



At **Flotech Performance Systems** we have drawn upon over 30 years' experience in additive injection to develop the most advanced additive injection manifold to date - the **FLOBLOCK**.

**FLOBLOCK** seamlessly integrates check valve, needle valve, flowmeter, solenoid valve and filter in a single manifold measuring under 23cm in length.

**FLOBLOCK** is compatible with all mainstream load computers, additive controllers, PLC's and Terminal Automation Systems.

#### **Applications Include;**

- Marker Dyes
- DNA Markers
- Performance Additives
- Static Dissipators
- Stenching & Denaturing Agents

## Benefits

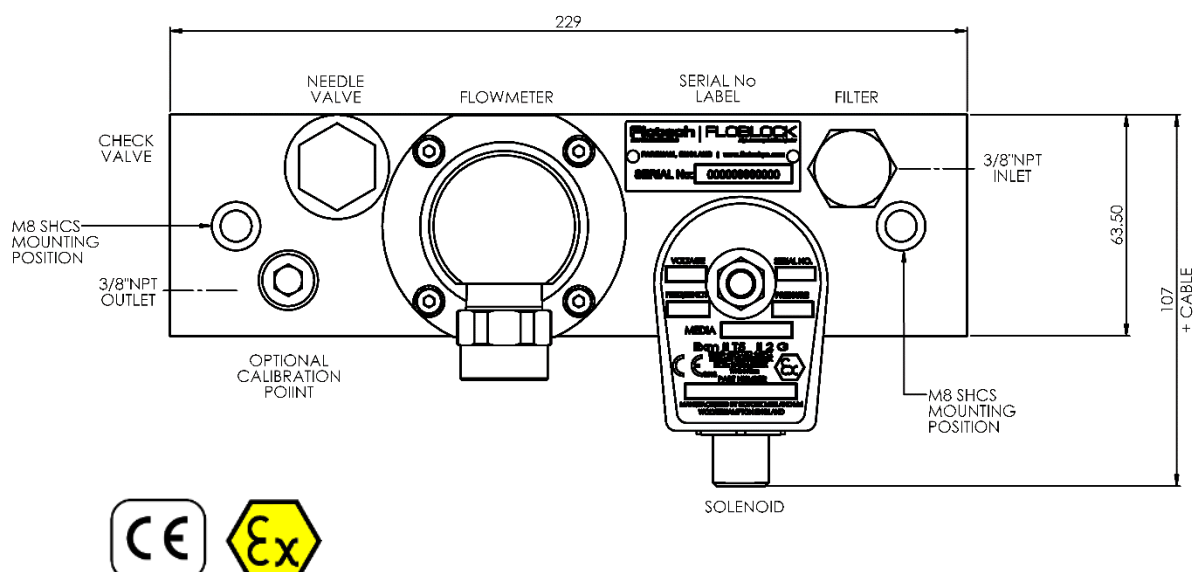
The unique design of the **FLOBLOCK** incorporates features which combined make it **the most efficient and reliable injector on the market**.

- **Integrated flow control valve** allows fine tuning of additive flow and facilitates calibration under true process conditions for more accurate injection rates and reduced additive wastage.
- **Integral filter** prevents contamination entering the meter or the solenoid.
- **Inbuilt non-return valve** prevents additive contamination caused by reverse flow.
- **One-piece stainless construction & static seals** ensures robust, leak-free performance.
- **Common bolting pattern and inlet / outlet positions** allow direct replacement of most common injectors (adaptors are available where bolting patterns differ).
- **Optional dual pulse flowmeter** provides pulse redundancy to prevent unwanted shutdowns.
- **Optional stainless-steel gears and PTFE seals** ensure performance across a diverse range of chemicals and additives.

**FLOBLOCK** is held in stock in all derivatives and supported by an extensive spares inventory and expert technical support by our UK facility.

Using the **FLOCAL** calibration kit (available separately), **FLOBLOCK** can be quickly, safely and accurately calibrated.

Based upon a product flow rate of 2400 LPM, the **Standard Flow Injector** is suitable for **100-3000 ppm** (typical shot size of 20-200cc). The **Low Flow Injector** is suitable for **20-600 ppm** (typical shot size of 10-40cc).



# Modelling Code

Flow Rate	
<b>FLO-S</b>	Standard Flow - (740 pulses/Litre)
<b>FLO-L</b>	Low Flow - (1480 pulses/Litre)

Mounting & Installation Kit	
<b>0</b>	Not Required
<b>1</b>	Mounting Kit (Stand off's & Bolts Only)
<b>2</b>	Mounting & Installation Kit (2 x Hawke M20 Exe/Exd Glands (501/423), Stand off's, Bolts)
<b>3</b>	Mounting & Installation Kit (2 x Hawke M20 Exd Potted Glands (ICG 623), Stand off's, Bolts)

Flow Meter Type	
<b>S</b>	Single Pulse
<b>D</b>	Dual Pulse

Flow Meter Gear Material	
<b>R</b>	Ryton
<b>S</b>	Stainless Steel

Solenoid Seat Material	
<b>I</b>	Isolast
<b>P</b>	PTFE

Control Solenoid - Voltage and Temperature Class	
<b>1</b>	230 VAC 50Hz - T3 - Exm - ASCO
<b>2</b>	230 VAC 50Hz - T5 - Exm - ALCON
<b>3</b>	230 VAC 50Hz - T6 - Exd - ALCON
<b>4</b>	115 VAC 50Hz - T3 - Exm - ASCO
<b>5</b>	115 VAC 50Hz - T5 - Exm - ALCON
<b>6</b>	115 VAC 50Hz - T6 - Exd - ALCON
<b>X</b>	Other (upon request)

Blocking Solenoid - Voltage and Temperature Class	
<b>0</b>	Not Required
<b>1</b>	To same specification as Control Solenoid
<b>X</b>	Other (upon request)

Isolation & Flushing Options	
<b>0</b>	Not Required
<b>1</b>	Inlet & Outlet Isolation
<b>2</b>	Inlet & Outlet Isolation c/w 1/4" QRC

Approvals	
<b>A</b>	ATEX / CE
<b>I</b>	IECEX
<b>F</b>	FM
<b>C</b>	CSA

Cable Lengths	
<b>2</b>	2 Meter Flying Leads
<b>5</b>	5 Meter Flying Leads

<b>FLO-S</b>	<b>1</b>	<b>S</b>	<b>R</b>	<b>I</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>A</b>	<b>2</b>
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**Default Code**

## Technical Specifications

General	
Mounting	2 off M8
Manifold Connections	3/8" NPTF
Sensor Thread	1/2" x 13 S.A.E. female threads
Assembled Weight	7 kg
Dimensions	229mm W x 63.5mm H x 51mm D
Max Design Pressure	27 Bar / 400 PSI
Temperature Range	-20 Deg C to +50 Deg C
Protection Level	ATEX II 2 Gb / FM Class1 Div1 Group C&D

Flow Data	
Nominal K-Factor	740 pulses/litre (Standard Flow Variant) - 1480 pulses/litre (Low Flow Variant)
Meter Accuracy	0.50%
Repeatability	0.25%
Max Flow Rate	12 litres/min
Min Shot Size	10cc (low flow)

Materials	
Manifold	Stainless Steel 303
Meter Gears	Ryton® (PPS) (S/Steel 316 available as an option)
Flowmeter Cap	Stainless Steel
Solenoid Seals	Isolast or PTFE
Solenoid Body	Stainless Steel, AISI 304
Sensor Body	Aluminium
Filter	Strengthened Sintered Steel, 80 mesh, 180 µm

Electrical	
Solenoid Coil Power Requirement	8.6 Watts @ 230 Volt AC / 17.1 Watts @ 120 Volt AC
Solenoid Voltage	230 VAC 16W 50Hz or 115 VAC 22W 50Hz (C/F for 12 VDC or 24 VDC options)
Sensor Type	Magnetoresistive, Omni-polar, Solid State, Sinking
Sensor Power	5 - 25 VDC, 11 mA maximum
Sensor Output	Sink, 20 mA Maximum