MIV 2.0 Release

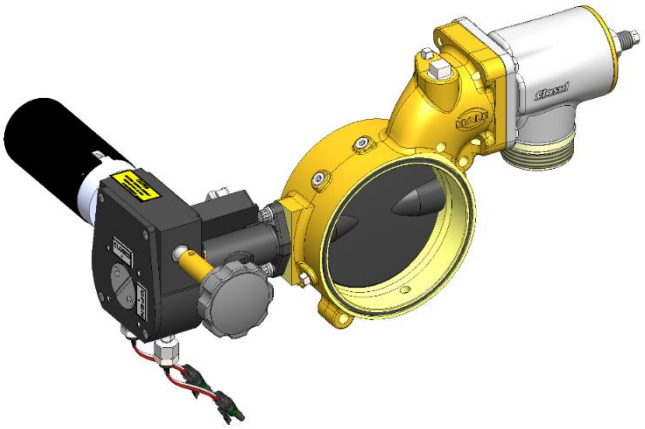
PB-1049

August 31, 2020

PRODUCT NAME: MIV 2.0

AFFECTED PART NUMBERS:

- **All original MIV part numbers that begin with 538-1560-xx-x (Please see chart below for new part numbers)**
- **Configured Pumps and Pump Kits with Qflo, Qmax, Qmax-XS and Qtwo pumps**



Hale Products has updated the patented Master Intake Valve (MIV) to incorporate features that will benefit ease of maintenance, reliability, and interconnection with other truck apparatus systems. The original MIV will be phased out of production but Hale will continue to support the units in the field with replacement parts.

PRODUCT DETAIL

New features available on MIV 2.0

- MIV Body is constructed with 5 grease ports for easily accessed maintenance using spray lubricant.
- Utilizes Hale electric valve position switches proven for robustness and easy adjustments
- Removed microswitches from the gearbox adapter simplifying maintenance. Care should be taken to ensure the position switches do not cause interference due to the new location. Please see diagram below for space needed for position switches.
- Control panel includes valve control and air bleeder valve saving panel space.
- Utilizes less parts for simpler maintenance and optimized housing for reduced weight.

MIV's space saving design is designed to be installed behind the panel

- Does not obstruct other panel mounted equipment, saving valuable panel space.
- Does not extend beyond the running boards creating a hazard that overhangs the running boards.
- Will not interfere with rollup doors, making it ideal for rescue bodies.
- Easily bolts between the suction extension and the suction on Q series pumps. Optional installation on the rear and bottom ports on capable Q series pumps.

Large diameter bore

- Utilizes an oversized, 6.4-inch diameter, bore which allows the intake to be used during drafting.
- Unlike other valves the MIV does not need to be removed for NFPA or UL testing.
- Valve design has been shown to enhance the flow characteristics of the pumps where it is installed. During the test of the Qmax-XS, used for the 3000 GPM Qmax-XS White paper, MIVs were used to enhance the performance of the pump.

Use on pumps other than Q Series pumps

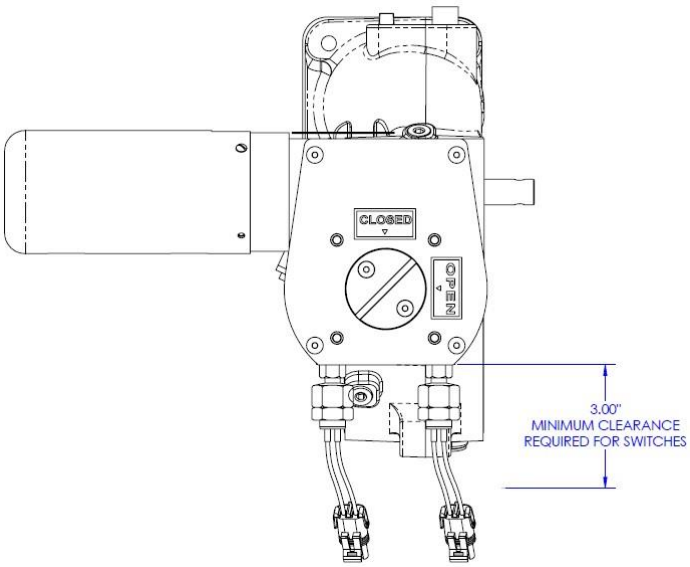
- Can be installed in line on properly plumbed pumps for front, rear, or side suctions.
- Offered in manual or electric.

MIV 2.0 Release

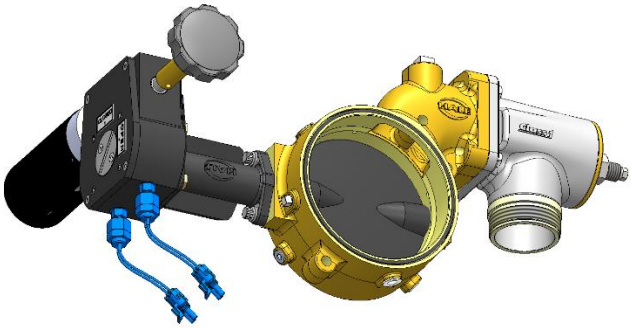
PB-1049

Unique construction and design

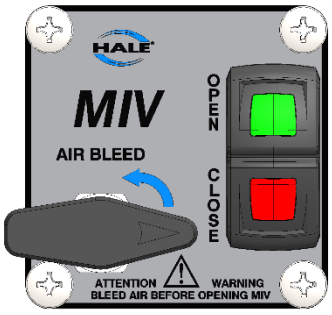
- Corrosion resistant brass body for longevity
- Sealed electrical connections for reliable operation
- Plumbed for an optional intake relief valve (NST, NPT, or grooved coupling)
- Provisions for pre-priming, allowing for seamless transition from onboard tank to drafting



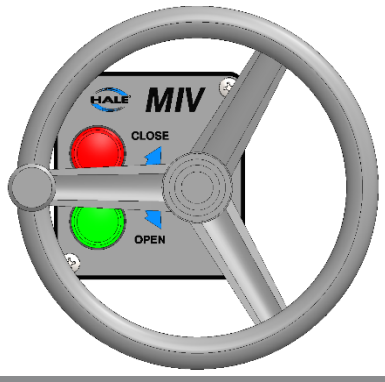
Care must be taken to ensure adequate room for new location of position switches shown in blue below.



<u>Panel mounted equipment will need new cutouts</u>



Electric controller with integrated air bleeder valve



Panel mounted manual controller with separate air bleeder valve

Hale Products, Inc.
607 NW 27th Ave., Ocala, FL 34475
P: 800.533.3569 F: 800.520.3473 haleproducts.com

OLD PART NUMBER	DESCRIPTION	NEW PART NUMBER
538-1560-05-0	MIV-M INLET VALVE W/S.S. NST	538-1561-05-0
538-1560-06-0	MIV-M INLET VALVE W/S.S. NPT	538-1561-06-0
538-1560-07-0	MIV-M INLET VALVE W/S.S. GROOVED	538-1561-07-0
538-1560-12-0	MIV-E SIDE W/O RELIEF VALVE OR CONTROL	538-1561-12-0
538-1560-19-0	MIV-E SIDE - NH SST VLV	538-1561-19-0
538-1560-21-0	MIV-E SIDE - NPT SST VLV	538-1561-21-0
538-1560-29-0	MIV-E BOT LS-FT RS-RE -GROOVED VLV	538-1561-29-0
538-1560-30-0	MIV-E BOT LS-FT RS-RE -NPT VLV	538-1561-30-0
538-1560-31-0	MIV-E SIDE – GROOVED SST VLV	538-1561-31-0
538-1560-32-0	MIV-E BOT RS-FT LS-RE-NPT VLV	538-1561-32-0
538-1560-35-0	MIV-E BOT RS-FT LS-RE-NH VLV	538-1561-35-0
538-1560-36-0	MIV-E SIDE W/NO RELIEF VALVE	538-1561-36-0
538-1560-43-0	MIV-E BOT RS-FT LS-RE-GROOVED VLV	538-1561-43-0
538-1560-51-0	MIV-E BOTTOM LS-FR RS-RE	538-1561-51-0
538-1560-52-0	MIV-E BOTTOM RS-FT LS-RE	538-1561-52-0
538-1560-70-0	MIV-M INSTALLATION KIT	538-00055
538-1560-72-0	MIV-E STD INSTALLATION KIT	538-00064

LIST PRICE (US Dollars, FCA Free Carrier Our Dock, Ocala, FL USA Incoterms® 2010)

Configured Item. Pricing dependent on options chosen at the time of order configuration. Price Guides are now available at haleproducts.com. Sign in to My Account on the Hale website to view 2020 pricing documents.

AVAILABILITY

Configured pumps, kits and modules ordered after April1, 2021 will be configured with MIV 2.0
Currently accepting loose Electric MIV 2.0 orders

Hale will continue to support original MIV's in the field for a period of no less than 10 years.

SPECIFICATION

When preparing specifications for your new fire pump assure the use of a Hale Master Intake Valve (*Hale MIV*) by incorporating these specifications as written.

1. The inlet valve shall be a full flow butterfly type valve designed to mount on the fire pump between the suction tube extension and suction tube behind the pump compartment panel. The valve shall not interfere with other suction or discharge openings on the fire pump or with pump operating controls when properly mounted.
2. The entire valve shall be manufactured and tested at the pump manufacturers factory.
3. When the valve is installed in the fire pump suction the fire pump shall be capable of achieving an NFPA / UL test rating of 1500 GPM through a single 6 inch NST suction hose.
4. The valve body and related components that are in contact with water shall be manufactured of fine-grained corrosion resistant bronze.
5. The butterfly disc shall be manufactured from 80,000 PSI minimum yield strength heat treated cast steel then coated with a durable nitrile rubber to provide a positive seal when the valve is closed.
6. Testing and rating of the valve shall be accomplished at the valve manufacturers factory. The valve, less relief valve, shall be hydrostatically tested to 600 PSIG. The valve shall then be vacuum tested to 26 inches Hg.
7. An integral relief valve mounting pad shall be provided on the valve body. This mounting pad shall provide a Hale type 115 4-3/8 inch bolt circle flange for normal installation. The mounting pad shall have 2-½ inch female NPT threads to permit remote mounting of the relief valve without special adapters.
8. The inlet valve(s) shall be operated by a 12 VDC electric motor with remote capabilities or by a manual handwheel located next to the suction tube.
9. Each valve shall be provided with panel placards indicating control operation. The placards shall have status lights to indicate whether the valve is open, closed or traversing from one position to another integrated into the rocker type operation switch.
10. Each valve shall be provided with a gear actuator that will cycle the valve from OPEN to CLOSED position in no less than 3 seconds. The gear actuators shall be sealed units designed to provide reliable service in the harsh pump compartment environment. The ratio of the gear actuator shall be such that the handwheel will close the valve in no more than 10 complete turns.
11. The electrical wiring for the valve shall be minimum 14 AWG, type SXL or GXL (SAE J1128) and shall be protected using 257 F minimum flame retardant, moisture resistant loom or braid. All electrical connections shall use sealed Packard Weather Pack or Deutsch connectors to provide extra protection from the harsh pump compartment environment to ensure long life and reliable operation.
12. The air bleeder valve shall be mounted on the operator panel and be controllable by the pump operator. Air bleeder valve connections shall have a restriction no larger than ¾ inch to prevent water hammer when filling hose.
13. The valve body shall have a ¼ inch female NPT threaded port on the bottom to permit connection of an individual water drain valve.
14. A suction tube extension 7-¼ inches wide shall be used to allow for the additional length of the inlet valve. The shorter suction tube extension, along with a 4, 6 or 9 inch suction tube, will keep the suction tube threads within the apparatus running boards while maintaining clearance for adapters.
15. A panel mounted manual override shall be provided to permit operation of the electric remote control valve in the event of abnormal operating conditions. The manual override shall be designed to permit operation of the valve without the use of special tools or disassembly of the pump compartment panel or valve.
16. The valve shall be equipped with o-ring seals for the mounting flanges. The o-ring seal groove shall be sized for proper squeeze of the o-ring for pressures in excess of 600 PSIG.