Product Bulletin

MARK I 77x8 Injection Manifold

Document Number: MKI_77x8_001

BLENDTECH

Product Description

The BLENDTECH MARK I Injection Manifold provides users with a complete stainless steel fluid metering block for injecting a wide variety of fuel additives or dyes. MiniBLOCK serves as a "slave device" to a user-supplied "master controller" such as the MARK V or "TAS" system. The product is accurate, reliable and compatible with a wide range of chemicals. The oval gear design offers high accuracy and low pressure drop. Sensors are either UL / ULc or ATEX listed and are approved for use in hazardous area locations.

Features

System Description

The BLENDTECH MARK I 77x8 Injection Manifold is a completely integrated, self-contained additive injector. The process valves, solenoid valve, process fittings, strainer and flow meter are integrated onto a precision machined block, available in either 304 stainless steel or high strength aluminium *(special order)*, providing a high-tech drop-in injection solution. This product is designed to be a slave to an intelligent additive injection controller, such as the BLENDTECH MARK V, PLC, TAS controller or electronic load controller capable of additive injection.

Key Features

- Compact Integrated additive injection solution virtually eliminating all possible leak points.
- Available in either stainless steel or high strength aluminium *(special order)*.
- Slave injector compatible with all BLENDTECH FLEx iO hardware and most additive injection control hardware, including TAS controllers, PLC and Load controllers.
- Industry standard components.
- Low Pressure Drop
- Either hall effect or reed switch sensors options available.
- Unique mechanical arrangement ensuring very high accuracy during control.
- Chemraz and Teflon elastomers for excellent chemical resistance
- UL / ULc or ATEX Approvals available
- Supports multiple additive configuration.
- AC or DC options available.
- Quick connect calibration port.

Model MKI 7718

- For low dosage applications, such as dye, marker and ethyl mercaptan.
- Flow rate 0.03 to 0.30 GPM *(0.12 to 1.20 lpm)* at 1 cSt.
- Maximum operating pressure 300 psig
- Maximum differential pressure 145 psig
- High pressure solenoid available
- Accuracy 0.25 to 0.50 % of flow.
- Nominal Meter K_f 6000 ppg *(1585 ppl)*

Model MKI 7738

- For most typical gasoline and diesel additives.
- Flow rate 0.3 to 3.0 GPM *(1.2 to 12.0 lpm)* at 1 cSt.
- Maximum operating pressure 300 psig
- Maximum differential pressure 145 psig
- Accuracy 0.25 to 0.50 % of flow.
- Nominal Meter K_f 2600 ppg *(687 ppl)*

The Total Solution Company

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FLEXiO
BLENDTECH Configurable I/O System

MARK I 7718 Injection Manifold with Check Valve

Technical Specifications

Operating Information

Maximum Pressure: 300 psig

Performance:

0.25% to 0.50% accuracy

10:1 turndown

Minimum injection size of 2cc

Option 1 (MK I 7718):

0.3 GPM (1.2 lpm) @ 1cSt

Option 2 (MK I 7738):

3 GPM (12 lpm) @ 1cSt

Electrical

Inject Valve:

Explosion Proof, 2-way direct acting normally closed solenoid valve standard. Rated for use in Class 1, Zone 1 Group C and D hazardous areas. Both CSA/UL or ATEX approvals are available. 120VAC 60Hz, 240VAC 50Hz, 12 VDC and 24 VDC options available.

Flow Meter Sensor:

- 3 wire Hall-Effect type *(5 to 30 VDC)*
- 2 wire Reed Switch type *(5 to 30 VDC)*

Environment

Unit suitable for indoor or outdoor

Dimensions

6.5" X 4.00" X 1.50" (L X H X D)

165.1 mm X 101.6 mm X 38.1 mm

Mechanical

- 3/8" FNPT inlet and outlet port connections.
- Swagelok quick-connect fitting with dust cap on calibration port *(316 L).*
- Integrated basket screen strainer 230 micron *(60 mesh).*
- Check valve on output port 1psig cracking pressure.

Materials of Construction

Option 1:

Manifold and meter body 304 Stainless Steel.

Option 2 *(special order)*:

Manifold and meter body High Strength Aluminium.

All wetted seals teflon or Chemraz.

Meter Gears 300 series stainless.

Options

- Calibration Kit *(recommended)*
- Thermal Relief Kit *(for dye applications)*

Hazardous Areas

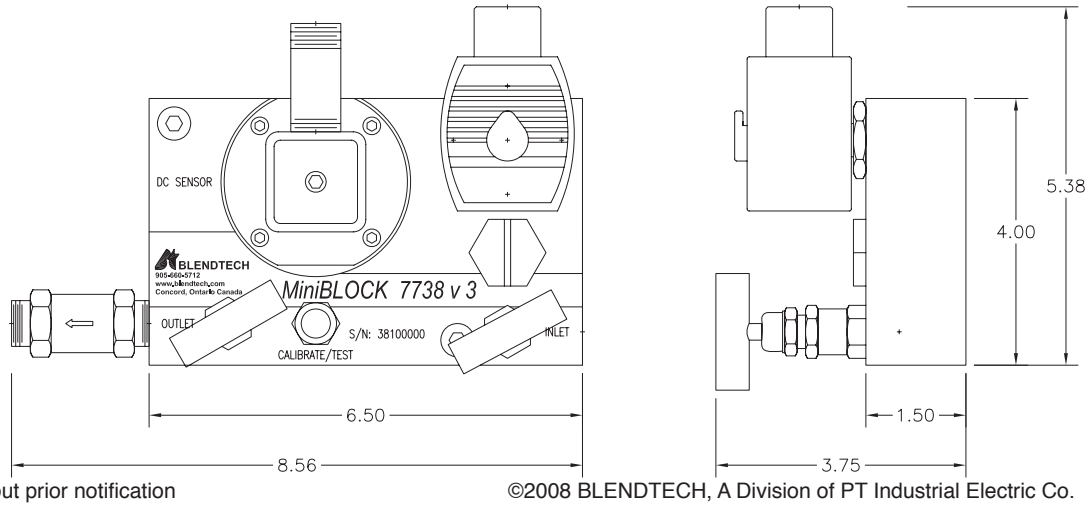
Option 1:

System UL / CSA Approved for Class I, Group D, Zone 1 Hazardous Areas.

Option 2:

KEMA 07 ATEX 0009 EEx d, m IIA T3

CE Approved



Specifications subject to change without prior notification

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