

Mono-Block™ II+

The industry's most widely used additive injector



Unparalleled Additive Control

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

The Mono-Block II+ is the successor of the Mono-Block II—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. Built upon the identical footprint and using identical electronic components as the MBII, it is differentiated by numerous mechanical enhancements and unique patent pending features.

The Mono-Block II+ 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.

A patented pressure relief feature prevents possible injector damage during the calibration operation. An integral adjustable needle valve in the discharge port of the block provides precise flow regulation for unparalleled additive control.

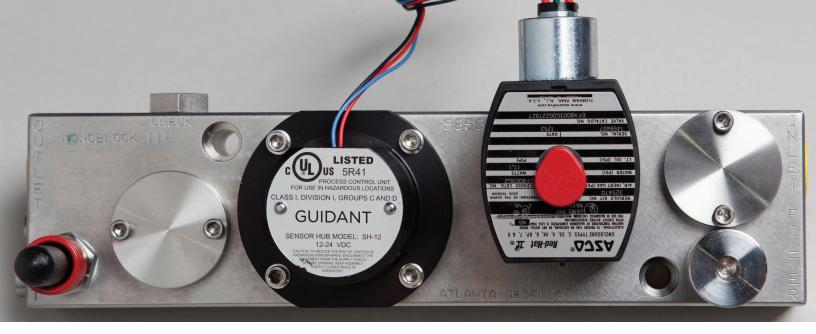
Features

- · 304 stainless-steel block
- 3/8-inch female National Pipe Taper (FNPT) inlet and outlet ports
- Inlet and outlet tapered plug-style isolation valves with 180° operation
- Allen wrench access bolts to provide tamper resistance
- Valve cover plates with seal wire screws for added security
- Patented thermal relief device-protecting calibration port
- Allen wrench-adjustable integral needle valve for precise flow throttling
- Strainer basket positioned perpendicular to flow in the face of the block
- · Oval gear meter cavity machined into block
- Stainless-steel ball check valve, machined and polished to achieve optimum sealing
- Meter, solenoid, mounting holes, and component heights identical to the legacy Mono-Block II, ensuring seamless integration

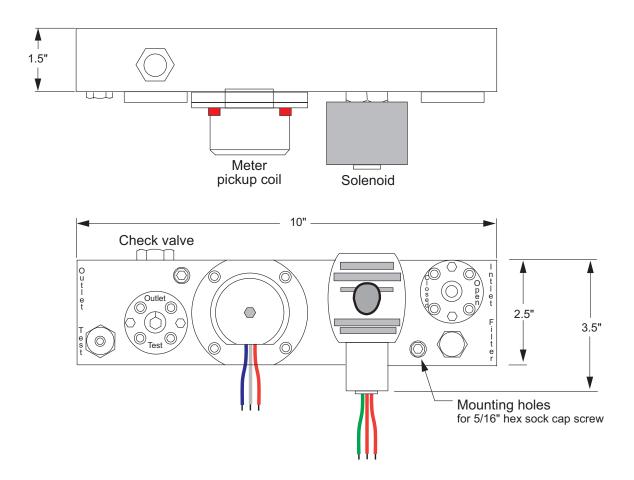
- Male Test Port (P/N 10-50000-SWK)
- Explosion-proof solenoid machined into block
- · Explosion-proof Hall effect meter sensor
- · Optional Calibration Kit

Benefits

- Operational security with tamper-proof features
- Seamless integration onto existing panels and racks, as footprint is identical to the Mono-Block II
- Proven reliability, with 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



General Arrangement



Technical Specifications

Flow		
Nominal K-Factor	5,000 pulses per gallon (PPG)	
Meter Accuracy	0.50%	
Meter Repeatability	0.25%	
Max Flow Rate	9.5 liters per minute (I/min)	
Min Flow Rate	0.38 l/min	
Max Pressure	400 pound-force per square inch (psi) (16 bar)	
Max Viscosity	300 centistokes (cSt)	
Environmental		
Temperature	-20 to 65 °C (-4 to 150 °F)	
Approvals	IECEx and ATEX Zone 2	
Materials		
Manifold	304 stainless steel	
Meter Gears	538 Ryton polyphenylene sulfide (PPS) or 303 stainless steel	
Sensor	Aluminum	
Solenoid Seals	Chemraz or polytetrafluoroethylene (PTFE)	
Electrical		
Solenoid Voltage	120/240 volts alternating current (VAC) 22/11 watts (W); 50/60 hertz (Hz)	
Sensor Type	Solid-state, bipolar magnetic gated, open-collector output	
Sensor Power	5 to 25 volts direct current (VDC), 20 milliampere (mA) maximum	
Open Collector Output	5 to 25 VDC, 100 mA maximum (unsourced)	
Mechanical		
Manifold Components	Outlet flow control and 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	Stainless steel	
Calibration	Mono-Block Calibration Kit (P/N 10-31565-SWK)	

Identification Code

CV 1-6	Product Family	Availability
HELA05	Mono-Block Low Flow (FM)	↓
CV 7	Number of Injectors	
1	One	
CV 8	Mounting	
0	Not requested	
6	MP6 add a block kit with conduit fittings and Seal off for FM/UL block	
CV 9	Standard Flow and Gear Material	
0	No standard flow injector selected	
CV 10	Low Flow and Gear Material	
Е	Extended flow - Ryton gears - (5,000 pulses per US gallon (p/USgal)	
F	Extended flow - stainless steel - (5,000 p/USgal)	
CV 11	Solenoid - Seat Material	
2	PTFE	
3	Chemraz (FM standard)	
CV 12	Control Solenoid - Voltage	
7	120 VAC - 50/60Hz - UL/FM	
8	240 VAC - 50/60Hz - UL/FM	
CV 13	CV 13 Blocking Solenoid, Isolation, and Flushing Options (External)	
0	Not requested	•
1	Isolation valves - inlet and outlet	•
6	Thermal relief assembly	
7	Thermal relief assembly + isolation valves - inlet and outlet	
8	Thermal relief assembly + blocking solenoid	
CV 14	Ex Approvals	
0	FM	
Е	CSA	
CV 15	Cable Lengths	
0	No option	•

Typical Identification Code



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.

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