

# Absolute en relatieve druk Cerabar PMP55

Digitale druktransmitter met volledig gelast membraan voor het meten in gasen of vloeistoffen



## Voordelen:

- Grote verscheidenheid aan procesaansluitingen en membraanmaterialen
- Het nieuwe TempC-membraan beperkt de invloed van schommelingen van de omgevings- en procestemperatuur tot een minimum
- Eenvoudige menugestuurde inbedrijfstelling via display, 4 tot 20 mA met HART, PROFIBUS PA, FOUNDATION Fieldbus
- Voor procesdrukbeveiliging tot SIL2, gecertificeerd volgens IEC 61508 en IEC 61511
- Modulair concept voor eenvoudige vervanging van het display of de elektronica
- Naadloze en onafhankelijke systeemintegratie (HART/PA/FF)

Meer informatie en actuele prijzen:

[www.be.endress.com/PMP55](http://www.be.endress.com/PMP55)

## Overzicht specificaties

- **Accuracy** Standard 0.15% Platinum 0.075%
- **Process temperature** -70°C...400°C (-94°F...752°F)
- **Pressure measuring range** 1 bar...400 bar (15 psi...6000 psi)
- **Process pressure absolute / max. overpressure limit** 600 bar (9000 psi)
- **Main wetted parts** 316L AlloyC Montel Tantal Rhodium

**Toepassingsgebied:** De digitale Cerabar PMP55-druktransmitter met metalen voorzetsmembraan wordt vooral gebruikt in de proces- en hygiëne-industrie voor druk-, niveau-, volume- of massameting in vloeistoffen. Geschikt voor hoge druk en voor toepassingen met extreme procestemperaturen van -70 tot +400 °C (-94 tot 750 °F). Quick Setup met instelbaar meetbereik maakt een eenvoudige inbedrijfstelling

mogelijk, verlaagt de kosten en bespaart tijd. SIL2 volgens IEC 61508 en IEC 61511.

## Kenmerken en specificaties

### Continuous / Liquids

#### Meetprincipe

Absolute and gauge pressure

#### Characteristic / Application

Smart and reliable pressure transmitter, with piezoresistive measuring cell and metal welded process isolating diaphragm and diaphragm seal.

#### Supply / Communication

4 ..20 mA HART:  
11,5...45 V DC  
Ex ia: 11,5...30 V DC

PROFIBUS PA

FOUNDATION Fieldbus

#### Accuracy

Standard 0.15%

Platinum 0.075%

#### Long term stability

< 0,1% von URL/ year

0,2% of URL/ 5 years

0,25% of URL/ 10 years

#### Ambient temperature

-40°C...85°C  
(-40°F...185°F)

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**Continuous / Liquids****Process temperature**

-70°C...400°C  
(-94°F...752°F)

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

600 bar (9000 psi)

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**Pressure measuring range**

1 bar...400 bar  
(15 psi...6000 psi)

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**Main wetted parts**

316L  
AlloyC  
Montel  
Tantal  
Rhodium

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**Process connection**

Diaphragm seal  
Flanges (DIN, ASME, JIS)  
Tri-Clamp ISO2852  
Hygienic connections

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**Max. measurement distance**

4000m (13.123ft) H2O

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**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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## Continuous / Liquids

**Design approvals**

EN 10204-3.1

NACE MR0175, MR0103

AD2000

**Hygienic approvals**

3A, EHEDG

CoC ASME-BPE

**Marine approval**

GL/ ABS/ LR/ BV/ DNV

**Options**

local display

**Successor**

PMP51B

**Application limits**

Measuring cell: Metal welded

If pressurized, possibly use differential pressure measurement with two pressure transmitters (electronic dp). Observe ratio head pressure : hydrostatic pressure

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## Pressure

**Meetprincipe**

Absolute and gauge pressure

**Characteristic**

Smart and reliable pressure transmitter, with piezoresistive measuring cell

and metal welded process isolating diaphragm and diaphragm seal.

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**Pressure****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)

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**Reference Accuracy**

Standard 0.15%

Platinum 0.075%

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**Long term stability**

0.1% of URL/ year

0.2% of URL/ 5 years

0.25% of URL/ 10 years

---

**Process temperature**

-70°C...+400°C

(-94°F...+752°F)

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**Ambient temperature**

-40°C...+85°C

(-40°F...+185°F)

## Pressure

**Measuring cell**

400 mbar...400 bar

(15 psi...6000 psi)

relative/ absolute

**Smallest calibratable span**

20 mbar (0.3 psi)

**Vacuum resistance**

50 mbar (0.73 psi)

**Max. Turn down**

20:1

**Max. overpressure limit**

600 bar (9000 psi)

**Process connection**

Thread:

G1/2...G2, MNPT1/2...MNPT2

Flange:

DN25...DN100,

ASME 1"...4",

JIS 10k

Diaphragm seal

## Pressure

**Process connection hygienic**

Tri-Clamp

DIN11851

DIN11864-1

NEUMO

Varivent

SMS

DRD

Universal adapter

**Material process membrane**

316L, AlloyC,

Tantal, PTFE,

Rhodium&gt;Gold

**Material gasket**

None, diaphragm welded

**Fill fluid**

Silicone oil,

Inert oil,

Vegetable oil,

High temperature oil,

Low temperature oil,

## Pressure

**Material housing**

Die-cast aluminum,

AISI 316L

**Communication**

4...20 mA

4...20 mA HART

PROFIBUS PA

FOUNDATION Fieldbus

**Certificates / Approvals**

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

**Safety approvals**

SIL

**Design approvals**

EN10204-3.1

NACE MR0103

**Hygienic approvals**

CoC ASME-BPE

3A, EHEDG

**Marine approvals**

GL/ ABS/ LR/ BV/ DNV

**Specialities**

TempC Membrane

**Successor**

PMP51B



Meer informatie [www.be.endress.com/PMP55](http://www.be.endress.com/PMP55)