

# Drukverschil Deltabar PMD55

## Drukverschiltransmitter met metalen sensor voor drukverschilmetingen



F L E X

### Voordelen:

- Eenvoudige menugestuurde inbedrijfstelling via lokaal display, 4-20 mA met HART, PROFIBUS PA, FOUNDATION Fieldbus
- Eenvoudige aanpassing aan impulsleidingen - mogelijkheid om de leidingen met hoge en met lage druk te wisselen via elektrische schakelaar op de hoofdelektronica
- Compact ontwerp en modulair concept voor eenvoudige vervanging van het display of de elektronica
- Procesdruk tot SIL2, gecertificeerd volgens IEC 61508 en IEC 61511
- Internationaal inzetbaar dankzij een breed scala aan goedkeuringen

### Overzicht specificaties

- **Accuracy** 0,1% "PLATINUM" 0,075%
- **Max. meetfout** 0,1% "PLATINUM" 0,075%
- **Process temperature** -40 °C...85 °C (-40 °F...185 °F)
- **Medium temperature range** Temperature gradient from pressure piping
- **Pressure measuring range** 10mbar...40bar (0.15...580psi)

Meer informatie en actuele prijzen:

[www.be.endress.com/PMD55](http://www.be.endress.com/PMD55)

**Toepassingsgebied:** De Deltabar PMD55-drukverschiltransmitter met piëzoresistieve sensor en gelast metalen membraan wordt veel gebruikt in proces- en milieutoepassingen voor continue drukverschilmetingen in vloeistoffen, dampen en gassen. Quick Setup met instelbaar meetbereik maakt een eenvoudige inbedrijfstelling mogelijk, verlaagt de kosten en bespaart tijd. SIL2 volgens IEC 61508 / IEC 61511.

### Kenmerken en specificaties

## Liquids

**Meetprincipe**

Differential pressure

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**Product headline**

Digital transmitter with metallic measuring diaphragms  
Compact size  
Modular transmitter  
Long-term stability

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**Max. meetfout**

0,1%  
"PLATINUM" 0,075%

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**Max. process pressure**

10 mbar...40 bar  
(0.15...580 psi)

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**Medium temperature range**

Temperature gradient from pressure piping

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**Display/Operation**

Option

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**Outputs**

4...20mA HART

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**Digital communication**

HART

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**Hazardous area approvals**

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

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**Functional safety**

SIL

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**Liquids****Material certificates**

NACE MR0103

NACE MR0175

EN10204-3.1

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**Steam****Meetprincipe**Differential pressure

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**Product headline**Digital transmitter with metallic measuring  
diaphragms

Compact size

Modular transmitter

Long-term stability

---

**Max. meetfout**

0,1%

"PLATINUM" 0,075%

---

**Max. process pressure**

10mbar...40bar

(0.15...580psi)

---

**Medium temperature range**Temperature gradient from pressure piping

---

**Display/Operation**Option

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**Outputs**4...20mA HART

---

**Digital communication**HART

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**Hazardous area approvals**ATEX, FM, CSA, IECEx, INMETRO, NEPSI, TIIS

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## Steam

**Functional safety**

SIL

**Material certificates**

NACE MR0103

NACE MR0175

EN10204-3.1

## Pressure

**Meetprincipe**

Differential pressure

**Characteristic**

Digital transmitter with metallic measuring diaphragms

Compact size

Modular transmitter

Long-term stability

**Supply voltage**

4...20 mA HART

11,5...45V DC (Non Ex):

Ex ia: 11,5...30V DC

PROFIBUS PA:

9...32 V DC (Non Ex)

FOUNDATION Fieldbus:

9...32 V DC (Non Ex)

**Reference Accuracy**

Standard 0.1%

Platinum 0.075%

**Long term stability**

0.05% of URL/ year

0.13% of URL/ 5 years

0.23% of URL/ 10 years

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**Pressure****Process temperature**

-40°C...+85°C  
(-40°F...+185°F)

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**Ambient temperature**

-40°C...+85°C  
(-40°F...+185°F)

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**Measuring cell**

10 mbar...40 bar  
(0.15...580 psi)

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**Smallest calibratable span**

10 mbar (0.15 psi)

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**Max. Turn down**

20:1

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**Max. overpressure limit**

on one side:  
160 bar  
(2300 psi)

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**Process connection**

1/4-18 NPT

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**Material process membrane**

316L, AlloyC,

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**Material gasket**

Viton, PTFE, EPDM, NBR

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**Fill fluid**

Silicone oil  
Inert oil

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**Material housing**

Die-cast aluminum

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## Pressure

**Communication**

4...20 mA HART  
PROFIBUS PA  
FOUNDATION Fieldbus

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**Certificates / Approvals**

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

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**Safety approvals**

SIL

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**Design approvals**

NACE MR0175  
EN10204-3.1

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**Successor**

PMD55B

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## Gas

**Meetprincipe**

Differential pressure

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**Product headline**

Digital transmitter with metallic measuring  
diaphragms  
Compact size  
Modular transmitter  
Long-term stability

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**Max. meetfout**

0,1%  
"PLATINUM" 0,075%

---

**Max. process pressure**

10mbar...40bar  
(0.15...580psi)

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## Gas

**Medium temperature range**

Temperature gradient from pressure piping

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**Display/Operation**

Option

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**Outputs**

4...20mA HART

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**Digital communication**

HART

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**Hazardous area approvals**

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

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**Functional safety**

SIL

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**Material certificates**

NACE MR0103

NACE MR0175

EN10204-3.1

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## Continuous / Liquids

**Meetprincipe**

Differential pressure

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**Characteristic / Application**

Digital transmitter with metallic measuring

diaphragms

Compact size

Modular transmitter

Long-term stability

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**Supply / Communication**

4...20mA HART:

11,5...45V DC

Ex ia: 11,5...30V DC

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**Continuous / Liquids****Accuracy**

0,1%  
"PLATINUM" 0,075%

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**Long term stability**

0,05% of URL/year  
0,125% of URL/5 years

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**Ambient temperature**

-40°C...85°C  
(-40°F...185°F)

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**Process temperature**

-40 °C...85 °C  
(-40 °F...185 °F)

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**Process pressure absolute / max. overpressure limit**

160 bar

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**Pressure measuring range**

10mbar...40bar  
(0.15...580psi)

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**Main wetted parts**

316L

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**Process connection**

1/4-18 NPT

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**Communication**

4...20mA HART  
PROFIBUS PA  
FOUNDATION Fieldbus

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**Certificates / Approvals**

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

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**Safety approvals**

SIL

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## Continuous / Liquids

### Design approvals

EN 10204-3.1  
NACE MR0175, MR0103  
AD2000

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### Options

4-line digital display  
Aluminium housing

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### Successor

PMD55B

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### Application limits

Measuring cell:  
Metal welded

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Meer informatie [www.be.endress.com/PMD55](http://www.be.endress.com/PMD55)