

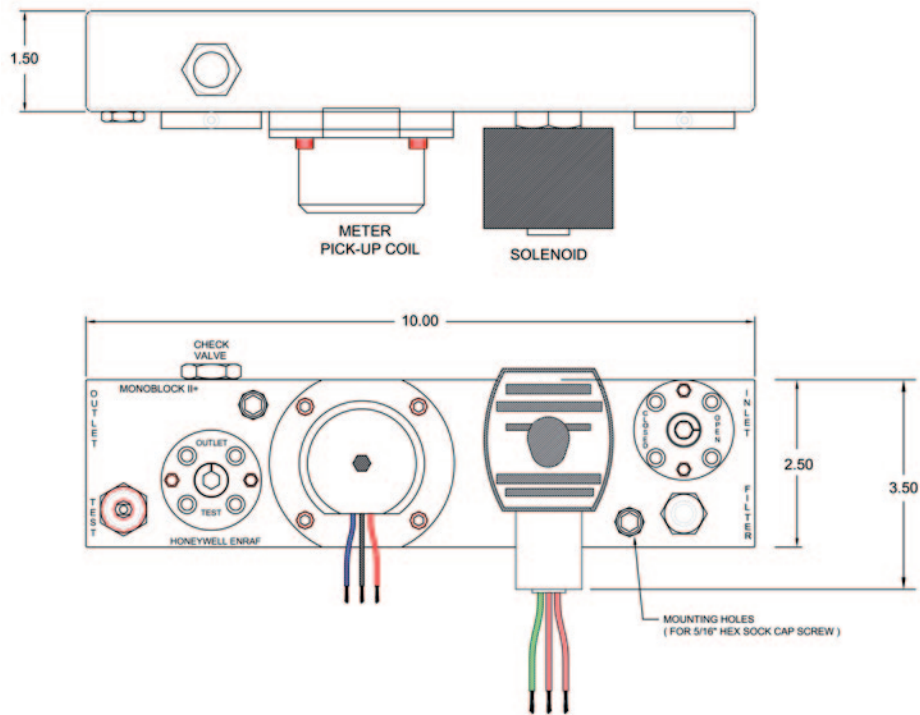


The Mono-Block II+ is the building block for both smart and slave injector solutions.

The new Mono-Block™ II+ represents the latest generation of Honeywell Enraf's MBII, the industry's most widely used additive injector, installed at more than 75,000 load racks, pipelines, chemical storage and distribution facilities and aviation fuel delivery facilities around the world. Built upon the identical footprint and utilizing identical electronic components as the

MBII, it is differentiated by numerous mechanical enhancements and unique patent pending features. Mono-Block II+ is designed to work seamlessly with Honeywell Enraf's Smart injector controllers (Mini-Pak 3000, Mini-Pak 6 and new Fusion4 SSC) or as a slave unit with latest generation loading presets and Terminal Automation Systems. The compact assembly features a solid block design manufactured in 303 stainless steel. A patent pending pressure relief feature prevents possible injector damage during the calibration operation. An integral adjustable needle valve in the discharge port of the block provides for precise flow regulation for unparalleled additive control.

General Arrangement



Benefits

- Operational security with tamper proof features
- Seamless integration onto existing panels and racks as footprint is identical to MBII
- Proven reliability, greater than 75,000 MBII injectors installed worldwide
- Proven ease of maintenance and calibration
- Extremely accurate with unparalleled treat rate optimization when used with Fusion4 SSC, and existing MiniPak and BlendPak controllers

Features

- 303 Stainless steel block.
- 3/8" 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
- Patent pending thermal relief device
- Allen adjustable integral needle for precise flow throttling
- Oval gear meter cavity machined into block.
- Strainer basket positioned perpendicular to flow in face of block
- SS ball check valve, machined and polished to achieve optimum sealing
- Meter, solenoid, mounting holes and component heights are identical to legacy MBII ensuring seamless integration
- New Male Test Port P/N 10-50000-SWK
- New Calibration Kit P/N 10-31565-SWK
- Explosion proof solenoid machined into block
- Explosion proof Hall-Effect meter sensor

Technical Specification

Flow

Nominal K-Factor	:	5000 PPG
Meter Accuracy	:	0.50%
Meter Repeatability	:	0.25%
Max Flow Rate	:	2.5 gal/Min (9.5 Liters/Min)
Min Flow Rate	:	0.1 gal/Min (0.38 Liters/Min)
Max Pressure	:	400 psi (27.6 Bar)
Max Viscosity	:	300 cst.

Environmental

Temperature	:	-28°C to 65°C (-20°F to 150°F)
Approvals	:	Explosion proof components rated for Class 1, Div1 Group C & D

Materials

Manifold	:	303 Stainless Steel
Meter Gears	:	538 Ryton™
Sensor	:	Aluminum
Solenoid Seals	:	Chemraz

Electrical

Solenoid Voltage	:	120/240 VAC 22 W / 11 W; 50/60 Hz (Consult Factory for 12 VDC or 24 VDC)
Sensor type	:	Solid-state, bi-polar magnetic gated, open collector output
Sensor power	:	5 - 25 VDC, 20 mA maximum
Open Collector Output	:	5 - 25 VDC, 100 mA maximum (un-sourced)

Mechanical

Manifold Components	:	Outlet flow control & diverter valve, Inlet strainer, Outlet check valve, QRC calibration point.
Manifold Connections	:	3/8" FNPT

Weight

Bare Mono-Block II unmounted:	:	5 kg (11 lbs) approx
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Options

Oval gear material	:	Stainless Steel
Calibration	:	Mono-Block™ Calibration Kit (P/N 10-31565-SWK)

Identification Code

Pos 1, 2, 3 Manufactured Product										
9	0	-	Mono-Block II+ Multi-Pak Family of injector blocks							
Pos 4 Operating Voltage										
0	120 VAC 50/60 Hz									
1	240 VAC 50/60 Hz									
9	Special									
Pos 5 Wetted parts material										
0	Optional Teflon Solenoid Seat with other standard sales									
1	Standard Chemraz solenoid seat									
2	High resistant Option - SS gears, High resistant Elastomers									
9	Special									
Pos 6 Meter resolution										
1	Ryton Gears - 5000 PPG (Nominal)									
4	Stainless Steel Gears - 5000 PPG (Nominal)									
9	Special									
Pos 7 Electrical and certifications										
0	UL listed electrical components									
9	Special									
Pos 8 Configuration										
0	Bare Mono-Block II+ unmounted									
1	Full size panel with 1 MBII+ Injector Block with room for 5 more									
2	Full size panel with 2 MBII+ Injector Blocks with room for 4 more									
3	Full size panel with 3 MBII+ Injector Blocks with room for 3 more									
4	Full size panel with 4 MBII+ Injector Block with room for 2 more									
5	Full size panel with 5 MBII+ Injector Block with room for 1 more									
6	Full size panel with 6 MBII+ Injector Blocks									
9	Special									
Pos 9, 10, 11 Control options										
0	0	0	Slave Injectors with terminal strips in enclosure							
M	P	6	Adder for MP6 electronic controller in enclosure							
9	0	-	1	1	1	0	6	M	P	6
9	0	-								
Typical identification code										
Your identification code										

For More Information

To learn more about Honeywell Enraf's solutions, contact your Honeywell Enraf account manager or visit www.honeywellenraf.com.

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