

Product Information HM-E, HMP-E

PHARMA

FOOD

Turbine flowmeter HM-E / HMP-E

Application/Specified usage

- Measurement of flow and volume of pure, low viscous media in food and pharmaceutical applications.
- Designed for hygienic applications in food-, beverage- and pharmaceutical industries.

Certificates





Application Examples

 Process water, demineralized water, aqueous media such as filtered fruit juice or beer, alcohols, light oils, saline solutions, cleaning agents, and acids.

Hygienic design/Process connection

- Hygienic design, confirmed by 3-A certification
- · 2-part housing ensures simple cleaning and maintenance
- · High media resistance due to stainless steel 316L and Rulon™ bearings
- · Nominal widths according to ASME BPE and DIN 11850 Series 2
- · Universal clamp connection.

HMP-E

Features

- High quality and hygienic alternative to industrial, non-hygienic turbine, paddle wheel or variable area flowmeters
- · Economical alternative to mass flowmeters in non-conductive, low-viscosity
- Cost-effective and compact alternative to magnetic-inductive flowmeters in applications that require a small probe

Options/Accessories

- · 3-wire signal probe with M12 connection
- · Pre-fabricated cable for M12 connector
- · Analog output via universal universal transmitter "NCI-45"

HMP-E



Measuring Principle

- · The signal probe (1) generates an electromagnetic field (3) in an oscillating circuit (2).
- This electromagnetic field penetrates the stainless steel walls of the housing and induces an induction current (eddy current) in the turning rotor blades.
- This induction current, in turn, generates an electromagnetic field that counteracts the magnetic field generated by the oscillating circuit and thus causes a change in the oscillating circuit voltage.
- The integrated amplifier (4) processes these voltage changes into a pulse signal with a frequency that is directly proportional to the rotational speed of the turbine.

Non-contact pulse measurement

