

Deltabar PMD55B - differential pressure transmitter

Smart transmitter with metal membrane for differential pressure monitoring in liquids and gases



More information and current pricing:

www.apsc.endress.com/PMD55B

Benefits:

- Wireless control of the device in the process area with the SmartBlue App without interrupting the process
- Reduce on site accidents and protect equipment when instruments are in difficult to reach areas
- Reduce systematic failures - error free SIL commissioning and instrument guided proof testing

Specs at a glance

- **Accuracy** Standard: up to 0.075 % Platinum: up to 0.055 %
- **Process temperature** -40°C...+110°C (-40°F...+230°F)
- **Pressure measuring range** 30 mbar.... 40 bar (0.45 psi... 600 psi)
- **Main wetted parts** 316L, AlloyC
- **Material process membrane** 316L, AlloyC

Field of application: This transmitter belongs to the new Deltabar generation. It is robust and easy to operate either locally or remotely. The transmitter can be controlled wireless via app on a mobile device using a secure Bluetooth connection. The PMD55B allows condition-based maintenance which increases efficiency in technical service significantly. The software is designed to simplify the handling. Intuitive wizards guide you through the setup and proof testing of the device which minimizes operating errors.

Features and specifications

Continuous / Liquids

Measuring principle

Differential pressure

Characteristic / Application

Transmitter with metal membrane for differential pressure monitoring in liquids or gases.

Intuitive and clear wizard for commissioning

Specialities

Bluetooth® Operation and maintenance with SmartBlue App,

RFID TAG for easy identification,

Plug and play functionalities

Supply / Communication

Ex d, Ex e, non-Ex::

10.5...35V DC

Ex i: 10.5...30V DC

Accuracy

Standard:

up to 0.075 %

Platinum:

up to 0.055 %

Long term stability

0.05 % of URL/ year

0.13 % of URL/ 5 years

0.23 % of URL/ 10 years

Continuous / Liquids**Ambient temperature**

-40°C...+85°C (-40°F...+185°F)

Process temperature

-40°C...+110°C (-40°F...+230°F)

Process pressure absolute / max. overpressure limit

250 bar (3750 psi)

Pressure measuring range

30 mbar.... 40 bar (0.45 psi... 600 psi)

Main wetted parts

316L, AlloyC

Process connection

NPT 1/4-18, RC1/4"

Communication

4...20 mA HART

Certificates / Approvals

ATEX, IEC Ex, CSA C/US, NEPSI

Safety approvals

SIL

Design approvals

EN 10204-3.1,

NACE MR0175,

NACE MR0103,

AD2000

Drinking water approvals

NSF, KTW

Continuous / Liquids**Application limits**None

Pressure**Measuring principle**Differential pressure

Characteristic

Transmitter with metal membrane for differential pressure monitoring in liquids or gases.

Intuitive and clear wizard for commissioning

Supply voltage

Ex d, Ex e, non-Ex:

10.5...35V DC

Ex i: 10.5...30V DC

Reference Accuracy

Standard:

up to 0.075 %

Platinum:

up to 0.055 %

Long term stability

0.05 % of URL/ year

0.13 % of URL/ 5 years

0.23 % of URL/ 10 years

Pressure**Process temperature**

-40°C...+110°C
(-40°F...+230°F)

Ambient temperature

-40°C...+85°C
(-40°F...+185°F)

Measuring cell

30 mbar...40 bar
(0.45 psi...600 psi)

Smallest calibratable span

0.3 mbar (0.0045 psi)

Max. Turn down

100:1

Max. overpressure limit

250 bar (3750 psi)

Process connection

NPT1/4-18,

RC1/4"

Material process membrane

316L, AlloyC

Material gasket

PTFE, FKM, EPDM, FFKM

Fill fluid

Silicone oil,

Inert oil

Material housing

Aluminium

Pressure

Communication

4...20 mA HART

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