

Hydrostatische niveaumeting Deltapilot FMB70

Ultieme druksensor met Contite-meetcel voor hydrostatische niveaumeting



Meer informatie en actuele prijzen:

www.be.endress.com/FMB70

Voordelen:

- Hermetisch afgedichte vochtbestendige Contite-meetcel, hoge referentienauwkeurigheid: $\pm 0,1\%$, optioneel $\pm 0,075\%$ en minimale temperatuureffecten dankzij actieve temperatuurcompensatie
- Optimale consistente herhaalbaarheid en langetermijnstabiliteit
- Modulair concept voor eenvoudige vervanging van het display of de elektronica
- HistoROM/M-DAT-databackup voor instrumentinstellingen en meetwaarden
- Functiebewaking van de meetcel tot de elektronica
- Naadloze en onafhankelijke systeemintegratie (HART/PA/FF)
- Internationaal inzetbaar dankzij een breed scala aan goedkeuringen

Overzicht specificaties

- **Accuracy** Standard 0.1% Optional 0.075%
- **Process temperature** $-10^{\circ}\text{C} \dots +100^{\circ}\text{C}$ ($+14^{\circ}\text{F} \dots +212^{\circ}\text{F}$)
- **Pressure measuring range** 100 mbar...10 bar (1.5 psi...150 psi)
- **Process pressure / max. overpressure limit** 40 bar (600 psi)
- **Main wetted parts** Alloy C 316L

Toepassingsgebied: De Deltapilot FMB70 met de vochtbestendige Contite-meetcel en 2-kamer behuizing wordt veel ingezet voor proces- en hygiënische toepassingen. Het instrument is ontwikkeld voor niveaumetingen in vloeibare en pasta-achtige media in open of gesloten reservoirs, waarbij de metingen niet worden beïnvloed door mogelijke schuimvorming. De geïntegreerde HistoROM/M-DAT-datamodule maakt

het beheer van proces- en instrumentparameters eenvoudig. Ontworpen volgens IEC 61508 voor gebruik in SIL3-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

Compact 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 0.1%

Optional 0.075%

Long term stability

0.05 % of URL/year

Process temperature

-10°C...100°C

(14°F...212°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

25 mbar (3.63 psi)

Vacuum resistance

0 mbar abs.

Max. overpressure limit

40 bar (600 psi)

Process connection

Thread:

G1 1/2, MNPT1/2

Flange:

DN40...DN100,

ASME 1 1/2"...4",

JIS 10K

Process connection hygienic

Tri-Clamp

DIN11851

DIN11864-1

NEUMO

Varivent N

SMS

DRD

Material process membrane

316L, AlloyC,

Gold-Rhodium

Material gasket

None, measuring cell welded

Pressure**Fill fluid**

Inert oil,
Synthetic oil

Material housing

316L, Die-cast aluminum

Communication

4 ... 20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

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

Safety approvals

SIL

Design approvals

EN10204-3.1
NACE MR0175
MR0103

Hygienic approvals

3A, EHEDG
CoC ASME-BPE

Marine approvals

GL, DNV

Drinking water approvals

NSF

Specialities

Gold-rhodium coated membrane

Continuous / Liquids**Meetprincipe**

Hydrostatic

Characteristic / Application

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

Specialities

Diagnostic functions

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 0.1%
Optional 0.075%

Long term stability

0.05 % of URL/year

Ambient temperature

-40°C...+85°C
(-40°F...+185°F)

Process temperature

-10°C...+100°C
(+14°F...+212°F)

Process pressure / max. overpressure limit40 bar (600 psi)

Continuous / Liquids**Pressure measuring range**

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

Main wetted parts

Alloy C
316L

Process connection

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

Process connection hygienic

Tri-Clamp
DIN11851
DIN11864-1
NEUMO
Varivent N
SMS
DRD

Max. meetafstand

100 m (328 ft) H₂O

Communication

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

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

Safety approvals

SIL

Continuous / Liquids**Design approvals**

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Marine approval

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Drinking water approvals

NSF

Options

HistoROM/M-Dat

4-line digital display

SS- or Aluminiumhousing

Separate housing

Application limits

Measuring cell: Contite,
condensate-proof, watertight,
metal welded

If pressurized, possibly use
differential pressure measurement
with two pressure
transmitters. Observe ratio
head pressure : hydrostatic
pressure

Meer informatie www.be.endress.com/FMB70