



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_i 12000 ppg (3170 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_i 2600 ppg (687 ppl)



The Total Solution Company

BLENDTECH, A Division of PT Industrial Electric Co. • 216 Rivermede Road, Units 1 and 2 • Concord, Ontario, L4K 3M6, Canada
p: 905.669.5712 • f: 905.669.5193 • www.blendtech.com • info@blendtech.com

We lead the way...



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 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)

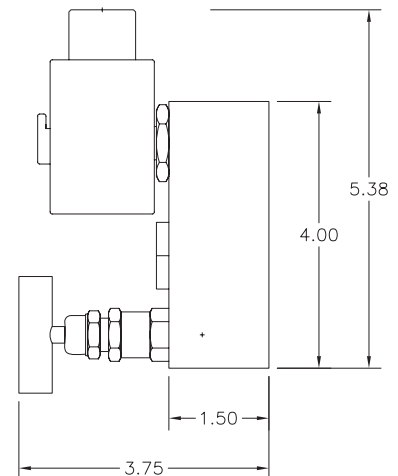
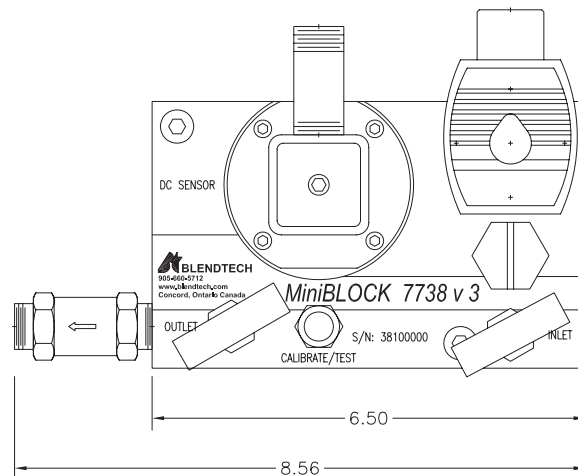
Hazardous Areas

Option 1:

System CSA C/US Approved for Class I, Groups C& D, Zone 1 Hazardous Areas.

Option 2:

KEMA 07 ATEX 0009 EEx d, m IIb T3 or T4 or T5 or T6¹ • CE Approved



Specifications subject to change without prior notification

©2008 BLENDTECH, A Division of PT Industrial Electric Co.

Distributed by:

BLENDTECH
A Division of PT Industrial Electric Co.
216 Rivermede Road, Unit 1 & 2
Concord, Ontario • CANADA L4K 3M6
Phone: (905) 669-5712 • Fax: (905) 669-5193
email: info@blendtech
web: www.blendtech.com

The Total Solution Company