

Hydrostatische niveaumeting

Deltapilot FMB52

Druksensor met Contite-meetcel voor hydrostatische niveaumeting



Voordelen:

- Hermetisch afgedichte vochtbestendige Contite-meetcel, hoge referentienauwkeurigheid: $\pm 0,2\%$, optioneel $\pm 0,1\%$ en minimale temperatuureffecten
- Modulair concept voor eenvoudige vervanging van het display of de elektronica
- Naadloze en onafhankelijke systeemintegratie (HART/PA/FF)
- Eenvoudige en veilige menugestuurde bediening: ter plekke via displaymodule, via 4-20 mA met HART, via PROFIBUS PA, via FOUNDATION Fieldbus
- Internationaal inzetbaar dankzij een breed scala aan goedkeuringen

Overzicht specificaties

- **Accuracy** Standard 0.2% Optional 0.1%
- **Process temperature** PE cable: $-10^{\circ}\text{C} \dots 70^{\circ}\text{C}$ / $14^{\circ}\text{F} \dots 158^{\circ}\text{F}$ FEP cable: $-10^{\circ}\text{C} \dots 80^{\circ}\text{C}$ / $14^{\circ}\text{F} \dots 176^{\circ}\text{F}$
- **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 Cable (PE/FEP) optional coating AuPt optional coating AuRh

Meer informatie en actuele prijzen:

www.be.endress.com/FMB52

Toepassingsgebied: De Deltapilot FMB52 is voorzien van een kabel en een vaste procesaansluiting. Dit instrument met de Contite-meetcel wordt vooral gebruikt in de proces- en milieu-industrie. Het is ontwikkeld voor niveaumetingen in vloeibare en pasta-achtige media in open of gesloten reservoirs. De metingen worden niet beïnvloed door mogelijke schuimvorming. Voor gebruik in SIL2-veiligheidssystemen.

Kenmerken en specificaties

Pressure

Meetprincipe

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
Cable 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%

Long term stability

0.05 % of URL/year

Process temperature

PE cable: -10°C...70°C / 14°F...158°F
FEP cable: -10°C...80°C / 14°F...176°F

Ambient temperature

-40°C...85°C
(-40°F...185°F)

Pressure

Measuring cell

100 mbar...10 bar
(1.5 psi...150 psi)

Smallest calibratable span

10 mbar (1.45 psi)

Vacuum resistance

0 mbar abs.

Max. Turn down

100:1

Max. overpressure limit

40 bar (600 psi)

Process connection

Thread:

G1 1/2, MNPT1 1/2

Flange:

DN40...DN100,

ASME 2"...4",

JIS 10K

Material process membrane

316L, AlloyC,

Gold-Rhodium

PE, FEP

Material gasket

Viton, EPDM, Kalrez, none

Fill fluid

Inert oil,

Synthetic oil

Material housing

316L, Die-cast aluminum

Pressure

Communication

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

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

Safety approvals

Overfill protection WHG
SIL

Design approvals

EN10204-3.1
NACE MR0175

Marine approvals

GL/ ABS/ LR/ BV/ DNV

Drinking water approvals

KTW/ NSF/ ACS

Specialities

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

Continuous / Liquids

Meetprincipe

Hydrostatic

Characteristic / Application

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

Continuous / Liquids

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

PE cable: -10°C...70°C / 14°F...158°F

FEP cable: -10°C...80°C / 14°F...176°F

Process pressure absolute / max. overpressure limit

40 bar (600 psi)

Pressure measuring range

100 mbar...10 bar

(1.5 psi...150 psi)

Continuous / Liquids**Main wetted parts**

Alloy C
316L
Cable (PE/FEP)
optional coating AuPt
optional coating AuRh

Process connection

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

Max. meetafstand

100 m (328 ft) H₂O

Communication

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

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Safety approvals

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Continuous / Liquids

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
In case of an open tank or shaft use FMB53 with mounting clamp.

Meer informatie www.be.endress.com/FMB52