

# Absolute and gauge pressure Cerabar PMP71

Digital pressure transmitter with welded metal sensor for measurement in gases, steam or liquids



## Avantajlar:

- Best accuracy, reproducibility and long-term stability
- Highest safety due to gas tight feedthrough with capabilities up to SIL2/3, certified to IEC 61508
- Easy menu-guided commissioning via local display, 4 to 20mA with HART, PROFIBUS PA, FOUNDATION Fieldbus
- HistoROM data management concept for fast and easy commissioning, maintenance and diagnostics
- Overload-resistant and function-monitored from the measuring cell to the electronics
- Available with mounted manifolds: always fit, always tested for leaks
- Seamless and independent system integration (HART/PA/FF)

Daha fazla bilgi ve güncel fiyatlandırma:

[www.tr.endress.com/PMP71](http://www.tr.endress.com/PMP71)

## Özelliklere genel bakış

- **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

**Uygulama alanı:** The Cerabar PMP71 digital pressure transmitter with metallic membrane is typically used in process applications for pressure, level, volume or mass measurement in liquids or gases. PMP71 is designed for high pressure applications up to 700bar. Quick Setup with freely adjustable measuring range without pressure specification. Designed according to IEC 61508 for use in SIL2/3 safety systems and

available with MID Parts Certificate suitable for custody transfer applications.

## Özellikler ve şartlar

### Continuous / Liquids

#### Measuring principle

Absolute and gauge pressure

#### 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)

---

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

-40°C...125°C  
(-40°F...257°F)

---

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

1050bar (15,750psi)

---

**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. measurement distance**

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

---

---

## Continuous / Liquids

**Marine approval**GL/ ABS

---

**Drinking water approvals**NSF

---

**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

---

## Pressure

**Measuring principle**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

---

---

**Pressure****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)

---

**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

---

---

**Pressure****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

---

**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

---

**Safety approvals**SIL

---

Pressure

**Design approvals**

EN10204-3.1  
NACE MR0175

---

**Marine approvals**

GL/ABS

---

**Drinking water approvals**

NSF

---

**Specialities**

Diagnostic functions

---

**Successor**

PMP71B

---

Ayrıntılı bilgi [www.tr.endress.com/PMP71](http://www.tr.endress.com/PMP71)