

MIA

Magnetic-inductive flowmeters

with analog output, impulse output
and with communication RS 485 / MODBUS RTU

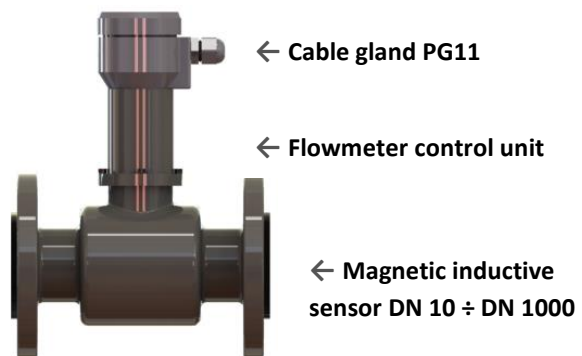
Main advantages

- Cheaper solution without display
- Compact and separated version
- Wide range of process connections
- A lot of material choices of lining and electrodes
- IP68 protection in separate version with stainless steel sensor or housing
- Empty pipe detection
- Suitable for dosing applications
- RS 485 communication / MODBUS RTU
- Analog output 4-20 mA
- Impulse output
- Frequency output

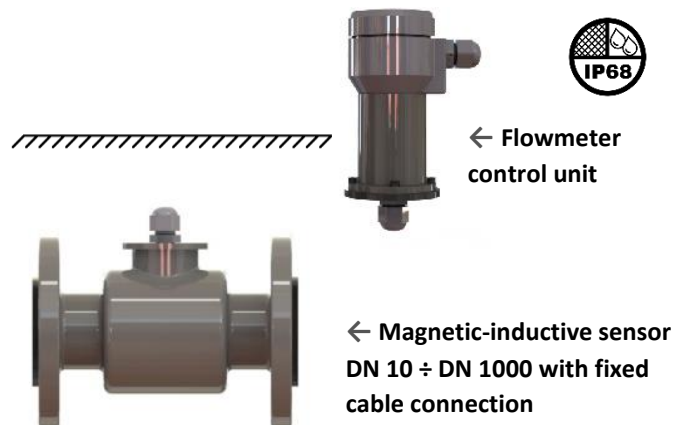
Applications

- Water treatment
- Chemical industry
- Food industry
- Mechanical engineering
- Agriculture
- Power engineering

Compact version - type MIA - C

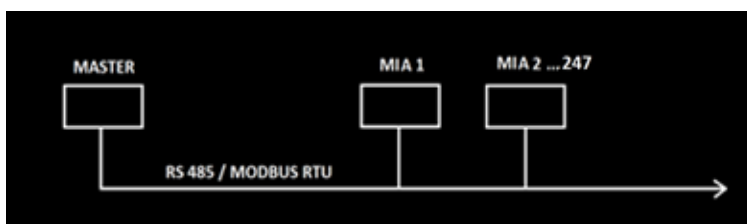


Separated version - type MIA - S



Terminal block connection

PWR supply		RS 485			Analog output		Impulse output		Frequency output	
9 + 36 VDC	0 V	A	B	shield	+	-			+	-



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Specifications

Option	compact version, separated version (sensor instalated under ground or under liquid level), fixed cable, cable length according to the order (max. 50 m)
Nominal sizes	flange DN 10 ÷ 1000 mm, without flanges DN 10 ÷ 100 mm
Insulation class of excitation coils	class E
Connection	flanged DIN (ANSI, BS, JIS) / hygienic - food DIN 11 851
Maximum pressure	standard 1,6 MPa (0,6 / 1,0 / 2,5 / 4,0 MPa)
Liner material	hard + soft rubber DN 10 ÷ DN 1000 / teflon PTFE DN 10 ÷ DN 500
Electrodes	stainless steel 316Ti (Hastelloy / Tantal / Titan / Platinum)
Outer casing and flanges	carbon steel standard (stainless steel 304, 321)
Flow tube	stainless steel 321
External coating	acrymetal multi component lacquer / polished stainless steel
Protection	IP67-NEMA5 (compact version) / IP68-NEMA6 (separated version)
Media temperature	compact version: 0 ÷ 90 °C separated version: hard rubber (0 ÷ 90 °C), PTFE (-20 ÷ 130 °C)
Accessories options	sensor grounding ring for plastic pipe for DN 10 ÷ DN 40 sensor grounding electrode for DN 50 ÷ DN 1000
Special option	food industry stainless steel version – teflon lining, fitting DIN 11 851 flange version with stainless steel cover – teflon / rubber lining flange all-stainless steel version – teflon / rubber lining without flange version – teflon / rubber lining
Flow direction	both direction
Suppression of small flows	yes
Empty pipe detection	yes
Electrical conductivity of medium	≥5 μS/cm, for demineralized water ≥20 μS/cm
Accuracy of measurement	0,5 % of measured value + 2 mm/s (reference conditions)
Communication port	RS 485, MODBUS RTU (instantaneous reading, parameters setting and calibration...)
Analog output	passive, 4-20 mA, max. 500 Ω
Impulse output	passive, optical relay, max. 30 V / 60 mA
Frequency output	passive, optocoupler, max. 26.4 V DC / 2 mA - setting up to 2 kHz (for calibration, dosing applications, etc.)
Power supply	9 ÷ 36 V DC / 10 W
Main unit protection	IP67 - NEMA5
Ambient temperature	-20 ÷ 60 °C