

100 YEARS PROCESS-INSTRUMENTATION 1911-2011 We measure flow, mass, density, level and pressure



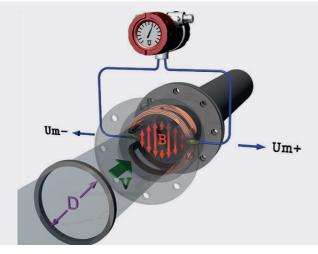
# Magnetic-Inductive flowmeter for hazardous areas

- > high accuracy: 0.3 % of measured value
- > maintenance free
- no pressure drop
- > numerous lining materials
- > numerous electrode materials
- > low-cost grounding electrode instead of earthing rings. Special materials also available e.g. Tantalum



# Magnetic-inductive flowmeter EPX/UMF3

### Measuring principle



# Magnetic-Inductive flow sensor EPX

### **Compact version**

The extremely durable INLINE magnetic-inductive-flowmeter EPX.



An electrically conductive medium flowing through an orientated magnetic field, in accordance to Faraday's law of induction, will induce a voltage proportional to the mean flow velocity rate and hence the volumetric flow.

This principle allows high accuracy and is independent of the density and viscosity of the measured medium as well as creating no pressure drop.

Without moving parts this system is maintenance free and thus perfect for almost all conductive liquids.

With numerous lining- and electrode-materials the EPX is an all-rounder for many applications in the fields of:

- > Water / Wastewater
- > Chemical- / Petrochemical industry
- > Plant construction
- > Power plants

# Magnetic-Inductive flowmeter EPX/UMF3

### areas of application

hazardous areas, corrosive media

Available in nominal sizes from DN15 to DN300, the ATEX certified EPX sensor with transmitter UMF3 can be used in almost any environment.

Whether compact- or remote- mounted the EPX sensor with UMF3 transmitter is ideally suited for measurements in hazardous areas such as the chemical and petrochemical industry.

Optimize your processes with Heinrichs Magnetic flow meters and save time and money during the entire life cycle.

Lining materials such as PTFE in combination with highly resistant Hastelloy, platinum or tantalum electrodes allow the use of the device for liquids such as acids, alkalis and other mixtures.

Highest standards of workmanship and purity of materials enable a long service life and consistently high precision.

Especially in critical applications where abrasive or inhomogeneous process media is in use, is the magnetic - inductive flowmeter the appropriate choice, thereby delivering highly accurate measurements.



# Magnetic-Inductive Transmitter UMF3

**Transmitter** with rugged design Ex d field housing

User-friendly, with a modern control concept and variable power supply.



- > 6-key-operation for easy menu navigation
- > plain text menu
- > power supply
  - > 24 V 4-wire
  - >90-253 VAC 50/60Hz
- >1 Analogue output +1 pulse output +1 status output
- > HART communication

## Magnetic-Inductive flowmeter EPX/UMF3

#### Performance data

at a glance

Nominal diameters DN15..DN300

1/2" ... 12"

Accuracy ±0,3 % of measured value

+10<sup>-4</sup> of end value

Conductivity  $\geq 5\mu S_1 \geq 20\mu S$  for

demineralised water

Temperature range

Hard rubber-35 °C to +64 °CPTFE / ECTFE-35 °C to +139 °C

Sensor material Steel / Stainless steel

Electrodes Stainless steel, Hastelloy,

Tantalum, Titanium, Platinum

Transmitter Painted aluminum housing

Power supply 24 VDC

90-253 VAC 50/60Hz

Communication HART

Signal output 4-20 mA, pulse output,

Status output

**Explosion proof certificates** ATEX (Gas/Staub)

Sensor Ex II 2G Ex e ia IIC Gb

Fx II 2D Fx th IIIC Dh

Pressure rating

DIN EN1092-1

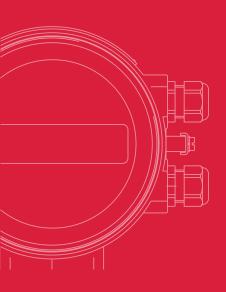
 DN15-DN50
 PN40

 DN65-DN200
 PN16

 DN250-DN300
 PN10

ASME B<sub>16.5</sub>

15,9 bar (-29°C bis +38°C) 12" class 150 10,3 bar (-29°C bis +38°C)





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