

Hydrostatic Level measurement Deltapilot FMB51

Pressure sensor with the Contite measuring cell for hydrostatic level measurement



Mais informações e preço atual:

www.br.endress.com/FMB51

Benefícios:

- Hermetically sealed Contite measuring cell with condensate-resistance, high reference accuracy: $\pm 0.2\%$, optionally $\pm 0.1\%$ and minimum temperature effects
- Modular concept for easy replacement of display or electronics
- Seamless and independent system integration (HART/PA/FF)
- Easy and safe menu-guided operation: On-site via display module, via 4 to 20mA with HART, via PROFIBUS PA, via FOUNDATION Fieldbus
- International usage thanks to a wide range of approvals

Especificações resumidas

- **Accuracy** Standard 0.2% Optional 0.1%
- **Process temperature** $-10^{\circ}\text{C} \dots 85^{\circ}\text{C}$ ($14^{\circ}\text{F} \dots 212^{\circ}\text{F}$)
- **Pressure measuring range** 100 mbar...10 bar (1.5 psi...150 psi)
- **Process pressure absolute / max. overpressure limit** 40 bar (600 psi)
- **Main wetted parts** Alloy C 316L optional coating AuPt

Campo de aplicação: The Deltapilot FMB51 is a rod version with a fixed process connection. This device with the Contite measuring cell and is typically used in the environmental industry. It is made for level measurement in liquid and paste-like media in open or closed containers and is unaffected by possible foam formation. For use in SIL2 safety systems.

Características e especificações

Continuous / Liquids

Measuring principle

Hydrostatic

Characteristic / Application

Pressure transmitter for hydrostatic level measurement with flush mounted metallic Contite measuring cell:

Hermetically sealed, condensate-resistant and climatic-proofed
Rod version

Specialities

Modularity to differential pressure and process pressure devices
(replacable display, universal electronics)

diagnostic functions

Hermetically sealed Contite measuring cell (condensate-resistant and climatic-proofed)

Supply / Communication

4...20mA HART:

10,5...45V DC

Ex ia: 10,5...30V DC

PROFIBUS PA /

FOUNDATION Fieldbus:

9...32V DC (Non Ex)

Accuracy

Standard 0.2%

Optional 0.1%

Long term stability

0.05 % of URL/ year

Ambient temperature

-40°C...85°C

(-40°F...185°F)

Process temperature

-10°C...85°C

(14°F...212°F)

Continuous / Liquids**Process pressure absolute / max. overpressure limit**40 bar (600 psi)

Pressure measuring range100 mbar...10 bar
(1.5 psi...150 psi)

Main wetted partsAlloy C
316L
optional coating AuPt

Process connectionThread:
G1 1/2, MNPT1 1/2
Flange:
DN40...DN100,
ASME 2"...4",
JIS 10K

Max. measurement distance100m (328ft) H2O

Communication4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / ApprovalsATEX, FM, CSA, CSA C/US, IEC Ex, INMETRO, NEPSI

Safety approvalsOverfill protection WHG
SIL

Design approvalsEN 10204-3.1
NACE MR0175

Continuous / Liquids

Drinking water approvals

KTW/ NSF

Options

Separate housing
Initial device settings
Overvoltage protection

Application limits

If pressurized, usage of two pressure transmitters to measure the differential pressure (electronic dP)
Observe ratio head pressure : hydrostatic pressure

Pressure

Measuring principle

Hydrostatic pressure

Characteristic

Pressure transmitter for hydrostatic level measurement with flush mounted metallic Contite measuring cell:
Hermetically sealed, condensate-resistant, climatic-proofed and with lowest temperature influences
Rod version

Supply voltage

4...20 mA HART
10,5...45 VDC (Non Ex):
Ex ia: 10,5...30 VDC
PROFIBUS PA:
9...32 VDC (Non Ex)
FOUNDATION Fieldbus:
9...32 VDC (Non Ex)

Reference Accuracy

Standard 0.2 %
Optional 0.1 %

Pressure**Long term stability**0.05 % of URL/year

Process temperature-10°C...85°C
(14°F...212°F)

Ambient temperature-40°C...85°C
(-40°F...185°F)

Measuring cell100 mbar...10 bar
(1.5 psi...150 psi)

Smallest calibratable span10 mbar (1.45 psi)

Vacuum resistance0 mbar abs.

Max. Turn down100:1

Max. overpressure limit40 bar (600 psi)

Process connectionThread:
G1 1/2, MNPT1 1/2
Flange:
DN40...DN100,
ASME 2" ...4",
JIS 10K

Material process membrane316L, AlloyC
Gold-Rhodium

Pressure**Material gasket**

Viton, EPDM, Kalrez, none

Fill fluidInert oil,
Synthetic oil

Material housing

316L, Die-cast aluminum

Communication4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

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