FLOMEC®



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 (±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 barl)
- 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 HI

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 T3T6 | | | |

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

APPROVALS







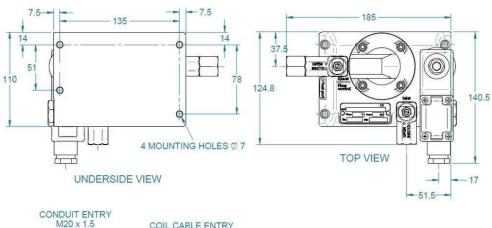


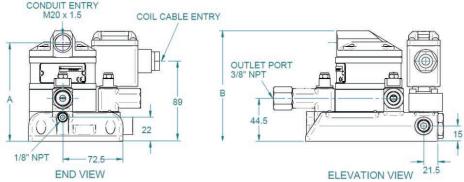
NEMA

IP65/67

DIMENSIONS

| | A | В |
|--------|-------------------|-------------------|
| 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

Wichita / Sydney / Mexico City

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