

# Trabon® MSP Zero-Leak Inlet Shut-off Valve

## DESCRIPTION

The MSP Zero-Leak inlet shut-off valve is designed for use in **oil only** header lines, for the lubrication of extended systems and/or systems with varied lube frequencies. Such applications include automotive transfer lines, conveyor lines, flexible machining centers and also complete plant lubrication.

The MSP Zero-Leak inlet shut-off valve can be mounted as the inlet section to any primary (master) divider valve assembly. By using a remote manifold kit, it can be teed off of the header line to a remote primary (master) divider valve assembly.

The MSP Zero-Leak shut-off valve is supplied normally closed to flow. When the coil is energized, the zero-leak valve is opened, allowing oil to flow through. Once the proper amount of oil has been dispensed, the valve is de-energized, shutting off oil flow. The Zero-Leak valve is designed for header-line pressures up to 1500 psi.

## FEATURES/BENEFITS

- Designed for use with an oil header line system, which is an economical method of providing lubricant to extensive systems. Reduces plumbing and installation cost.
- When used in a header line system, lubrication zones are easily extended or deleted as changes are made to the lube circuit. This reduces engineering design costs.
- Enables individual zone lubrication. Prevents over lubrication thus saving on lubrication costs.
- Facilitates individual zone operation and monitoring. Identifies a fault in a specific zone for ease of troubleshooting. Helps lessen machine downtime, which means more production time.
- Solenoid can be rotated through 180° to accommodate any electrical hook up --orientation. Allows for faster installation to reduce costs.
- Available with three pin mini-connection as standard
- Available with NPSF pipe, BSPP or SAE, o-ring sealed ports.



- Inlet restrictor/filter available for use in continuous pressurized header line systems. This will slow down lube inrush and enable accurate control of the lube systems. Order Part Number 563074 (463-410-204) for NPT pipe inlet.
- Coil is molded and sealed, making it impervious to coolant. Allows mounting of valve in harsh environments.

## OPERATION

The MSP Zero-Leak inlet shut-off valve is used in conjunction with an oil header line lube system with each shut-off valve representing a zone of lubrication (See Fig.1). The header line can either be continuously (use restrictor) or intermittently pressurized upon demand. When the particular machine zone requires lubrication, based upon a pre-determined interval, an electrical signal from a Trabon Flexi-Monitor® or machine PLC will sequentially energize the solenoids attached to the shut-off valves (A1), (A2), and (A3). This will open the valve and allow lubricant from the header line to cycle the divider valve, thus providing lubricant to the points within the zone. Once the zone has received the proper amount of lubrication, determined through monitoring the cycle switch (B) or proximity switch (B) for appropriate number of cycles, the controller will de-energize the solenoid and the valve will shut-off lubricant flow.

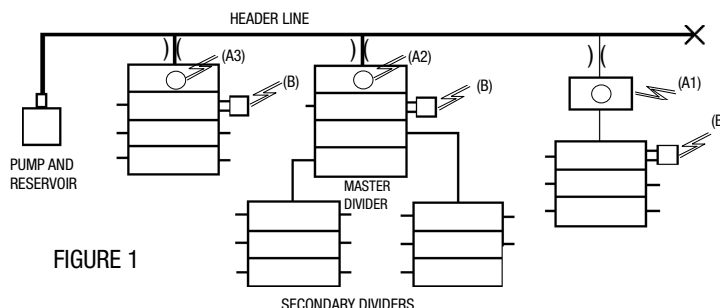
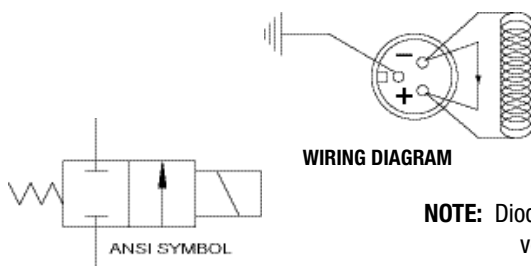
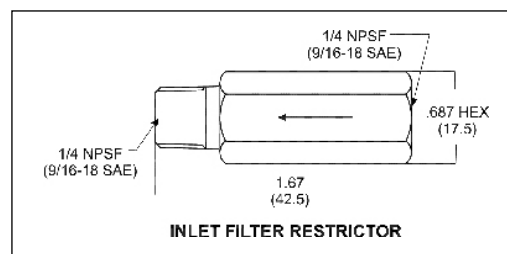
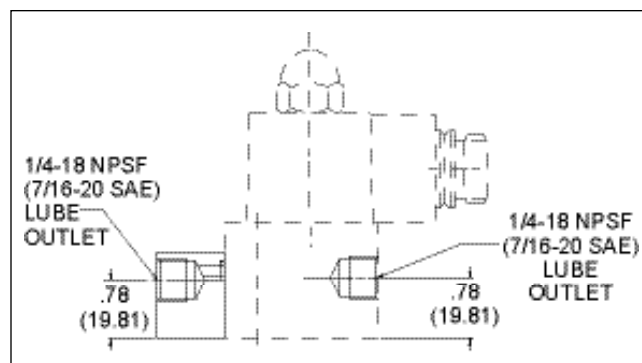
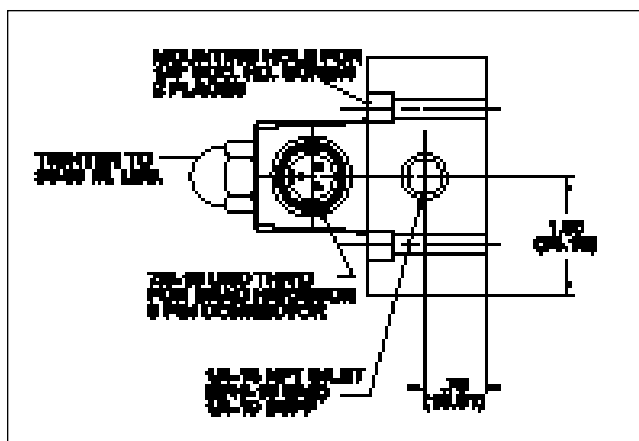
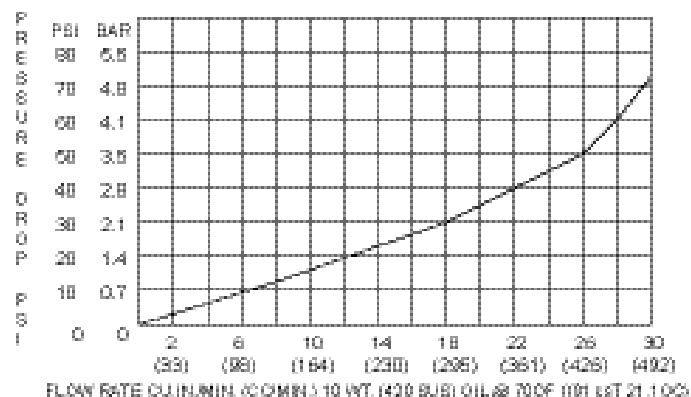


FIGURE 1

SPECIFICATION	
Position	Normally closed
Material	Anodized Aluminum body
Pressure (max)	1500 psi (104 bar)
Lubricant	Oil up to 5000 SUS
Electrical Rating:	
(AC)	120V at 60 Hz, 9.5W continuous duty coil, class "H" insulation, .220 amps holding
(DC)	24V, 28W continuous duty coil w/ diode, class "H" insulation
Filtration	(ISO 18/14) or better oil cleanliness level



**NOTE:** Diode on DC version only



Graco endorses the SAE recommendation of ISO 18/14 (ISO 4406) oil cleanliness for most bearing applications. Some high speed bearing may require cleaner oil. Consult the bearing manufacturer for recommendation.

COMPONENT ORDERING		
Description	Part No.	Old Part No.
Zero-Leak valve, 120 VAC w/ Brad Harrison 3 pin connector		
(1/4-18 NPSF)	563460	527-004-320
(9/16-18 SAE)	563468	527-005-200
Zero-Leak valve, 24 VDC w/Brad Harrison 3 pin connector		
(1/4-18 NPSF)	563464	527-004-870
(9/16-18 SAE)	563467	527-005-180
Zero-Leak valve (no coil), 1/4 BSPP	563462	527-004-770
Repair Kit (w/wrench nut)	563933	560-002-640

COMPONENT ORDERING (continued)		
Replacement Coil, 120 VAC	557226	492-120-206
Replacement Coil, 24 VDC	557225	492-120-205
Remote mount manifold kit (includes outlet manifold, O-Ring & 2 Mtg screws)		
(1/4-18 NPSF)	563461	527-004-360
Inlet Restrictor w/90 Micron Last Chance Filter (1/4 NPTF)	563074	463-410-204
Brad Harrison Mating Cables		
6ft (1.3m) (3 pin) straight	558021	570-999-080
12ft (3.7m) (3 pin) straight	558022	570-999-090

Note: See bulletin L10105 for Modular Zero-Leak

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

**Contact us today!**

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