

Proline t-mass 65F thermische massaflowmeter

Robuuste flowmeter met aanpassing aan veranderende procesomstandigheden



Meer informatie en actuele prijzen:

www.be.endress.com/65F

Voordelen:

- Meting van gassen en gasmengsels in kleine leidingdiameters
- Veiligheid voor de installatie – hoge nauwkeurigheid en herhaalbaarheid voor een groot aantal utiliteits- en procesgassen
- Kostenefficiënte metingen – eenvoudige installatie, verwaarloosbare drukverliezen en onderhoudsvrij
- Betrouwbare flow-tendentie - multivariabele metingen
- Snelle en efficiënte inbedrijfstelling – geleide werkmenu's
- Hoge beschikbaarheid van de installatie – zelfdiagnose en foutbewaking
- Automatisch herstel van gegevens voor onderhoud

Overzicht specificaties

- **Max. meetfout** Gas: 1.5% o.r. (10 to 100% o.f.s.), 0.15% o.f.s. (1 to 10% o.f.s.)
- **Measuring range** 0.5 to 3750 kg/h (1.1 to 8250 lb/h)
- **Medium temperature range** -40 °C to +100 °C (-40 °F to +212 °F)
- **Max. process pressure** PN40 / Cl. 300 / 20K
- **Wetted materials** Transducer: 1.4404 (316L); Alloy C22, 2.4602 (UNS N06022) Process connections: 1.4404 (316L/316) Sensor body: DN 15 to 25 (1/2" to 1"): CF3M-A351 DN 40 to 100 (1-1/2" to 4"): 1.4404 (316/316L) Bushing: PEEK GF30, PVDF O-ring seals: EPDM, Kalrez 6375, Viton FKM

Toepassingsgebied: Het t-mass 65F inline-instrument is speciaal ontworpen voor de directe massaflowmeting van industriële gassen en perslucht. Met een typische regelbereik van 100:1 kan het instrument operationele flows en off-line lekkages nauwkeurig meten. Met de

geïntegreerde gasconfigurator kan de klant het instrument voor 20 vrij selecteerbare gassen configureren.

Kenmerken en specificaties

Gas

Meetprincipe

Thermal

Product headline

High-performing flowmeter with intelligent and dynamic adaptation to changing process conditions.

Measurement of gases and gas mixtures in small line sizes.

Sensor features

Plant safety – high accuracy and repeatability for a wide range of utility and process gases. Cost-effective measurement – easy installation, negligible pressure loss and maintenance-free.

Inline version: nominal diameter DN 15 to 100 (1/2 to 4"). Process pressure up to PN 40, Class 300. High accuracy: $\pm 1.5\%$ o.r. (10 to 100 % o.f.s.).

Transmitter features

Reliable flow trending – multivariable measurement. Flexible device configuration to suit the application – integrated "Gas Engine" functionality. For demanding applications – user-definable gas mixtures, high repeatability and accuracy.

Device as compact or remote version. 4-20 mA HART, PROFIBUS PA/DP, Modbus RS485, FF. Worldwide approvals (Hazardous areas).

Nominal diameter range

DN 15 to 100 (1/2" to 4")

Gas

Wetted materials

Transducer: 1.4404 (316L); Alloy C22, 2.4602 (UNS N06022)

Process connections: 1.4404 (316L/316)

Sensor body:

DN 15 to 25 (1/2" to 1"): CF3M-A351

DN 40 to 100 (1-1/2" to 4"): 1.4404 (316/316L)

Bushing: PEEK GF30, PVDF

O-ring seals: EPDM, Kalrez 6375, Viton FKM

Measured variables

Mass flow, temperature, volume flow, energy flow

Max. meetfout

Gas: 1.5% o.r. (10 to 100% o.f.s.), 0.15% o.f.s. (1 to 10% o.f.s.)

Measuring range

0.5 to 3750 kg/h (1.1 to 8250 lb/h)

Max. process pressure

PN40 / Cl. 300 / 20K

Medium temperature range

-40 °C to +100 °C (-40 °F to +212 °F)

Ambient temperature range

-20 °C to +60 °C (-4 °F to +140 °F)

Optional: -40 °C to +60 °C (-40 °F to +140 °F)

Transmitter housing material

Transmitter housing:

Compact: powder coated die-cast aluminium

Wall-mount: powder coated die-cast aluminium

Remote field: powder coated die-cast aluminium

Connection housing (remote version): powder coated die-cast aluminium

Degree of protection

IP 67

NEMA 4x

Gas

Display/Operation

Liquid crystal: back-lit, two lines with 16 characters per line
Configuration via local display and operating tools possible

Outputs

4-20mA HART (active/passive selectable), pulse, frequency, status

Inputs

4-20mA, status input

Digital communication

HART, PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, Modbus
RS485

Power supply

85 to 260 VAC, 45 to 65 Hz
20 to 55 VAC, 45 to 65 Hz
16 to 62 VDC

Hazardous area approvals

ATEX, FM, CSA, NEPSI

Product safety

CE, C-tick, EAC marking

Pressure approvals and certificates

PED, CRN

Hygienic approvals and certificates

Oxygen service (certified acc. To BS IEC 60877)

Meer informatie www.be.endress.com/65F