



GUIDANT

# Mono-Block™ III

The industry's most widely used additive injector



# Our Latest Generation Additive Injector

**The Mono-Block III is the building block for both smart and remotely controlled injector solutions.**

The Mono-Block III is the latest generation of the Mono-Block Series of additive injectors—the industry’s most widely used additive injector, installed at more than 75,000 loading racks, pipelines, chemical storage and distribution facilities, and aviation fuel delivery facilities around the world.

The Mono-Block III is designed to work seamlessly with Guidant’s Fusion4 smart injector controllers (MSC-A and SSC-A), as well as latest-generation loading presets and terminal automation systems, such as Guidant’s FuelFACS suite of software. The compact assembly features a solid block, stainless steel design.

## Features

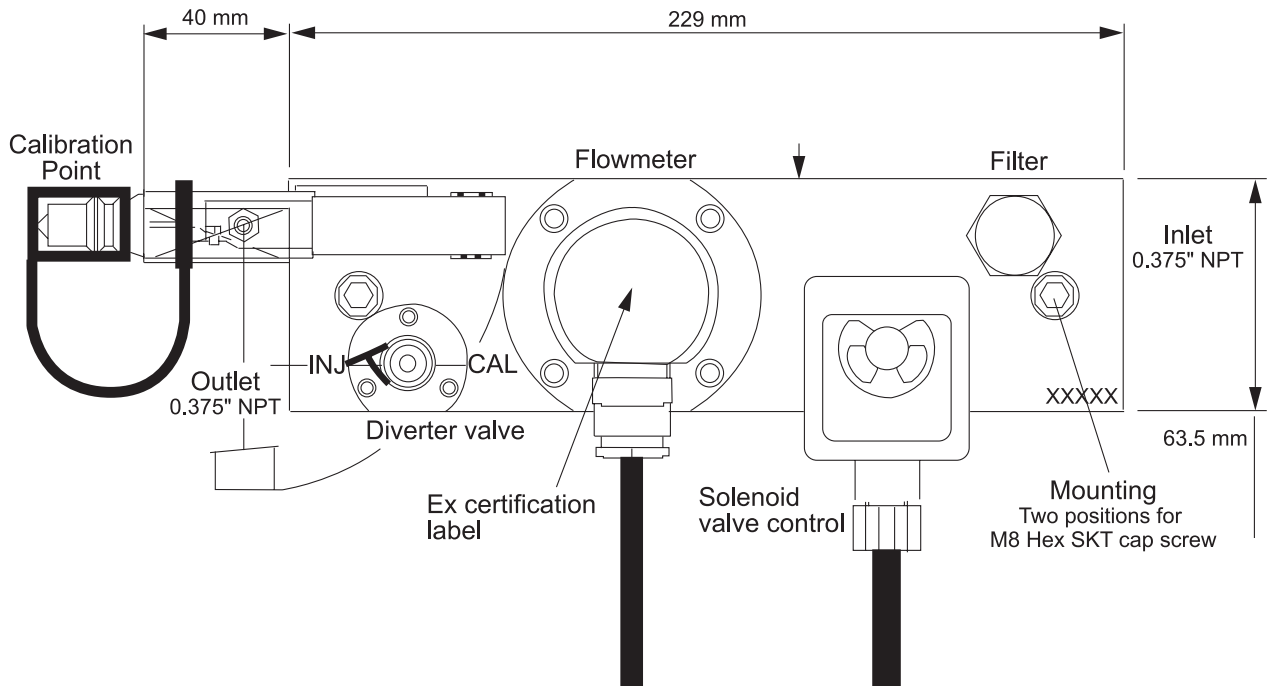
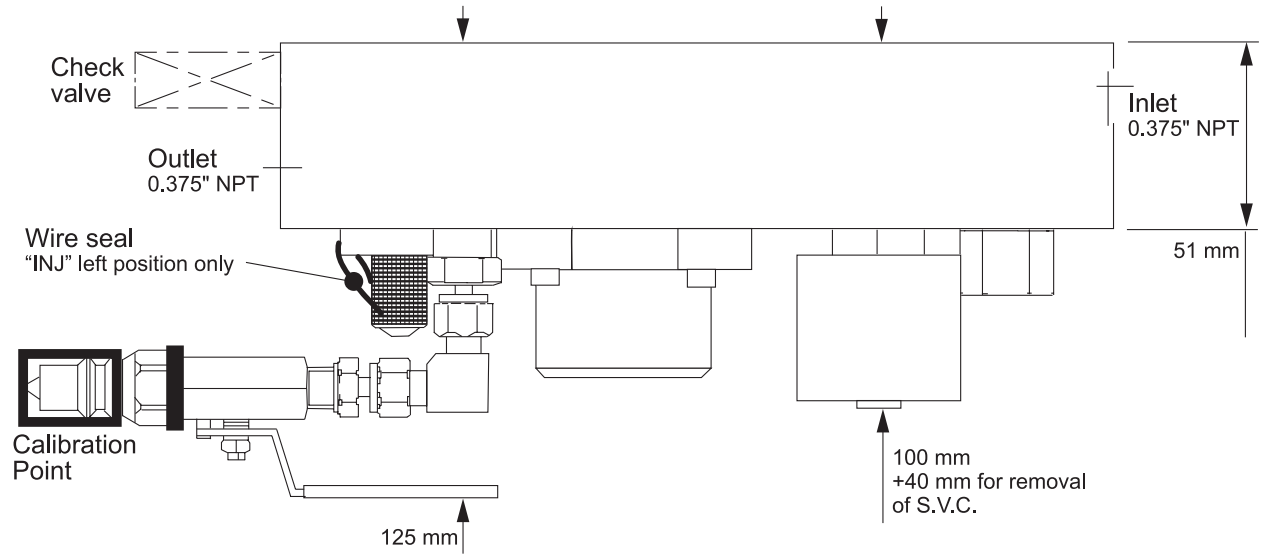
- 304 stainless steel block
- 3/8-inch female National Pipe Taper (FNPT) inlet and outlet ports
- Outlet tapered plug-style isolation valves with 180° operation
- Two different types of Mono-Block models for standard flow and low flow
- Valve cover plates with seal wire screws for added security
- Oval gear meter cavity machined into the block for precise measurements
- Strainer basket positioned perpendicular to flow in the face of the block
- Explosion-proof solenoid machined into the block
- Explosion-proof Hall-effect meter sensor
- An integral stainless steel ball check valve, machined and polished for optimum sealing at discharge ports to protect against reverse flow
- Optional calibration kit P/N 30-00-002

## Benefits

- Operational security with tamper-proof features
- Proven reliability, more than 75,000 Mono-Block legacy injectors installed worldwide
- Proven ease of maintenance and calibration
- Extremely accurate treat-rate optimization when used with a smart controller
- Ex certified Hall-effect flow sensor, factory sealed with no serviceable or replacement parts



# General Arrangement



## Technical Specifications

Flow		
	Standard Flow	Low Flow
Nominal K-Factor	760 pulses per liter (P/L)	1460 P/L
Meter Accuracy	0.50%	0.50%
Meter Repeatability	0.25%	0.25%
Max Flow Rate Note: The specified maximum flow rate is based on 50 cSt hydrocarbon liquid.	11.0 liters per minute (l/min)	1.0 l/min
Min Flow Rate	1.0 l/min	0.1 l/min
Max Pressure	235 pound-force per square inch (psi) (16 bar)	235 psi (16 Bar)
Max Viscosity	300 centistokes (cSt)	
Environmental		
Temperature	-20 to 65 °C (-4 to 150 °F)	
Ex Safety Approvals	UL 25 ATEX 3482X (EU), IECEx UL 25.0089X (International), UL Brazil UL-BR 26.0378X, PESO (Pending) Ex db IIC T6 Gb	
Materials		
Manifold	304 stainless steel	
Meter Gears	538 Ryton polyphenylene sulfide (PPS)	
Sensor	Aluminum	
Solenoid Seals	Isolast/polytetrafluoroethylene (PTFE)	
Electrical		
Solenoid Voltage	See options	
Sensor Type	Solid-state, bipolar magnetic gated, open-collector output	
Sensor Power	5 to 25 volts direct current (VDC), 31 milliampere (mA) maximum	
Open Collector Output	5 to 25 VDC, 100 mA maximum (unsourced)	
Mechanical		
Manifold Components	Diverter valve, inlet strainer, outlet check valve, quick-release coupling (QRC) for calibration port	
Manifold Connections	3/8-inch FNPT	
Weight		
Bare Mono-Block III Unmounted	Approximately 5 kilograms (kg) (11 pounds (lbs))	
Options		
Meter Gears	303 stainless steel	
Calibration	Mono-Block Calibration Kit (part number 30-00-002)	
Inlet and Outlet Isolation Valve	3/8-inch male NPT connection to Mono-Block, 1/2-inch ball valve, 316 stainless steel	
Blocking Solenoid	Same as control solenoid	
Flushing Options	Quick release coupling, 1/2-inch NPT, 303 stainless steel	

## Modeling Code

Characterization Value (CV)			
CV 1 through 6	Model Key	Availability	
HELA01	Mono-Block Standard Flow	↓	
HELA02	Mono-Block Low Flow		↓
CV 7	Number of Injectors		
1	One	.	.

Characterization Value (CV)			
CV 8	Mounting	Availability	
0	Not Requested	.	.
1	Backplate Mounting Kit 1 (2 x standard M20 Ex d glands, standoffs, bolts)	.	.
2	Backplate Mounting Kit 2 (2 x Hawke M20 Ex d glands, standoffs, bolts)	.	.
3	Backplate Mounting Kit 3 (2 x standard M20 Ex e glands, standoffs, bolts)	.	.
4	Backplate Mounting Kit 4 (2 x Hawke M20 Ex e glands, standoffs, bolts)	.	.
A	Backplate Mounting Kit T6/4 A (2 x standard M20 Ex e glands, standoffs, bolts)	.	.
B	Backplate Mounting Kit T6/4 B (2 x Hawke M20 Ex d glands, standoffs, bolts)	.	.
CV 9	Standard Flow and Gear Material		
0	No Standard Flow Injector Selected		.
A	Standard Flow - Ryton Gears - (760 P/L)	.	
B	Standard Flow - Stainless Steel Gears - (760 P/L)	.	
CV 10	Low Flow and Gear Material		
0	No Low Flow Injector Selected	c	
C	Low Flow - Ryton Gears - (1460 P/L)		d
D	Low Flow - Stainless Steel Gears - (1460 P/L)		d
CV 11	Solenoid - Seat Material		
1	Isolast (ATEX standard)	.	.
2	PTFE	.	.
CV 12	Control Solenoid - Voltage and Temperature Class		
1	230 VAC 50 Hz - T3 - Ex m	f	f
2	230 VAC 50 Hz - T5 - Ex m	f	f
3	230 VAC 50 Hz - T6 - Ex d	e	e
4	110 VAC 50 Hz - T3 - Ex m	f	f
5	110 VAC 50Hz - T5 - Ex m	f	f
6	110 VAC 50 Hz - T6 - Ex d	e	e
A	230 VAC 50 Hz - T4 - Ex d - IECEX	e	e
B	110 VAC 50 Hz - T4 - Ex d - IECEX	e	e
CV 13	Blocking Solenoid, Isolation, and Flushing Options		
0	Not Requested	.	.
1	Isolation Valves - Inlet and Outlet	.	.
2	Isolation Valves - Inlet and Outlet + Flushing Points 1/4-inch QRC	.	.
4	Blocking Solenoid + Isolation Valves - Inlet and Outlet	.	.
5	Blocking Solenoid + Isolation Valves - Inlet and Outlet + Flushing Points 1/4-inch QRC	.	.
CV 14	Ex Approvals		
A	ATEX	j	j
B	IECEX	k	k
C	PESO (India)	m	m
D	UL Brazil (INMETRO)		
CV 15	Sensor Cable Lengths		
0	No Option	n	n
A	2-Meter Flying Lead	.	.
B	5.2-Meter Flying Lead		

# Restrictions

Value	Only Available with Selection		Not Available with Selection	
	CV	Selection	CV	Selection
c	9	A, B		
d			9	A, B
e			8	1, 2, 3, 4
f			8	A, B
g			12	1, 4
h			12	1, 4
j	12	1, 2, 3, 4, 5, 6		
k	12	A, B, 1, 2, 4, 5		
m	12	1, 2, 3, 4, 5, 6		
n	12	3, 6, A, B	8	1, 2, 3, 4, A, B
q	8	0, 1, 2, 3, 4		

## About Guidant

As the undisputed leader in liquid and gas custody transfer solutions with the largest global install base, Guidant's legacy is built on more than 90 years of expertise, accuracy, reliability, and best-in-class technologies. We are a private company focused on the measurement solutions business, serving emerging and established energy markets across the globe.

### Corporate Website

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