EN

IN-FLOW

F-106DD

Mass Flow Meter for low pressure drop or corrosive gas service

Bronkhorst®

Technical specifications

Measurement & control

Type of media	Gases
Flow range	38 m^3_n/h … 773 m^3_n/h
Accuracy	±1% FS
Repeatability	<±0.2% Rd (or <±0.04% FS whichever is greater)
Turndown ratio	1:50 (2…100%)
Multi fluid capability	Storage of max. 8 calibration curves
Response time (sensor)	1 … 2 sec
Operating temperature	-10…+70°C; 0...+50°C for ATEX zone 2, KCs, Class1 Div 2
Temperature sensitivity	< 0.1% FS/°C
Leak integrity, outboard	tested < 2 x 10^{-9} mbar l/s He
Pressure sensitivity	0.1% Rd/bar typical N2; 0.01% Rd/bar typical H2
Mounting	max. error at 90° off horizontal 0.2% at 1 bar, typical N2
Warm-up time	30 minutes
Storage/transport conditions	0...+50°C, max. 95% RH (non-condensing)

Approvals

Electrical safety	IEC 61010-1
Marking	CE, UKCA, RoHS, WEEE, REACH
Ex-Protection	Class I Div 2, ATEX Zone 2, KCs

Mechanical specs

Pressure rating (PN) - in barg	10
Ingress protection	IP65
Material wetted parts	stainless steel 316L or comparable
Sealing material	standard: FKM/Viton®; options: EPDM, FFKM/Kalrez®
Process connections	wafer type DN100/4”, for mounting between flanges

Electrical properties

Power supply	+15…24 Vdc
Power consumption	1.5 W typical at 24 V for fieldbus: add 0.9 W
Analog output	0…5 (10) Vdc or 0 (4)…20 mA (sourcing)
Analog setpoint	0…5 (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 (instrument 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)

Last modified 16-04-2026.