MASS-STREAM

D-6483/BJ-1-2

Direct Thermal Mass Flow Controller for Gases, IP65 protected





Mechanical specs

Pressure rating (PN)	16
Ingress protection	IP65
Material wetted parts	Aluminum EN AW-6082-T6 (non-anodised) or stainless steel SS 316; Body of motor driven valve: Brass
Sealing material	standard: FKM/Viton®; option: EPDM
Process connections	G1/2" / compression type couplings
Max. ∆P	16 bar(d)
Weight	Aluminum: 7.5 kg; Stainless steel: 9.0 kg

Electrical properties

Power supply	+1524 Vdc ± 10 %
Power consumption	3.5 W typical at 24 V for fieldbus: add + 0.9 W for display: add + 0.5 W
Analog output	05 (10) Vdc or 0 (4)20 mA (sourcing)
Analog setpoint	05 (10) Vdc or 0 (4)20 mA (sinking)
Digital communication	standard: RS232 options: CANopen®, DeviceNet™, EtherCAT®, PROFIBUS DP, PROFINET, Modbus (RTU, ASCII or TCP/IP), EtherNet/IP, POWERLINK or FLOW-BUS

Electrical interfaces

Power (main connector)	8-pin DIN (male)
Function (main connector)	Analog, RS232, RS485
PROFIBUS DP	8-pin M12B (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)

Technical specifications

Measurement & control

Type of media	almost all gases and gas-mixes, compatible with chosen materials
Flow range	min. 10500 l _n /min
	max. 1005000 l _n /min
Accuracy	±1.0% Rd plus ±0.5% FS
Repeatability	<±0.2% FS
Turndown ratio	1:30
Multi fluid capability	up to 8 calibration curves
Settling time (in control, typical)	< 5 sec.
Control stability	< 0.2% FS typical
Response time (sensor)	approx. 0.9 seconds
Operating temperature	0+50°C
Temperature sensitivity	±0.1% Rd/°C (Air)
Leak integrity, outboard	< 2 x 10 ⁻⁸ mbar l/s He
Pressure sensitivity	±0.3% Rd / bar typical (Air)
Max. Kv-value	1.1 / 3.4 (remain position)
Mounting	at 90° deviation from horizontal max. error 0.2% at 1 bar typical N2
Warm-up time	30 minutes
Storage/transport conditions	0+50°C, max. 95% RH (non-condensing)

Approvals

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