

# **Product Overview**















## Coriolis Mass Flow Meter TM, TMU and TME

## **Applications:**

Measurement of mass flow, density, temperature and volume flow.

## Areas of application:

Liquids, gases

#### **Special Features:**

Reliability, rugged design.

The electronic transmitter can be mounted integral or remote. Numerous versions and tailor made designs are available! Special materials

## **Technical data:**

Range: from 0,8 kg/h up to 2.200.000 kg/h of liquid  $\pm$ 0,1% of reading  $\pm$  zero-stability (liquid)

Process temperature: -90°C ... +260°C

Ingress protection: IP 65

Various process connections: as well as special connections

Special materials: Tantalum, Hastelloy, Nickel, Titanium, etc.

Nominal pressure: up to 900 bars

Options:

Additional hHeat jacketing: Steam, liquid, electrical

#### **Certificates and approval:**

Explosion protection, ATEX: intrinsically safe Approval by different metrological institutes

PEC

FM (applied for) NEPSI (applied for)

## **Transmitter UMC3 for Coriolis Mass Flow Meter**

User-friendly digital transmitter with microcontroller, easy to handle.

#### **Product specialities:**

Reliability

Easy to handle

The transmitter can be replaced without recalibration.

DSB data memory module

#### **Technical data:**

2 current outputs (0) 4 - 20mA

1 Pulse output

1 Status output

### **Options:**

The display/interface board can be installed separately.

## Approval:

Explosion protection, ATEX: intrinsically safe, explosion proof, increased safety Approval by different metrological institutes

FM (applied for) NEPSI (applied for)

#### **Communication:**

HART®

**Profibus** 



## Magnetic-Inductive Flow Meters EP, PIT, PITY

Applications: Areas of application:

Volume flow measurement Flow measurement of conductive liquids

## **Product specialities:**

Reliability

Different materials for electrodes (e. g. Hastelloy, Platinum, Tantalum, Gold, and many more)

Tailor made solutions.

Transmitter UMF (to be used in hazardous areas)

Transmitter UMF2

## **EP**

Inline sensor with linings made of PFA, PTFE, hard rubber

#### **Technical data:**

Nominal size: DN10 ... DN600 Nominal pressure: up to PN 40 Range: 0,0015 m³/h ... 10.000 m³/h Viscosity: 0,2 mPas ... 50.000 mPas Process temperature: -25°C ... +180°C Accuracy: ±0,5% of measuring value

#### **Options:**

Different nominal size, pressure rating and ranges on request!

options.

## PIT, PITY

Insertion type MAG meter as an alternative to classic inline MAG flow meters.

#### Technical data:

Range I 0.5 m/s ... 5 m/s Range II 1 m/s ... 10 m/s Nominal pressure: up to PN40 Accuracy: ±1,5% of reading ±0,5% of

max. range

Appropriate for nominal sizes up to 2.000

mm.

#### **Options:**

Retractable during operation







## Transmitters UMF and UMF2 for Magnetic-Inductive Flow Meters

### **Transmitter UMF**

Easy to handle digital transmitter for magnetic-inductive sensors of the series EP, PIT and PITY.

#### **Product specialities:**

Can be used in hazardous areas The electronic transmitter can be mounted integral or remote.

The transmitter can be replaced without recalibration.

DSB data memory module

#### Technical data:

1 current output 0/4 - 20mA 1 pulse output, 1 status output

#### **Options:**

The display/interface board can be installed separately.

#### Approval:

Explosion protection, ATEX: intrinsically safe, explosion proof, increased safety NEPSI (applied for)

#### **Communication:**

**HART®** 

### **Transmitter UMF2**

Easy to handle digital transmitter for magnetic-inductive sensors of the series EP, PIT and PITY.

#### **Product specialities:**

The electronic transmitter can be mounted integral or remote.

The transmitter can be replaced without recalibration.

Digital on-site display (with illuminated background)

#### **Technical data:**

1 current output 0/4 - 20mA 1 pulse output

1 status output

i status output

#### **Communication:**

**HART®** 

























## Variable Area Flow meter

#### **BGN, BGF series**

#### **Applications:**

Volume flow measurement of liquids and gases

#### **Product specialities:**

Can be used for vertical and horizontal installation. Reliability

Robust construction with magnetic transmission of measured values.

Wide and clear scale. Can be used in hazardous areas

#### Technical data:

Range: 0,005 m³/h ... 130 m³/h of water Nominal size: up to DN150 / ANSI 6" Nominal pressure: up to PN 600

Process temperature BGN / BGF: -80°C ... +350°C

#### **Options:**

Design BGF: horizontal or vertical installation possible. Spring stop, gas damping

Special materials, a. g. Hastolley or PTEF lining.

Special materials, e. g. Hastelloy or PTFE lining.

Heat jacketing

Display unit in stainless steel, IP 68 Electronic transmitter ES

Limit switches

#### Communication:

HART® Profibus

## Series: KD1, KDS, BGK

for low flow applications

#### **Product specialities:**

Reliability. Robust construction with magnetic transmission of measured values (KDS, BGK). Can be used in hazardous areas

#### **Technical data KD1:**

Range: 0,25 l/h ... 100 l/h of water Nominal pressure: up to 16 bars Connection: ¼" NPT (F)

#### **Technical data KDS:**

Range: 1 l/h ... 200 l/h of water Nominal pressure: up to 64 bars Connection: ¼" NPT (F)

#### **Technical data BGK:**

Range: 1 I/h ... 200 I/h of water Nominal pressure: up to 40 bars Connection: Flange

#### **Options:**

Limit switches. Differential-pressure controller. Higher pressure ratings on request

#### V 30 series

Glass

## **Product specialities:**

Reliability

Robust and low-wear mechanical flow meter.

## **Technical data:**

Ranges: from 100 l/h up to 10.000 l/h

(water)

Accuracy class: 1,6

Process temperature: 0°C ... +80°C Various process connections

#### **Options:**

Limit switches Splinter protection

#### **VKN** series

Plastics

## **Product specialities:**

Reliability Robustness

#### **Technical data:**

Ranges: from 0.05 m<sup>3</sup>/h up to 50 m<sup>3</sup>/h of

water

Nominal sizes: G ½" ... G 2"
Process temperature: up to +60°C

#### **Option:**

Limit switches



## Flap Flow Meter TSK

#### **Applications:**

Flow measurement of liquids

#### **Product specialities:**

Can be used for vertical and horizontal installation.

Reliability

Robust construction with magnetic transmission of measured values.

Wide and clear scale

Special materials Hastelloy, PTFE, or PP

Can be used in hazardous areas

#### Technical data:

Range: 1,5 m³/h ... 1.200 m³/h

Nominal sizes: DN50 ... DN500 in sandwich structure

Nominal pressure: up to PN 100 Process temperature: -20°C ... +300°C

#### **Options:**

Display unit in stainless steel, IP 68 Electronic transmitter ES

Limit switches

#### **Communication:**

HART® Profibus

## **Electronic Transmitter ES**

Can be used in the following devices, BGN, BGF, TSK (flow metering), DWF (density metering), BA (level metering).

## **Product specialities:**

Reliability

The transmitter can be replaced without recalibration.

2-wire system

Application possible in hazardous areas

Linearization of the characteristic with 16 fulcrums

## Technical data:

Current output 4 - 20mA

Explosion protection, ATEX: intrinsically safe

## Options:

Digital display

Limit switches acc. to NAMUR (software-controlled)

Pulse output

#### **Communication:**

**HART®** 

Profibus

















## **Level metering**

#### **Applications:**

Level or interface metering

#### **MBSK** series

### **Product specialities:**

Reliability. Robust construction with magnetic transmission of measured values. Big scale with 180°-wide angle ball-display. Can be used in hazardous areas. Self-monitoring function. PTB approval for zone 0

#### Technical data:

Process temperature: up to +350°C Nominal pressure: up to 400 bars

#### **Options:**

Polypropylene fittings, PVDF- and PTFE-lining. Limit switches Reed contact with electronic transmitter, 4-20mA, HART® Approval: Possible by TÜV, Germanischer Lloyd and Bureau Veritas

#### **BA** series

#### **Product specialities:**

Reliability. Robust construction with magnetic transmission of measured values. Wide and clear scale. Can be used in hazardous areas (Zone 0).

#### Technical data:

Range: up to 6 m

Connection: up to DN100 / ANSI 4"

Nominal pressure: up to PN 160 Process temperature: -50°C ... +260°C

#### **Options:**

Various special materials. Heat jacketing Display unit in stainless steel, IP 68 Electronic transmitter ES Limit switches

## Communication:

HART® Profibus

## **Density meter DWF**

#### **Applications:**

In-line density measurement of liquids or multiphase-mixtures

## **Product specialities:**

Reliability. Robust construction with magnetic transmission of measured values. Can be used in hazardous areas. No by-pass required. Wide and clear scale

#### Technical data:

Medium density: from 700 g/l to 1.900 g/l

Measuring span: 50 g/l ... 600 g/l up to 10 m³/h Nominal sizes: DN25 or DN50 Process temperature: -20°C ... +200°C Nominal pressure: up to PN 16

#### **Options:**

Special materials according to customer request. Process connection according to customer request. Additional heating. Display unit in stainless steel, IP 68. Transmitter ES. Limit switches

### **Communication:**

HART® Profibus



Heinrichs Messtechnik can look back to a company tradition of almost 100 years

The history of the company began with the construction of Variable Area Flow Meters.

As soon as electronics conquered measuring technology, the product portfolio could be extended by Magnetic-Inductive Flow Meters.

As one of the first European companies, Heinrichs designed a Mass Flow Meter working with the Coriolis principle, almost 20 years ago.

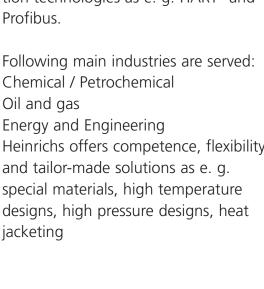
The adaptation of microprocessor technologies by the end of the nineties lead to modern communication technologies as e. g. HART® and

Chemical / Petrochemical Oil and gas **Energy and Engineering** Heinrichs offers competence, flexibility and tailor-made solutions as e. g. special materials, high temperature designs, high pressure designs, heat

Your measuring problem is our challenge









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