can result in serious injury and/or damage to the equipment.

**WARNING:** Prignitz Mikrosystemtechnik reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate testes, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.

## APPROVALS CERTIFICATE

CE Compliance: EMC directive 2014 / 30 / EU according in EN 61326-2-3

RoHS guideline: 2011/65/EU

Approved according to the European Directive EC79/2009

PRIGNITZ-Mikrosystemtechnik GmbH is certified acc. to ISO 9001. We offer a multitude of products compliant with ATEX, IECEx, CSA, and other worldwide relevant qualifications.



## CUSTOMIZED SOLUTIONS

An indisputable advantage of the products from Prignitz Mikrosystemtechnik is that in addition to the specified parameters, a variety of specific customer requests can be implemented:

- EX versions are available for use in hazardous areas (ATEX, IECEx, CSA)
- other process and electrical connections available in a wide range of options
- analog output signals can be customized upon request.

Feel free to ask us. We are ready to implement individual solutions for you.

## TRANSPORT, PACKAGING AND STORAGE

### Transport

Check the pressure transmitter for any damage that may have been caused during transportation. Obvious damage must be reported immediately.

### Packaging and storage

Do not remove packaging until just before mounting.

Keep the packaging as it will provide optimum protection during transport (e.g. change in installation site, sending for repair).

Permissible conditions at the place of storage:

- Storage temperature: -20 ... +70 °C

## DISMOUNTING, RETURN AND DISPOSAL

### Dismounting

Physical injuries and damage to property and the environment caused by hazardous media Upon contact with hazardous media (e.g. oxygen, acetylene, flammable or toxic substances), harmful media (e.g. corrosive, toxic, carcinogenic, radioactive), and also with refrigeration plants and compressors, there is a danger of physical injuries and damage to property and the environment.

- Should a failure occur, aggressive media with extremely high temperature and under high pressure or vacuum may be present at the instrument.
- Wear the requisite protective equipment.

### Dismounting the instrument

- Depressurise and de-energise the pressure transmitter.
- Disconnect the electrical connection.
- Unscrew the pressure transmitter with a spanner using the spanner flats.

### Return

Strictly observe the following when shipping the instrument:

All instruments delivered to Prignitz Mikrosystemtechnik must be free from any kind of hazardous substances (acids, bases, solutions, etc.) and must therefore be cleaned before being returned.

Edition version: D/PMP-D343.01/PMP-D343.02/Rev.1/Jan.2024/ENG

## HOW TO ORDER

# PMP-D343.0X-XX-(XX..XX)X-XX-00-17

### TYPE

**D** = Differential pressure transmitter

### FAMILY & TECHNOLOGY

**343** = Low pressure differential transmitter with PAM Technology

### DISPLAY

**1** = with Display  
**2** = without Display

### OUTPUT

**I2** = 4-20mA 2L  
**OU5** = 0-5V  
**1U5** = 1-5V  
**U10** = 0-10V

### DIFFERENTIAL PRESSURE RANGE

e.g.  
**(-1...1)**  
**(0...60)**  
**(0...400)**

### x2 RANGE

e.g.  
**2**  
**120**  
**800**

### UNITE

**01** = bar  
**18** = mbar

### ELECTRICAL CONNECTION

**17** = cable clamp connection (PCB Mount Terminal Block, 3-pole)

### PROCESS CONNECTIONS

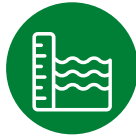
**00** = pressure nipple with 5,6 mm diameter

# PRIGNITZ

## MIKROSYSTEMTECHNIK



PRESSURE



LEVEL



TEMPERATURE



CALIBRATION &  
SERVICE

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