Promass 80F

추가 정보 및 현재 가격:
www.kr.endress.com/80F

장점:

- Highest process safety – immune to fluctuating and harsh environments
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Space-saving installation – no in/outlet run needs
- Cost-effective – dedicated design for standard applications
- Safe operation – display provides easy readable process information
- Fully industry compliant – IEC/EN/NAMUR

사양 정보

- **Max. measurement error** Mass flow (liquid): ±0.15 % (standard), 0.1 % (option) Volume flow (liquid): ±0.15 % Mass flow (gas): ±0.35 % Density (liquid): ±0.0005 g/cm³
- **Measuring range** 0 to 2 200 000 kg/h (0 to 80 840 lb/min)
- **Medium temperature range** Standard: –50 to +200 °C (–58 to +392 °F) High temperature: –50 to +350 °C (–58 to +662 °F)
- **Max. process pressure** PN 100, Class 600, 63K
- **Wetted materials** Measuring tube: 1.4539 (904L); 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022) Connection: 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022)

적용 분야: Promass F has a long standing reputation as a highly accurate and robust device. It is suited for a broadest range of applications. Combined with the proven Promass 80 transmitter with push buttons, Promass 80F offers highest measurement performance for liquids and gases under varying, demanding process conditions.

특징 및 사양

Gas

측정 원리
Coriolis

Gas

Product headline

The robust flowmeter for demanding applications with a compact or remote transmitter. Highest measurement performance for liquids and gases under varying, demanding process conditions.

Sensor features

Highest process safety – immune to fluctuating and harsh environments. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in/outlet run needs. Mass flow: measurement error ±0,05 % (PremiumCal). pressure-rated sensor housing up to 40 bar (580 psi).

Transmitter features

Cost - effective – dedicated design for standard applications. Safe operation – display provides easy readable process information. Fully industry compliant – IEC/EN/NAMUR. 2 - line backlit display with push buttons. Device in compact or remote version.

Nominal diameter range

DN 8 to 250 (⅜ to 10")
High temperature: DN 25 (1"), DN 50 (2"), DN 80 (3")

Wetted materials

Measuring tube: 1.4539 (904L); 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022)
Connection: 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022)

Measured variables

Mass flow, density, temperature, volume flow, corrected volume flow, reference density

Max. measurement error

Mass flow (liquid): ±0.15 % (standard), 0.1 % (option)
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Gas

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Max. process pressure
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Medium temperature range
Standard: –50 to +200 °C (–58 to +392 °F)
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Ambient temperature range
Standard: –20 to +60 °C (–4 to +140 °F)
Option: –40 to +60 °C (–40 to +140 °F)

Sensor housing material
1.4301/1.4307 (304L), corrosion resistant

Transmitter housing material
Powder - coated die - cast aluminium
1.4301 (304), sheet
CF3M (316L), cast

Degree of protection
IP67, type 4X enclosure. Remote transmitter: IP67, type 4X enclosure

Display/Operation
2 - line backlit display with push buttons
Configuration via local display and operating tools possible

Outputs
3 outputs:
0 - 20 mA (active)/4 - 20 mA (active/passive)
Pulse/frequency/switch output (passive)

Inputs
Status input

Gas

Digital communication
HART
PROFIBUS PA

Power supply
DC 16 to 62 V
AC 85 to 260 V (45 to 65 Hz)
AC 20 to 55 V (45 to 65 Hz)

Hazardous area approvals
ATEX, IECEx, FM, CSA, NEPSI

Other approvals and certificates
3.1 material, calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR, SIL, marine
PED, CRN, AD 2000
3-A,, FDA
NACE MR0175/MR0103, PMI; welding test acc. to EN, ASME,NORSOK

Product safety
CE, C-tick, EAC marking

Functional safety
Functional safety according to IEC 61508, applicable in safety-relevant applications in accordance with IEC 61511

Metrological approvals and certificates
Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR

Marine approvals and certificates
Marine approval

Pressure approvals and certificates
PED, CRN, AD 2000

Material certificates
3.1 material
NACE MR0175/MR0103, PMI; welding test acc. to EN, ASME,NORSOK

Gas

Hygienic approvals and certificates
3-A, EHEDG, FDA

Steam

측정 원리
Coriolis

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Steam

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Marine approval

Pressure approvals and certificates
PED, CRN, AD 2000

Steam

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Density/Concentration

측정 원리

Coriolis

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Product safety

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Metrological approvals and certificates

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Marine approvals and certificates

Marine approval

Pressure approvals and certificates

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Density/Concentration

Material certificates

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Liquids

측정 원리

Coriolis

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Liquids

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Marine approval

Pressure approvals and certificates
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Hygienic approvals and certificates
3-A, EHEDG, FDA

Density

측정 원리
Coriolis

Characteristic / Application
The universal and multivariable flowmeterfor liquids and gases

Ambient temperature
-20...+65°C
(-4...+140°F)

Process temperature
-50...+350°C
(-58...+662°F)

Process pressure absolute
PN 16...100
Cl 150...600
JIS 10...63K

Wetted parts
904L/1.4539
Alloy C-22

Density

Output

4...20mA
Pulse/Frequency
Status

Certificates / Approvals

ATEX
FM
CSA
TIIS

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