

Cerabar and Deltabar Pressure Transmitters

Product information for five Endress+Hauser pressure and differential pressure transmitters

This sheet covers four **Cerabar** pressure transmitters, in ceramic (**PMC**) and metal membrane (**PMP**) versions of the 51B and the higher-performance 71B, and one **Deltabar PMD75B** differential pressure transmitter. All use 4 to 20 mA with HART, and the PMC71B also offers fieldbus options.

At a glance

Product	Type	Range	Accuracy*	Outputs
Cerabar PMC51B	Ceramic membrane, gauge / absolute	Up to 40 bar (abs. from 0.1 bar)	+/-0.075% (platinum +/-0.055%)	4-20 mA HART 7, Bluetooth optional
Cerabar PMP51B	Metal membrane, gauge / absolute	400 mbar to 400 bar	+/-0.075% (platinum +/-0.055%)	4-20 mA HART 7, Bluetooth optional
Cerabar PMC71B	Ceramic membrane, gauge / absolute	100 mbar to 40 bar	+/-0.05% (platinum +/-0.025%)	HART, PROFIBUS PA, PROFINET APL, Bluetooth
Cerabar PMP71B	Metal membrane, gauge / absolute	400 mbar to 700 bar	+/-0.05% (platinum +/-0.025%)	4-20 mA HART, Bluetooth optional
Deltabar PMD75B	Differential pressure, metal membrane	10 mbar to 40 bar (differential)	+/-0.05% (platinum +/-0.035%)	4-20 mA HART, Bluetooth optional

Common features

- Digital transmitters with 4 to 20 mA output and superimposed HART communication
- Optional Bluetooth LE connection with the SmartBlue app for set-up and diagnostics
- Wetted parts in 316L stainless steel or ceramic, with alloy options on the metal membrane versions
- Optional SIL functional safety for 4 to 20 mA devices (IEC 61508)
- Ex approvals such as ATEX and IECEx on selected versions

Product profiles

Cerabar PMC51B

Ceramic pressure transmitter

Digital pressure transmitter with a ceramic process membrane for pressure and level in liquids and gases, including abrasive, corrosive and vacuum applications.

- Gauge ranges from -0.1/+0.1 bar up to -1/+40 bar; absolute from 0 to 0.1 bar abs up to 0 to 40 bar abs
- Reference accuracy +/-0.075%, or +/-0.055% in the platinum version, at turn-down 1:1 to 10:1
- Process temperature -40 to +100 C; supply 10.5 to 35 V DC
- Optional SIL 3 (IEC 61508) for 4-20 mA output and NSF/ANSI 61 drinking-water approval
- Bluetooth LE with the SmartBlue app is optional

Cerabar PMP51B

Metal membrane pressure transmitter

Digital pressure transmitter with a welded metal process membrane for pressure and level in liquids and gases, including with diaphragm seals for demanding processes.

- Ranges from 400 mbar up to 400 bar, with turn-down up to 100:1
- Reference accuracy +/-0.075%, or +/-0.055% in the platinum version, up to turn-down 10:1
- Standard process temperature up to +125 C; with diaphragm seals -70 to +400 C depending on fill fluid
- Wetted materials include 316L, Alloy C276, tantalum and Monel; optional PTFE coating
- Optional SIL 3 and NSF/ANSI 61 approval

Cerabar PMC71B

High-performance ceramic pressure transmitter

Higher-performance Cerabar with a dry ceramic (Ceraphire) measuring cell, offered with several digital communication options.

- Measuring range 100 mbar to 40 bar
- Accuracy up to 0.05%, and 0.025% in the platinum version
- Process temperature -40 to +150 C; ambient -40 to +85 C
- Outputs: 4-20 mA HART, PROFIBUS PA and PROFINET with Ethernet-APL
- Heartbeat Technology verification and monitoring, SmartBlue app and RFID identification

Cerabar PMP71B

High-performance metal membrane pressure transmitter

Higher-performance Cerabar with a metal process membrane for high pressures and extreme temperatures, including with diaphragm seals.

- Ranges from 400 mbar up to 700 bar, with turn-down up to 100:1
- Accuracy up to +/-0.05% for standard devices and +/-0.025% for platinum at 1:1
- With diaphragm seals the process temperature extends up to +400 C
- Isolating diaphragms in 316L or specialty alloys such as Alloy C276, tantalum and Monel
- ATEX / IEC Ex approvals, with optional SIL functional safety declaration

Deltabar PMD75B

High-performance differential pressure transmitter

Digital differential pressure transmitter for differential pressure, level and flow measurement in liquids and gases.

- Differential spans from 10 mbar to 40 bar, with turn-down above 100:1 on request
- Maximum working pressure up to 420 bar and overpressure limit up to 630 bar depending on configuration
- Accuracy $\pm 0.05\%$ for standard (turn-down up to 15:1) and $\pm 0.035\%$ for platinum
- Process connections NPT 1/4-18, RC 1/4 and DIN 19213 M10/M12 (flange materials 316L or Alloy C276)
- Approvals include ATEX, CE and EAC, with SIL 3 capability and NSF/ANSI 61

Notes and sources

* Accuracy depends on the version (standard or platinum) and on the turn-down ratio. Figures shown are the best-case values given in each data sheet and apply at low turn-down; check the data sheet for your range and turn-down.

Ranges, process temperatures and approvals depend on the cell, connection and options ordered; the order code defines the exact configuration. The PMD75B temperature given in the data sheet summary (-40 to +85 C) may refer to ambient rather than process temperature, so it is not listed as a process rating.

The PMC71B protocol options (PROFIBUS PA, PROFINET with Ethernet-APL) are taken from the Endress+Hauser product page.

Compiled from Endress+Hauser data sheets and product pages for the Cerabar PMC51B, PMP51B, PMC71B, PMP71B and Deltabar PMD75B. Confirm against the current Endress+Hauser documentation before quoting or ordering.