

# Electromagnetic flowmeter EcoMaster Hygienic

The versatile and cost-effective stainless steel flowmeter  
for conductive fluids



- Smallest hygienic flowmeter in its class worldwide
- Compact stainless steel meter with local display and programming
- Uncompromising and practical functionality
- Flexible process connections from DN 10...100 (3/8...4")
- Easy to install due to electrical connection with M12 plug

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# EcoMaster Hygienic – the economical solution for continuous flow measurement



The EcoMaster Hygienic was developed to meet customer requirements for a versatile and cost-effective electromagnetic flowmeter. The meters are profitable, compact and very easy to use. They comply with all hygienic requirements in the food & beverage and pharmaceutical industries.

The EcoMaster Hygienic is the world's smallest electromagnetic flowmeter manufactured entirely of stainless steel. Its compact design makes it easy to install in the smallest spaces. The EcoMaster Hygienic also fulfills hygienic and aseptic requirements, including protection class IP 67. In addition, the electronics unit features a modular, user-friendly design. As a result, you pay only for what you need.



## Modular flowmeter

With graphic display and 3-button control, the EcoMaster Hygienic is easily programmable. The version without a display is configured using a pluggable control unit with identical performance. All parameter settings are stored in the flowmeter.

The measuring range is adjustable between 0.5 and 10 m/s. After connecting the M12 plug, all inputs and outputs can be simulated via an integrated function test.

Benefits of the modular design:

- With or without local display
- Current output
- Configurable contact output:
  - Pulse
  - Limit alarm
  - System alarm
  - Forward/reverse
- Configurable contact input:
  - External output switch-off
  - External totalizer reset
- Rotatable display

## Practice oriented sensor design

The sensors are dimensionally stable with vacuum-proof lining. In combination with the proven seal and process connection concept they provide a gap free hygienic design and optimal surface conditions. All wetted parts used in the sensors are approved by the FDA, and an EHEDG cleanability test has been performed. The meters have CIP- and SIP-capability up to 150 °C (302 °F) for steam or hot water.

The large range of meter sizes from DN 10 to 100 (3/8 to 4") is available with a wide selection of process connections: weld stubs, threaded connection DIN 11851, TRI-Clamp DIN 32676 wafer design, and external threads.



### Process connections



DN	Flow range		Unit
	Min. (Flow velocity 0...0.5 m/s)	Max. (Flow velocity 0...10 m/s)	
10 (3/8")	0...2.25 (0.6)	0...45 (12)	l/min (US gal/min)
15 (1/2")	0...5.0 (1.3)	0...100 (36)	l/min (US gal/min)
20 (3/4")	0...7.5 (2.0)	0...150 (40)	l/min (US gal/min)
25 (1")	0...10 (2.6)	0...200 (53)	l/min (US gal/min)
32 (1 1/4")	0...20 (5.3)	0...400 (106)	l/min (US gal/min)
40 (1 1/2")	0...30 (7.9)	0...600 (159)	l/min (US gal/min)
50 (2")	0...3 (13.2)	0...60 (264.2)	l/min (US gal/min)
65 (2 1/2")	0...6 (26.4)	0...120 (528.4)	l/min (US gal/min)
80 (3")	0...9 (39.6)	0...180 (792.6)	l/min (US gal/min)
100 (4")	0...12 (52.8)	0...240 (1056.8)	l/min (US gal/min)

### Technical data at a glance

**Meter sizes:** DN 10...100 (3/8...4")  
**Fluid temperatures:** Max. 130 °C (266 °F)  
**CIP/SIP:** Max. 140° C/150 °C (284 °F/302 °F)  
**Certificates:** EHEDG: Cleanability,  
 FDA: Process-wetted parts  
**Accuracy:** 0.5 % of rate  
**Supply power:** 24 V AC/DC  
**Current output:** 0/4...20 mA  
**Contact/pulse output:**  
 Optocoupler 220 mA/16...30 V DC  
**Contact input:** Optocoupler 16...30 V DC  
 All signal inputs/outputs are galvanically isolated from the input circuit and each other.

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