MASS-STREAM

# D-6483/BJ-1

Direct Thermal Mass Flow Controller for Gases, IP65 protected





# **Technical specifications**

#### Measurement & control

Type of media	almost all gases and gas-mixes, compatible with chosen materials
Flow range	min. 10500 l <sub>n</sub> /min
	max. 1005000 l <sub>n</sub> /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 <sup>-8</sup> mbar l/s He
Pressure sensitivity	±0.3% Rd / bar typical (Air)
Max. Kv-value	2.8 / 4.4 (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**

Marking

#### **Mechanical specs**

Pressure rating (PN)	16						
Ingress protection	IP65						
Material wetted parts	Aluminum EN AW-6082-T6 (non-anodised) or stainless steel SS316; Body of motor driven valve: Brass						
Sealing material	standard: FKM/Viton®; option: EPDM						
Process connections	G1" (ISO1179-1 cavity) / compression type couplings						
Max. ΔP	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)									