

AIM BLOCK (ADDITIVE INJECTION MANIFOLD)

FLOMEC® AIM Block is a compact all stainless steel manifold assembly complete with isolating, flow regulating & check valves, a fine mesh strainer, solenoid valve & a precision oval gear flowmeter. AIM injects small amounts of modifying additives & performance enhancing agents into fuels, & base products. These include lubricants, dyes, colorings, denaturants, detergents, odorizing, anti-freeze, anti-corrosion, anti-static, anti-detonating, anti-icing, anti-foaming and emulsifiers. AIM block will work well with any controller or TAS system, serving as a composite slave assembly for accurate blending of fuel additives to fuels at loading facilities, stationary & mobile transfer units within the petroleum industry worldwide.

FEATURES / BENEFITS

- Compact stainless steel design with stainless gears
- All valve assemblies and the meter are detachable
- Modular process connections (directional)
- High accuracy & repeatability ($\pm 1\%$)
- Simple to install, easy to service in situ
- ATEX/IECEx approved Explosion proof

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER **1**

AIM = Additive Injection Manifold

METER SIZE **2**

- 004** = 1/8 in. (4 mm), 0.26-9.5 GPH (1-36 L/hr)
- 006** = 1/4 in. (6 mm), 0.5-27 GPH (2-100 L/hr)
- 008** = 3/8 in. (8 mm), 4-145 GPH (15-550 L/hr)

SEAL MATERIAL **3**

- 1** = FKM (Viton™) (standard for Alum.) -5° F minimum (-15° C)
- 3** = Chem-Kit, comprises Teflon & Perfluorelastomer (Kalrez-Kemraz) O-rings -5° F minimum (-15° C)

METER PROTECTION APPROVAL **4**

1 = IECEx / ATEX approved

CABLE ENTRIES **5**

- 1** = M20 x 1.5 mm
- 2** = 1/2 in. NPT

SOLENOID VALVE VOLTAGE **6**

- 1** = 24V (dc) x 9W coil (maximum operating pressure 100 psi [7 bar])
- 2** = 110-115V (ac) / 60 hz x 8W coil (maximum operating pressure 295 psi [20 bar])
- 3** = 220-230V (ac) / 50 hz x 8W coil (maximum operating pressure 295 psi [20 bar])

SOLENOID VALVE PROTECTION APPROVAL **7**

1 = IECEx / ATEX approved coil

SOLENOID VALVE ORIFICE **8**

- 3** = 3 mm (V (dc) coil = 100 psi [7 bar], V (ac) coil = 145 psi [10 bar] max. differential pressure)
- 5** = 5 mm (V (dc) coil = 50 psi [3.5 bar], V (ac) coil = 123 psi [8.5 bar] max. differential pressure)

INTEGRAL OPTIONS **9**

- 0** = Hall Effect output
- HR** = High resolution Hall Effect output (Not available for AIM008)

--->>>> **1** **2** **3** **4** **5** **6** **7** **8** **9**
 AIM 006 1 1 2 3 1 3 HR

APPLICATIONS

- Lubricants
- Dyes
- Colorings
- Denaturants
- Detergents
- Odorizing
- Anti-freeze
- Anti-corrosion
- Anti-static
- Anti-detonating
- Anti-icing
- Anti-foaming
- Emulsifiers

SPECIFICATIONS

	AIM004	AIM006	AIM008
Nominal Size:	1/8" [4 mm]	1/4" [6 mm]	3/8" [8 mm]
Process Connections	3/8 in. NPT Elbows, 3x 90° orientation positions		
Flow Range*			
- L/hr	1 - 36	2 - 100	15 - 550
- GPH	0.26 - 9.5	0.5 - 27	4 - 145
Accuracy: @3cP	± 1%		
Repeatability:	0.25% reading		
Temperature Range:	5° to 149° F (-15° to 65° C)		
Max. Pressure (Static):	440 psi (30 bar)		
Max. Pressure (Operating):	DC Solenoid Coils; 100 psi (7 bar) AC Solenoid Coils; 295 psi (20 bar)		
Electrical Output Resolution - Nominal Pulses per Gallon (Pulses / L)			
Hall Effect	10600 (2800)	3975 (1050)	2650 (710)
High Resolution	42400 (11200)	15900 (4200)	n/a
Hall Effect Output (NPN)	3 wire open collector, 5 - 24V (dc) max, 20mA max		
Protection Class:	IP66/67 (NEMA 4x); EXd I/II T3...T6		

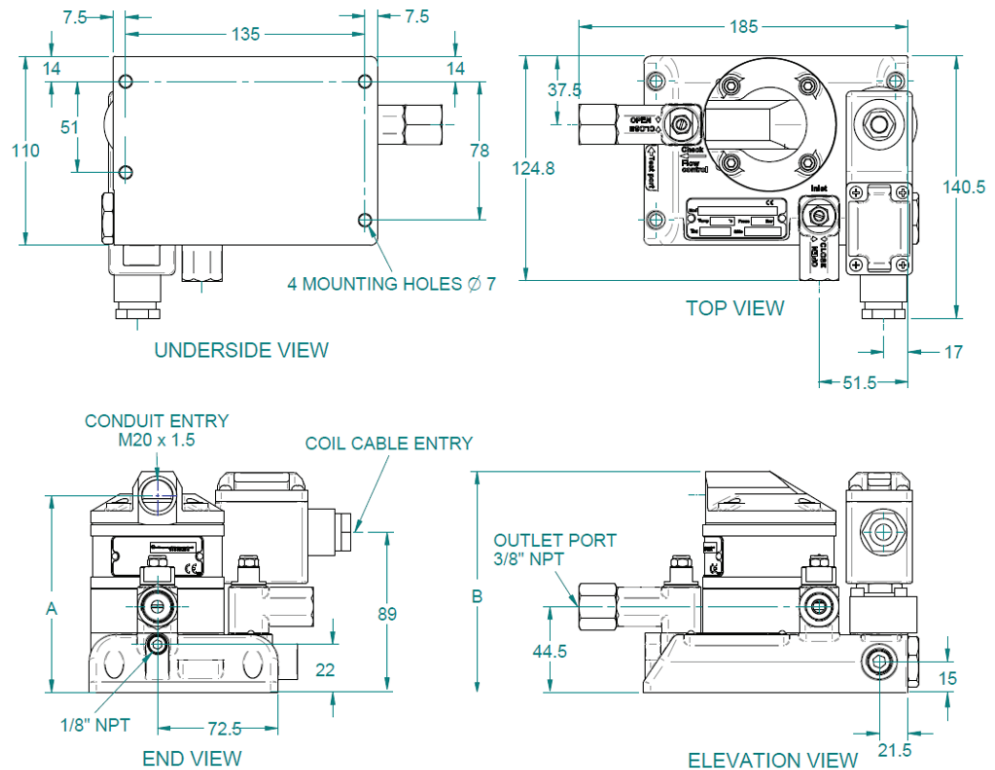
*Maximum flow is to be reduced as viscosity increases, see flow de-rating guide.

APPROVALS



DIMENSIONS

	A	B
AIM004	4.25" (108 mm)	4.80" (122 mm)
AIM006	4.25" (108 mm)	4.80" (122 mm)
AIM008	4.53" (115 mm)	5.08" (129 mm)



Service & Warranty: For technical assistance, warranty replacement or repair contact your **FLOMEC®** or **GPI®** distributor:

In North or South America: **888-996-3837 / FLOMEC.net**

Outside North or South America: **+61 2 9540 4433 / FLOMEC.net**

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