

Absolute en relatieve druk Cerabar PMP71

Digitale druktransmitter met gelaste metalen sensor voor het meten in gassen, stoom of vloeistoffen



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
- Overbelastingsbestendig en met functiebewaking van de meetcel tot de elektronica
- Leverbaar met gemonteerde kranenblokken: altijd passend, altijd getest op lekkages
- Naadloze en onafhankelijke systeemintegratie (HART/PA/FF)

Meer informatie en actuele prijzen:

www.be.endress.com/PMP71

Overzicht specificaties

- **Accuracy** Standard: 0.05% Platinum: up to 0.025%
- **Process temperature** -40°C...125°C (-40°F...257°F)
- **Pressure measuring range** 100mbar...700bar (1.5psi...10.500psi)
- **Main wetted parts** Alloy C276 316L Rhodium
- **Material process membrane** 316L, AlloyC, Rhodium > Gold

Toepassingsgebied: De digitale Cerabar PMP71-druktransmitter met metalen membraan wordt vooral gebruikt in de procestoepassingen voor druk-, niveau-, volume- of massameting in vloeistoffen en gassen. PMP71 is ontworpen voor hogedruktoepassingen tot 700 bar. Quick Setup met instelbaar meetbereik zonder drukspecificatie. Ontworpen

volgens IEC 61508 voor gebruik in SIL2/3-veiligheidssystemen en beschikbaar met MID-certificaat geschikt voor custody transfer toepassingen.

Kenmerken en specificaties

Pressure

Meetprincipe

Absolute and gauge pressure

Characteristic

Digital transmitter with piezoresistive sensor and welded metallic membrane

Modular transmitter

Long term stability

Enhanced safety via self diagnostic functions
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 0.025%

Long term stability

0.05 % of URL/ year

0.07 % of URL/ 5 years

0.1 % of URL/ 10 years

Process temperature

-40°C...125°C

(-40°F...257°F)

Pressure**Ambient temperature**

-50°C...85°C
(-58°F...185°F)

Measuring cell

100 mbar...700 bar
(1.5 psi...10.500 psi)
relative/ absolute

Smallest calibratable span

5 mbar (0.075 psi)

Vacuum resistance

10 mbar (0.15 psi)

Max. Turn down

100:1

Max. overpressure limit

1050 bar (15.750 psi)

Process connection

Thread:

G1/2...G2, R1/2, MNPT1/2...MNPT2, R1/2

Flange:

DN25...DN80,

ASME 1"...4",

JIS 10K...20K

Material process membrane

316L, AlloyC,
Rhodium > Gold

Material gasket

None, measuring cell welded

Fill fluid

Silicone oil,
Inert oil

Pressure**Material housing**

Die-cast aluminum,
AISI 316L

Communication

4...20 mA HART
1- 5V DC Low Power
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

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

Safety approvals

SIL

Design approvals

EN10204-3.1
NACE MR0175

Marine approvals

GL/ABS

Drinking water approvals

NSF

Specialities

Diagnostic functions

Successor

PMP71B

Continuous / Liquids**Meetprincipe**

Absolute and gauge pressure

Continuous / Liquids**Characteristic / Application**

Digital transmitter with piezoresistive sensor and welded metallic membrane

Modular transmitter

Long term stability

Enhanced safety via self diagnostic functions

Secondary process barrier

Specialities

diagnostic functionalities

different languages in software

Supply / Communication

4...20mA 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 0.025%

Long term stability

0,05% of URL/year

Ambient temperature

-50°C...85°C

(-58°F...185°F)

Process temperature

-40°C...125°C

(-40°F...257°F)

Process pressure / max. overpressure limit

1050bar (15,750psi)

Continuous / Liquids**Pressure measuring range**

100mbar...700bar
(1.5psi...10.500psi)

Main wetted parts

Alloy C276
316L
Rhodium

Process connection

Threads
Flanges (DIN, ASME, ...) with flush membrane

Max. meetafstand

7000m (22.966ft) H₂O

Communication

4...20 mA HART
1- 5V DC Low Power
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

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

Safety approvals

SIL

Design approvals

EN 10204-3.1
NACE MR0175, MR0103

Marine approval

GL/ ABS

Drinking water approvals

NSF

Continuous / Liquids

Options

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

Successor

PMP71B

Application limits

Measuring cell: Metal
welded
If pressurized, possibly
use differential pressure
meas-urement with two
pressure transmitters
(electronic dp). Observe
ratio head pressure :
hydrostatic pressure

Meer informatie www.be.endress.com/PMP71