

MN-54ST

Low Flow Coriolis Mass Flow Controller for Gases & Liquids



Technical specifications

Measurement & control

Type of media	liquids and gases
Flow range	0...100 kg/h
Accuracy	±0.2% Rd (liquids) ±0.5% Rd (gases)
Repeatability	0.5 x accuracy value
Zero point stability (ZS)	25 g/h
Response time (sensor)	≤10 msec (τ 63%); ≤40 msec (τ 98%)
Operating temperature	0...50 °C
Fluid temperature	0...50 °C
Leak integrity, outboard	< 2 x 10 ⁻⁹ mbar l/s He
Mounting	any position
Warm-up time	30 minutes

Approvals

Marking	CE, UKCA, RoHS, WEEE, REACH
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Mechanical specs

Pressure rating (PN) - in barg	120
Ingress protection	IP54
Surface roughness wetted parts	Ra ≤ 1.6 µm
Material wetted parts	Stainless steel 316L / 1.4404
Housing material	Stainless steel 316L / 1.4404

Electrical properties

Power supply	15...24 Vdc ±10%
Power consumption	max. 5W
Analog output	Optional: 0...5 (10) Vdc or 0 (4)...20 mA (sourcing)
Analog setpoint	Optional: 0...5 (10) Vdc or 0 (4)...20 mA (sinking)
Digital communication	Standard: ProPar RS232; Options: ProPar RS485, Modbus RTU/ASCII, FLOW-BUS, PROFIBUS DP, PROFINET, POWERLINK, EtherNet/IP, Modbus TCP, EtherCAT, CANopen, DeviceNet

Electrical interfaces

Service interface	USB-C, Bluetooth
Actuator output	4-pin M8 (female)
Power (main connector)	8-pin M12A (male)
Function (instrument connector)	Analog, RS232, RS485
PROFIBUS DP	5-pin M12 B (female)
CANopen / DeviceNet	5-pin M12A (male)
Modbus RTU/ASCII/FLOW-BUS	5-pin M12A (male)
Modbus TCP / EtherNet/IP / EtherCAT® / PROFINET / POWERLINK	2x 4 pin M12D (female)