MASS-STREAM

D-6473/002AI

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. 2100 l _n /min
	max. 201000 l _n /min
Accuracy	±1.0% Rd plus ±0.5% FS
Repeatability	< ±0.2% FS
Turndown ratio	1:50
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	0.04 0.4
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)

Mechanical specs

Pressure rating (PN)	20
Ingress protection	IP65
Material wetted parts	Aluminum EN AW-6082-T6 or stainless steel SS316, elastomer seals
Sealing material	standard: FKM/Viton®; option: EPDM
Process connections	G1/2" (ISO1179-1 cavity) / compression type or face seal (VCR/VCO) couplings
Min. ΔP	1.3 bar(d)
Max. ΔP	20 bar(d)
Weight	Aluminum: 4.0 kg; Stainless steel: 5.0 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

Po	wer	(mai	n co	nneo	ctor)					8-pi	n DIN	N (ma	ale)					
Fu	nctio	on (n	nain	conn	ecto	r)				Ana	log, I	RS23	2, RS	6485				
PF	OFI	BUS	DP							8-pi	n M1	2B (f	ema	le)				
CA	Nop	en /	Devi	ceNe	et					5-pi	n M1	2A (r	nale)					
Мо	odbu	s RT	U/AS	CII/F	LOW	-BUS	5			5-pi	n M1	2A (r	nale)					
				ther WERI			ther	CAT®	9/	2x 4	pin	M12I) (fei	male)			

Approvals

Marking										CE						

Last modified 16-05-2025. © Bronkhorst High-Tech B.V. All rights reserved. The specifications are subject to change without notice. The products described herein and this document are subject to specific legal disclaimers as set forth on www.bronkhorst.com/disclaimer. For more information and detailed advice, please contact the local Bronkhorst sales partner. Contact details can be found at www.bronkhorst.com/contact.