



PVC INLINE FLOW SENSORS 4000 SERIES



DESCRIPTION

The **Badger Meter 4000 Series** flow sensors are designed to measure flow in small PVC pipes. They include a nonmagnetic flow sensor with schedule 80 PVC tail pieces (plain end pipe). They are available in 1/2" (1.3 cm), 3/4" (1.9 cm), and 1" (2.5 cm) sizes. Low flow models (410xxx and 411xxx), and models with an optional integral 4-20 mA loop-powered transmitter (4xx210) are available. Programming is done using the A301-20 Programming Kit.



4000 Series

SPECIFICATIONS

Analog Output	2-wire, 4-20 mA (4xx210 models)	Media Temperature Range	Maximum 140°F (60°C)
Pulse Rate	3.2 to 200 Hz, 5 ms ±25% width, 9-20 VDC power @ 2 mA maximum; 5V CMOS and LSTTL compatible (4xx200 models)	Maximum Pressure	350 psig (2413 kPa) @ 73°F (22.8°C) media temperature
Wiring		Materials of Construction	PVC fittings, PPS housing, Viton o-ring, zirconia ceramic shaft, Tefzel impeller, UHMWPE bearings
Pulse models	20' (6.1 m), 20 AWG three-conductor shielded cable	Dimensions	
4-20 mA models	3' (.91 m), 20 AWG two-conductor shielded cable	400..., 410...	3.4"H x 8.8"W x 3.5"D (9.1 x 22.2 x 8.9 cm)
Accuracy	±1% of full scale	401..., 411...	3.4"H x 10.8"W x 3.5"D (9.1 x 26.8 x 8.9 cm)
Repeatability	±0.5% of full scale	402...	3.4"H x 13.0"W x 3.5"D (9.1 x 33.1 x 8.9 cm)
Connection Type	PVC plain end pipe	Weight	
Velocity Range		400..., 410...	.75 lb (.34 kg)
400..., 401..., 402...	1.0 to 20 fps (.33 to 6.0 mps)	401..., 411...	.85 lb (.38 kg)
410..., 411...	0.25 to 8.0 fps (.075 to 2.4 mps)	402...	.95 lb (.43 kg)
Media Compatibility	Water, pure water (verify application is compatible with flow sensor materials of construction, check material compatibility resources prior to ordering)	Approvals	CE
		Warranty	1 year

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FLOW

ORDERING INFORMATION

MODEL	DESCRIPTION
400200-0021	Inline flow sensor with 1/2" PVC tail pieces, pulse output
400210-0021	Inline flow sensor with 1/2" PVC tail pieces, integral 4-20 mA
410200-0021	Inline low flow sensor with 1/2" PVC tail pieces, pulse output
410210-0021	Inline low flow sensor with 1/2" PVC tail pieces, integral 4-20 mA
401200-0021	Inline flow sensor with 3/4" PVC tail pieces, pulse output
401210-0021	Inline flow sensor with 3/4" PVC tail pieces, integral 4-20 mA
411210-0021	Inline low flow sensor with 3/4" PVC tail pieces, pulse output
411210-0021	Inline low flow sensor with 3/4" PVC tail pieces, integral 4-20 mA
402200-0021	Inline flow sensor with 1" PVC tail pieces
402210-0021	Inline flow sensor with 1" PVC tail pieces, integral 4-20 mA

RELATED PRODUCTS

A301-20	Flow/BTU transmitter programming kit, includes cable
UFT-1	Universal flow transmitter, pulse output only