

## The benchmark for accuracy, reliability, and durability

# Permanently precise flow control: FMI

**The electromagnetic flowmeter FMI is an extremely versatile, robust and reliable instrument for all conductive media such as milk, cream, beer, tomato paste, sauces, molasses, yoghurt, slurries, concentrates and cleaning agents.**

**The performance spectrum is adapted to almost all applications in the food and pharmaceutical industries, also for dosing and filling applications:**

- **Extremely robust:** All components are made entirely of stainless steel. The magnetic field coils of the measuring system are fully encapsulated, which guarantees reliable, precise measuring results even in very harsh environments with strong vibrations or pressure shocks
- **Extremely reliable:** Fully protected against moisture, corrosion, and vibrations; vacuum-capable measuring tube lining made of high-quality PFA, process temperature up to 165°C (remote) suitable for CIP cleaning and pigging.
- **Always accurate:** Advanced signal processing ensures that the measurement is always accurate even with a change in liquid (e.g., milk/CIP cleaner)
- **Simple commissioning and operation:** User-friendly, rotatable backlit display with optical buttons for quick and easy programming, no opening of the cap required, no mechanical buttons
- **Extremely versatile electronics:** many configurations make individual settings possible. Available options include remote electronics.



### Technical Specifications at a glance

- **Measuring range from 30 l/h up to 280 000 l/h**
- **Very high accuracy:  $\pm 0.20\%$  /  $\pm 1\text{mm/s}$**
- **For liquids, mashes, pastes and cleaning solutions with a min. conductivity of  $> 5 \mu\text{S/cm}$**
- **Process temperature up to 100°C or 163 °C with remote electronics**
- **CIP / SIP cleaning up to 130 °C / 30 minutes with integral electronics**
- **Sensor with aseptic flange, many standard process connections available**



Main application area: Food | Material: 1.4404 / AISI 316L (without 3.1 certificate)

**FMI-C** compact version  
**FMI-R** remote version (includes 5 m coil and electrode cable as standard)

**Tube standard**

**DIN2** DIN 11850 Series 2 - Main application area: Food - Material: 1.4404 / AISI 316L  
**ODT** OD-Tube OD Tube (ASME-BPE) - Main application area: Food - Material: 1.4404 / AISI 316L

**Nominal diameter Process connection**

DIN2	ODT
10	1/2"
15	3/4"
25	1"
32	-
40	1½"
50	2"
65	2½"
80	3"
100	4"

**Main application area: Pharmaceutical**  
 Material 1.4435 / AISI 316L with 3.1 certificate  
 Order Code see Product Information

**Process connection (Ⓐ: 3-A conform)**

- SS** weld flange Ⓐ
- TC** Tri-Clamp\* Ⓐ
- HH** aseptic fitting DIN 11864-1 threaded side Ⓐ
- GG** milk pipe fitting DIN 11851
- VN** VARIVENT smooth flange
- FG** FG hygienic flange, smooth flange
- DF** DIN flange as per DIN EN 1092-1 Type 11 Form B, similar to DIN 2623/2633
- SMS** SMS threaded connector

**DIN 11850 Series 2**

**OD-Tube (ASME BPE)**

DIN2	SS	TC	GG	HH	DF	VN	FG	ODT	SS	TC	SMS
10	x	x	x	x	x			1/2"	x	x	
15	x	x	x	x	x			3/4"	x	x	
25	x	x	x	x	x		x	1"	x	x	x
32	x	x	x	x		x		-			
40	x	x	x	x	x		x	1½"	x	x	x
50	x	x	x	x	x	x	x	2"	x	x	x
65	x	x	x	x	x	x	x	2½"	x	x	x
80	x	x	x	x	x	x	x	3"	x	x	x
100	x	x		x	x		x	4"	x	x	x

x = process connection available for nominal width

**X** fixed character

**Power supply**









- DC** 9...32 V DC
- AC** 100...240 V AC

**Electrical connection (DC version only)**

- X** cable gland
- M12** M12-plug

FMI-C / DIN2 / 40 / SS / X / DC / M12

**Process adapters**

							
<b>Weld flange</b>	<b>Tri-Clamp</b>	<b>Milk pipe fitting</b>	<b>Aseptic fitting</b>	<b>Varivent</b>	<b>FG hygienic flange</b>	<b>DIN flange</b>	<b>SMS threaded connector</b>