

Drukverschil Deltabar PMD75

Drukverschiltransmitter met metalen sensor voor drukverschilmetingen



Voordelen:

- Hoge nauwkeurigheid, reproduceerbaarheid en langetermijnstabiliteit
- Optimale veiligheid dankzij gasdichte doorvoer met mogelijkheden tot SIL2/3, gecertificeerd volgens IEC 61508
- Eenvoudige menugestuurde inbedrijfstelling via lokaal display, 4-20 mA met HART, PROFIBUS PA, FOUNDATION Fieldbus
- HistoROM-datamanagementconcept voor snelle en eenvoudige inbedrijfstelling, onderhoud en diagnostiek
- Modulair concept voor eenvoudige vervanging van het display of de elektronica
- Overbelastingsbestendig tot 420 bar / 42 MPa / 6300 psi, met functiebewaking
- Naadloze en onafhankelijke systeemintegratie (HART/PA/FF)

Meer informatie en actuele prijzen:

www.be.endress.com/PMD75

Overzicht specificaties

- **Accuracy** Standard: 0.05% Platinum: up to 0.035%
- **Max. meetfout** 0,075% "PLATINUM" 0,05%
- **Process temperature** -40 °C...85 °C (-40 °F...185 °F)
- **Medium temperature range** Temperature gradient from pressure piping
- **Pressure measuring range** 10 mbar...250 bar (0.15 psi...3750 psi)

Toepassingsgebied: De Deltabar PMD75-drukverschiltransmitter met piëzoresistieve sensor en gelast metalen membraan wordt gebruikt in alle industrieën voor continue metingen in vloeistoffen, dampen en gassen. Dankzij de 3-toets bediening is een eenvoudige en betrouwbare inbedrijfstelling en werking mogelijk. De geïntegreerde HistoROM-datamodule maakt het beheer van proces- en instrumentparameters

eenvoudig. Ontworpen volgens IEC 61508 voor gebruik in SIL2/3-veiligheidstoepassingen.

Kenmerken en specificaties

Liquids

Meetprincipe

Differential pressure

Product headline

Digital transmitter with metallic measuring diaphragms

Modular transmitter

Long-term stability

High static pressure/Overload resistance

Enhanced safety via self diagnostic functions

Secondary process barrier

Max. meetfout

0,075%

"PLATINUM" 0,05%

Max. process pressure

max. 420 bar

(max. 2175 psi)

Medium temperature range

Temperature gradient from pressure piping

Display/Operation

Option

Outputs

4...20mA HART

PROFIBUS PA

FOUNDATION Fieldbus

Liquids**Digital communication**

HART
PROFIBUS PA
FOUNDATION Fieldbus

Hazardous area approvals

ATEX, FM, CSA, IECEx, INMETRO, NEPSI, TIIS

Functional safety

SIL

Material certificates

NACE MR0103
NACE MR0175
EN10204-3.1

Gas**Meetprincipe**

Differential pressure

Product headline

Digital transmitter with metallic measuring diaphragms
Modular transmitter
Long-term stability
High static pressure/Overload resistance
Enhanced safety via self diagnostic functions
Secondary process barrier

Max. meetfout

0,075%
"PLATINUM" 0,05%

Max. process pressure

max. 420 bar
(max. 6 091 psi)

Gas

Medium temperature range

Temperature gradient from pressure piping

Display/Operation

Option

Outputs

4...20mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Digital communication

HART
PROFIBUS PA
FOUNDATION Fieldbus

Hazardous area approvals

ATEX, FM, CSA, IECEx, INMETRO, NEPSI, TIIS

Functional safety

SIL

Material certificates

NACE MR0103
NACE MR0175
EN10204-3.1

Continuous / Liquids

Meetprincipe

Differential pressure

Characteristic / Application

Digital transmitter with metallic measuring diaphragms
Modular transmitter
Long term stability
High static pressure/Overload resistance
Enhanced safety via self diagnostic functions
Secondary process barrier

Continuous / Liquids

Supply / Communication

4...20 mA HART:
10,5...45V DC
Ex ia: 10,5...30V DC
PROFIBUS PA /
FOUNDATION Fieldbus:
9...32V DC

Accuracy

Standard: 0.05%
Platinum: up to 0.035%

Long term stability

0,05% of URL/year

Ambient temperature

-50 °C...85 °C
(-58 °F...185 °F)

Process temperature

-40 °C...85 °C
(-40 °F...185 °F)

Process pressure absolute / max. overpressure limit

420 bar (6300 psi)

Pressure measuring range

10 mbar...250 bar
(0.15 psi...3750 psi)

Main wetted parts

Alloy C276
316L
Monel
Tantalum

Continuous / Liquids**Process connection**

1/4-18NPT
RC1/4"

Max. meetafstand

400 m (1.312 ft) H₂O

Communication

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, CSA C/US, IEC Ex, INMETRO, NEPSI,
EAC

Safety approvals

SIL

Design approvals

EN 10204-3.1
NACE MR0175, MR0103

Marine approval

GL/ ABS

Options

HistoROM/M-Dat
4-line digital display
SS- or Aluminiumhousing
Separate housing

Successor

PMD75B

Application limits

Measuring cell:
Metal welded

Steam

Meetprincipe

Differential pressure

Product headline

Digital transmitter with metallic measuring diaphragms

Modular transmitter

Long-term stability

High static pressure/Overload resistance

Enhanced safety via self diagnostic functions

Secondary process barrier

Max. meetfout

0,075%

"PLATINUM" 0,05%

Max. process pressure

max. 420 bar

(max. 6091 psi)

Medium temperature range

Temperature gradient from pressure piping

Display/Operation

Option

Outputs

4...20mA HART

PROFIBUS PA

FOUNDATION Fieldbus

Digital communication

HART

PROFIBUS PA

FOUNDATION Fieldbus

Hazardous area approvals

ATEX, FM, CSA, IECEx, INMETRO, NEPSI, TIIS

Steam

Functional safety

SIL

Material certificates

NACE MR0103

NACE MR0175

EN10204-3.1

Pressure

Meetprincipe

Differential pressure

Characteristic

Digital transmitter with metallic measuring diaphragms

Modular transmitter

Long-term stability

High static pressure/Overload resistance

Secondary process barrier

Supply voltage

4...20 mA HART

10,5...45V DC (Non Ex):

Ex ia: 10,5...30V DC

PROFIBUS PA:

9...32 V DC (Non Ex)

FOUNDATION Fieldbus:

9...32 V DC (Non Ex)

Reference Accuracy

Standard: 0.05%

Platinum: up to 0.035%

Long term stability

0.03 % of URL/ year

0.05 % of URL/ 5 years

0.08 % of URL/ 10 years

Pressure**Process temperature**

-40°C...85°C
(-40°F...185°F)

Ambient temperature

-50°C...85°C
(-58°F...185°F)

Measuring cell

10 mbar...250 bar
(0.15 psi...3750 psi)

Smallest calibratable span

1 mbar (0.015 psi)

Vacuum resistance

50 mbar (0.73 psi)

Max. Turn down

100:1

Max. overpressure limit

On one side:
420 bar
(6300psi)

Process connection

1/4-18NPT
RC1/4"

Material process membrane

316L, AlloyC,
Tantal,
Gold-Rhodium

Material gasket

Viton, PTFE, EPDM, NBR

Pressure**Fill fluid**

Silicone oil

Inert oil

Material housing

316L, Die-cast aluminum

Communication

4...20 mA HART

PROFIBUS PA

FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, CSA C/US, IEC Ex, INMETRO, NEPSI,

EAC

Safety approvals

SIL

Design approvals

NACE MR0103

EN10204-3.1

Marine approvals

GL/ ABS

Specialities

Diagnostic functions

Successor

PMD75B

Meer informatie www.be.endress.com/PMD75