# **SERVICE & OPERATING MANUAL**

**ORIGINAL INSTRUCTIONS** 

# Surge Suppressor- Model VTA40 Metallic Construction

**Ex C E** 



**VTA40** 

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**VERSAMATIC®** Warren Rupp, Inc. • A Unit of IDEX Corporation

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## **Safety Information**

### A IMPORTANT



Read the safety warnings and instructions in this manual before pump installation and start-up. Failure to comply with the recommendations stated in this manual could damage the pump and void factory warranty.



When the pump is used for materials that tend to settle out or solidify, the pump should be flushed after each use to prevent damage. In freezing temperatures the pump should be completely drained between uses.

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Before pump operation, inspect all fasteners for loosening caused by gasket creep. Retighten loose fasteners to prevent leakage. Follow recommended torques stated in this manual.



Nonmetallic pumps and plastic components are not UV stabilized. Ultraviolet radiation can damage these parts and negatively affect material properties. Do not expose to UV light for extended periods of time.



#### WARNING

Pump not designed, tested or certified to be powered by compressed natural gas. Powering the pump with natural gas will void the warranty.



#### WARNING

The use of non-OEM replacement parts will void (or negate) agency certifications, including CE, ATEX, CSA, 3A and EC1935 compliance (Food Contact Materials). Warren Rupp, Inc. cannot ensure nor warrant non-OEM parts to meet the stringent requirements of the certifying agencies.

## A WARNING



When used for toxic or aggressive fluids, the pump should always be flushed clean prior to disassembly.



Before maintenance or repair, shut off the compressed air line, bleed the pressure, and disconnect the air line from the pump. Be certain that approved eye protection and protective clothing are worn at all times. Failure to follow these recommendations may result in serious injury or death.



Airborne particles and loud noise hazards. Wear eye and ear protection.



In the event of diaphragm rupture, pumped material may enter the air end of the pump, and be discharged into the atmosphere. If pumping a product that is hazardous or toxic, the air exhaust must be piped to an appropriate area for safe containment.



Take action to prevent static sparking. Fire or explosion can result, especially when handling flammable liquids. The pump, piping, valves, containers and other miscellaneous equipment must be properly grounded.

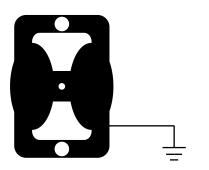


This pump is pressurized internally with air pressure during operation. Make certain that all fasteners are in good condition and are reinstalled properly during reassembly.



Use safe practices when lifting

## **Grounding ATEX Pumps**



ATEX compliant pumps are suitable for use in explosive atmospheres when the equipment is properly grounded in accordance with local electrical codes. Pumps equipped with electrically conductive diaphragms are suitable for the transfer of conductive or non-conductive fluids of any explosion group. When operating pumps equipped with non-conductive diaphragms that exceed the maximum permissible projected area, as defined in EN 13463-1: 2009 section 6.7.5 table 9, the following protection methods must be applied:

- · Equipment is always used to transfer electrically conductive fluids or
- · Explosive environment is prevented from entering the internal portions of the pump, i.e. dry running

For further guidance on ATEX applications, please consult the factory.



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## **Materials**

Material Profile:		Operating Temperatures:	
CAUTION! Operating temperature limitations are as follows:	Max.	Min.	
<b>Conductive Acetal:</b> Tough, impact resistant, ductile. Good abrasion resistance and low friction surface. Generally inert, with good chemical resistance except for strong acids and oxidizing agents.	190°F 88°C	-20°F -29°C	
<b>EPDM:</b> Shows very good water and chemical resistance. Has poor resistance to oils and solvents, but is fair in ketones and alcohols.	280°F 138°C	-40°F -40°C	
<b>FKM:</b> (Fluorocarbon) Shows good resistance to a wide range of oils and sovents; especially all aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils. Hot water or hot aqueous solutions (over 70°F) will attack FKM.	350°F 177°C	-40°F -40°C	
Hytrel®: Good on acids, bases, amines and glycols at room temperatures only.	220°F 104°C	-20°F -29°C	
<b>Neoprene:</b> All purpose. Resistance to vegetable oils. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters and nitro hydrocarbons and chlorinated aromatic hydrocarbons.	200°F 93°C	-10°F -23°C	
<b>Nitrile:</b> General purpose, oil-resistant. Shows good solvent, oil, water and hydraulic fluid resistance. Should not be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons.	190°F 88°C	-10°F -23°C	
<b>Nylon:</b> 6/6 High strength and toughness over a wide temperature range. Moderate to good resistance to fuels, oils and chemicals.	180°F 82°C	32°F 0°C	

<b>Polypropylene:</b> A thermoplastic polymer. Moderate tensile and flex strength. Resists stong acids and alkali. Attacked by chlorine, fuming nitric acid and other strong oxidizing agents.	180°F 82°C	32°F 0°C		
<b>PVDF:</b> (Polyvinylidene Fluoride) A durable fluoroplastic with excellent chemical resistance. Excellent for UV applications. High tensile strength and impact resistance.		0°F -18°C		
<b>Santoprene®:</b> Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	275°F 135°C	-40°F -40°C		
<b>UHMW PE:</b> A thermoplastic that is highly resistant to a broad range of chemicals. Exhibits outstanding abrasion and impact resistance, along with environmental stress-cracking resistance.	180°F 82°C	-35°F -37°C		
<b>Urethane:</b> Shows good resistance to abrasives. Has poor resistance to most solvents and oils.	150°F 66°C	32°F 0°C		
Virgin PTFE: (PFA/TFE) Chemically inert, virtually impervious. Very few chemicals are known to chemically react with PTFE; molten alkali metals, turbulent liquid or gaseous fluorine and a few fluoro-chemicals such as chlorine trifluoride or oxygen difluoride which readily liberate free fluorine at elevated temperatures.	220°F 104°C	-35°F -37°C		
Maximum and Minimum Temperatures are the limits for which these materials can be operated. Temperatures coupled with pressure affect the longevity of diaphragm pump components. Maximum life should not be expected at the extreme limits of the temperature ranges.				
Metals:				
Alloy C: Equal to ASTM494 CW-12M-1 specification for nickel and nickel alloy.				
<b>Stainless Steel:</b> Equal to or exceeding ASTM specification A743 CF-8M for corrosion resistant iron chromium, iron chromium nickel and nickel based alloy castings for general applications. Commonly referred to as 316 Stainless Steel in the pump industry.				

For specific applications, always consult the Chemical Resistance Chart.

Note: This document is a high level guide. Please be aware that not all model and or material combinations are possible for all sizes. Please consult factory or your distributor for specific details.



### SERVICE AND OPERATING INSTRUCTIONS

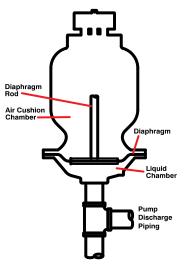
This Versamatic Surge Suppressor is a completely automatic diaphragm fitted surge suppressor to reduce the flow and pressure pulsations in a pumping system characteristic of reciprocating type pumps.

**Principle of Operation:** The Surge Suppressor uses a flexible diaphragm to separate a liquid chamber from compressed air chambers. A rod connected to the center of one diaphragm activates the air inlet and exhaust valves, which automatically admit or exhaust air in the air chambers. This maintains the diaphragms in mid-range of stroke for maximum surge suppression.

**Installation:** Locate the Surge Suppressor in discharge piping as close as possible to the pump. The unit will operate in any position. Connect air inlet connection to full plant air supply line before the air regulator to pump. Not to exceed 125PSI.

**Service Instructions:** When service is required, it is important to MAKE CERTAIN THAT INLET AIR PRESSURE IS DISCONNECTED. The diaphragms are serviced by simply removing the hex nuts or v-band, and removing the center spool casting. When Virgin PTFE diaphragms are used in conjunction with the elastomeric diaphragms they are placed over the "wetted" sides of each elastomeric diaphragm. Inlet and exhaust air valves are located externally for easy access and service.

**Warranty:** This unit is guaranteed for a period of five years against defective material and workmanship.





### IMPORTANT

Read these safety warnings and instructions in this manual completely, before installation and start-up of the pulsation dampener.

It is the responsibility of the purchaser to retain this manual for reference. Failure to comply with the recommendations stated in this manual will damage the pulsation dampener, and void factory warranty.



### 

Before surge suppressor operation, inspect all gasketed fasteners for looseness caused by gasket creep. Re-torque

loose fasteners to prevent leakage. Follow recommended torques stated in this manual.



### A WARNING

Before doing any maintenance on the pulsation dampener, be certain all pressure is completely vented from the pump, suction, discharge,

piping, and all other openings and connections. Be certain the air supply is locked out or made non-operational, so that it cannot be started while work is being done on the pump. Be certain that approved eye protection and protective clothing are worn all times in the vicinity of the pump. Failure to follow these recommendations may result in serious injury or death.



## 

Take action to prevent static sparking. Fire or explosion can result, especially when handling flammable liquids. The pump, piping, valves, containers or other miscellaneous equipment See page 8.

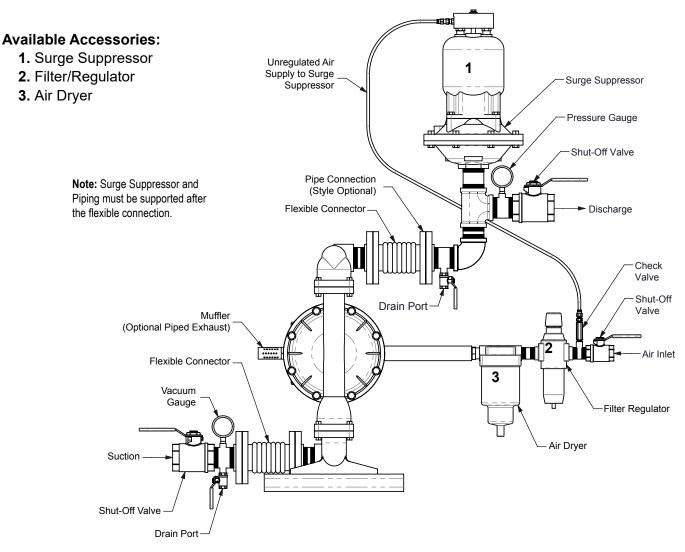
must be grounded. See page 8.

### 🔒 HAZARD WARNING 🛕

POSSIBLE EXPLOSION HAZARD can result if 1, 1, 1, -Trichloroethance, Methylene Chloride or other Halogenated Hydrocarbon solvents are used in pressurized fluid systems having Aluminum or Galvanized wetted parts. Death, serious bodily injury and/or property damage could result. Consult with the factory if you have questions concerning Halogenated Hydrocarbon solvents.



## **Recommended Installation Guide**



#### Installation And Start-Up

Locate the pump as close to the product being pumped as possible. Keep the suction line length and number of fittings to a minimum. Do not reduce the suction line diameter.

#### Air Supply

Connect the pump air inlet to an air supply with sufficient capacity and pressure to achieve desired performance. A pressure regulating valve should be installed to insure air supply pressure does not exceed recommended limits.

#### Air Valve Lubrication

The air distribution system is designed to operate WITHOUT lubrication. This is the standard mode of operation. If lubrication is desired, install an air line lubricator set to deliver one drop of SAE 10 non-detergent oil for every 20 SCFM (9.4 liters/sec.) of air the pump consumes. Consult the Performance Curve to determine air consumption.

#### Air Line Moisture

Water in the compressed air supply may cause icing or freezing of the exhaust air, causing the pump to cycle erratically or stop operating. Water in the air supply can be reduced by using a point-of-use air dryer.

#### **Air Inlet And Priming**

To start the pump, slightly open the air shut-off valve. After the pump primes, the air valve can be opened to increase air flow as desired. If opening the valve increases cycling rate, but does not increase the rate of flow, cavitation has occurred. The valve should be closed slightly to obtain the most efficient air flow to pump flow ratio.



## **Troubleshooting Guide**

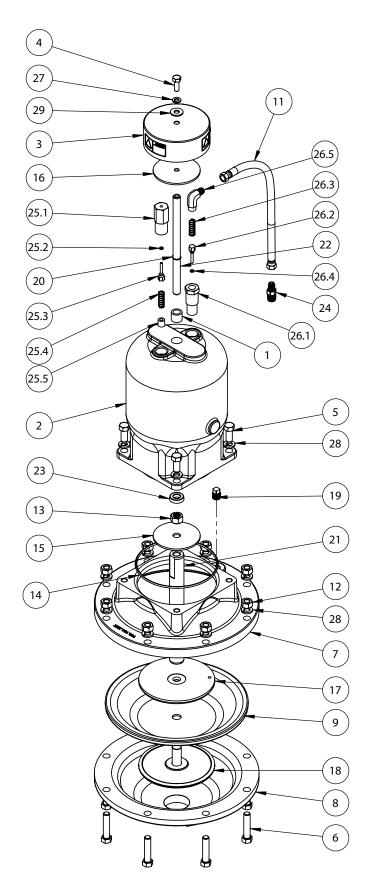
Symptom:	Potential Cause(s):	Recommendation(s):
Pump Cycles Once	Deadhead (system pressure meets or exceeds air supply pressure).	Increase the inlet air pressure to the pump. Pump is designed for 1:1 pressure ratio at zero flow. (Does not apply to high pressure 2:1 units).
	Air valve or intermediate gaskets installed incorrectly.	Install gaskets with holes properly aligned.
	Bent or missing actuator plunger.	Remove pilot valve and inspect actuator plungers.
Pump Will Not Operate	Pump is over lubricated.	Set lubricator on lowest possible setting or remove. Units are designed for lube free operation.
/ Cycle	Lack of air (line size, PSI, CFM).	Check the air line size and length, compressor capacity (HP vs. cfm required).
	Check air distribution system.	Disassemble and inspect main air distribution valve, pilot valve and pilot valve actuators.
	Discharge line is blocked or clogged manifolds.	Check for inadvertently closed discharge line valves. Clean discharge manifolds/piping.
	Deadhead (system pressure meets or exceeds air supply pressure).	Increase the inlet air pressure to the pump. Pump is designed for 1:1 pressure ratio at zero flow. (Does not apply to high pressure 2:1 units).
	Blocked air exhaust muffler.	Remove muffler screen, clean or de-ice, and re-install.
	Pumped fluid in air exhaust muffler.	Disassemble pump chambers. Inspect for diaphragm rupture or loose diaphragm plate assembly.
	Pump chamber is blocked.	Disassemble and inspect wetted chambers. Remove or flush any obstructions.
Pump Cycles and Will	Cavitation on suction side.	Check suction condition (move pump closer to product).
Not Prime or No Flow	Check valve obstructed. Valve ball(s) not seating properly or sticking.	Disassemble the wet end of the pump and manually dislodge obstruction in the check valve pocket. Clean out around valve ball cage and valve seat area. Replace valve ball or valve seat if damaged. Use heavier valve ball material.
	Valve ball(s) missing (pushed into chamber or manifold).	Worn valve ball or valve seat. Worn fingers in valve ball cage (replace part). Check Chemical Resistance Guide for compatibility.
	Valve ball(s)/seat(s) damaged or attacked by product.	Check Chemical Resistance Guide for compatibility.
	Check valve and/or seat is worn or needs adjusting.	Inspect check valves and seats for wear and proper setting. Replace if necessary.
	Suction line is blocked.	Remove or flush obstruction. Check and clear all suction screens or strainers.
	Excessive suction lift.	For lifts exceeding 20' of liquid, filling the chambers with liquid will prime the pump in most cases.
	Suction side air leakage or air in product.	Visually inspect all suction-side gaskets and pipe connections.
	Pumped fluid in air exhaust muffler.	Disassemble pump chambers. Inspect for diaphragm rupture or loose diaphragm plate assembly.
Pump Cycles Running	Over lubrication.	Set lubricator on lowest possible setting or remove. Units are designed for lube free operation.
Sluggish/Stalling,	Icing.	Remove muffler screen, de-ice, and re-install. Install a point of use air drier.
Flow Unsatisfactory	Clogged manifolds.	Clean manifolds to allow proper air flow
Flow Unsatisfactory	Deadhead (system pressure meets or exceeds air supply pressure).	Increase the inlet air pressure to the pump. Pump is designed for 1:1 pressure ratio at zero flow. (Does not apply to high pressure 2:1 units).
	Cavitation on suction side.	Check suction (move pump closer to product).
	Lack of air (line size, PSI, CFM).	Check the air line size, length, compressor capacity.
	Excessive suction lift.	For lifts exceeding 20' of liquid, filling the chambers with liquid will prime the pump in most cases.
	Air supply pressure or volume exceeds system hd.	Decrease inlet air (press. and vol.) to the pump. Pump is cavitating the fluid by fast cycling.
	Undersized suction line.	Meet or exceed pump connections.
	Restrictive or undersized air line.	Install a larger air line and connection.
	Suction side air leakage or air in product.	Visually inspect all suction-side gaskets and pipe connections.
	Suction line is blocked.	Remove or flush obstruction. Check and clear all suction screens or strainers.
	Pumped fluid in air exhaust muffler.	Disassemble pump chambers. Inspect for diaphragm rupture or loose diaphragm plate assembly.
	Check valve obstructed.	Disassemble the wet end of the pump and manually dislodge obstruction in the check valve pocket.
	Check valve and/or seat is worn or needs adjusting.	Inspect check valves and seats for wear and proper setting. Replace if necessary.
	Entrained air or vapor lock in chamber(s).	Purge chambers through tapped chamber vent plugs. Purging the chambers of air can be dangerous.
Due durat La alcium		Replace diaphragms, check for damage and ensure diaphragm plates are tight.
Product Leaking Through Exhaust	Diaphragm failure, or diaphragm plates loose. Diaphragm stretched around center hole or bolt holes.	Check for excessive inlet pressure or air pressure. Consult Chemical Resistance Chart for compatibili with products, cleaners, temperature limitations and lubrication.
Premature Diaphragm	Cavitation.	Enlarge pipe diameter on suction side of pump.
Fremature Diaphragm Failure	Excessive flooded suction pressure.	Move pump closer to product. Raise pump/place pump on top of tank to reduce inlet pressure. Install Back pressure device (Tech bulletin 41/). Add accumulation tank or pulsation dampener.
	Misapplication (chemical/physical incompatibility).	Consult Chemical Resistance Chart for compatibility with products, cleaners, temperature limitations and lubrication.
	Incorrect diaphragm plates or plates on backwards, installed incorrectly or worn.	Check Operating Manual to check for correct part and installation. Ensure outer plates have not been worn to a sharp edge.
Unbalanced Cycling	Excessive suction lift.	For lifts exceeding 20' of liquid, filling the chambers with liquid will prime the pump in most cases.
	Undersized suction line.	Meet or exceed pump connections.
	Pumped fluid in air exhaust muffler.	Disassemble pump chambers. Inspect for diaphragm rupture or loose diaphragm plate assembly.
	Suction side air leakage or air in product.	Visually inspect all suction-side gaskets and pipe connections.
		Visually inspect all suction-side gaskets and pipe connections. Disassemble the wet end of the pump and manually dislodge obstruction in the check valve pocket.
	Suction side air leakage or air in product.	

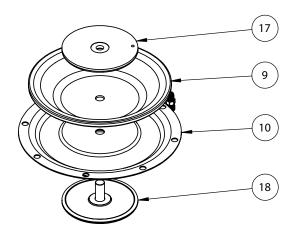
For additional troubleshooting tips contact After Sales Support at service.warrenrupp@idexcorp.com or 419-524-8388



vta40mdlsm-rev0419

## **Composite Repair Parts Drawing**







## **Composite Repair Parts List**

NO.         PART NUMBER         DESCRIPTION         QTY.           1         070.014.170         Bearing, Sleave         1           2         095.078.156         Body         1           3         165.023.000         Cap         1           4         170.005.330         Capscrew, Hex Hd - 5/16-18 X 7/8         1           5         170.024.330         Capscrew, Hex Hd - 7/16-14 X 1         4           6         196.194.156         Chamber, Inner         1           8         196.196.156E         Chamber, Outer - 1½" BSP Tapered         1           196.196.10E         Chamber, Outer - 1½" BSP Tapered         1           196.196.10E         Chamber, Outer - 1½" BSP Tapered         1           196.196.563         Diaphragm         2         286.005.363           286.005.364         Diaphragm         2         286.005.354           286.005.357         Diaphragm         2         286.005.357           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Nut, Hex - 1/2-13         1           12         545.007.330         Nut, Hex - 1/2-13         1           13         545.008.330         Nut, Hex - 1/2-13         1 <th>ITEM</th> <th></th> <th></th> <th></th>	ITEM			
2         095.078.156         Body         1           3         165.023.000         Cap         1           4         170.005.330         Capscrew, Hex Hd - 5/16-18 X 7/8         1           5         170.024.330         Capscrew, Hex Hd - 7/16-14 X 1         4           6         170.060.330         Capscrew, Hex Hd - 7/16-14 X 1         4           7         196.196.156E         Chamber, Outer - 1½" BSP Tapered         1           196.196.010E         Chamber, Outer - 1½" BSP Tapered         1           196.196.010E         Chamber, Outer - 1½" BSP Tapered         1           196.196.112E         Chamber, Outer - 1½" BSP Tapered         1           196.196.010E         Chamber, Outer - 1½" BSP Tapered         1           286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.357         Diaphragm         2           286.005.354         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Nut, Hex - 1/2-13         1           12         545.008.330         Nut, Hex - 1/2-13         1		PART NUMBER	DESCRIPTION	QTY.
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6         170.060.330         Capscrew, Hex Hd - 7/16-14 X 2         8           7         196.194.156         Chamber, Inner         1           8         196.196.156E         Chamber, Outer - 1½" BSP Tapered         1           196.196.010E         Chamber, Outer - 1½" BSP Tapered         1           196.196.110E         Chamber, Outer - 1½" BSP Tapered         1           9         286.005.360         Diaphragm         2           286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.354         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Nut, Hex - 7/16-14         8           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 7/16-14         8           14         560.022.360         O-Ring         1           15         612.047.330         Plate, Activator         1           16         612.047.330         Plate, Activator         1           16         612.047.330         Plate, Diaphragm Outer - Alum	5	170.024.330		4
7       196.194.156       Chamber, Inner       1         8       196.196.156E       Chamber, Outer - 1½" BSP Tapered       1         196.196.010E       Chamber, Outer - 1½" BSP Tapered       1         196.196.110E       Chamber, Outer - 1½" BSP Tapered       1         196.196.112E       Chamber, Outer - 1½" BSP Tapered       1         196.196.112E       Chamber, Outer - 1½" BSP Tapered       2         286.005.363       Diaphragm       2         286.005.364       Diaphragm       2         286.005.351       Diaphragm       2         286.005.354       Diaphragm       2         286.005.357       Diaphragm       2         286.005.357       Diaphragm       2         286.005.354       Diaphragm       2         286.005.355       Diaphragm       2         11       860.078.330       Nut, Hex - 7/16-14       8         13       545.007.330       Nut, Hex - 1/2-13       1         14       560.022.360       O-Ring       1         15       612.043.330       Plate, Activator       1         16       612.047.330       Plate, Diaphragm Outer - Alum Units Only       1         612.039.157       Plate, Diaphrag	6	170.060.330		8
196.196.010E         Chamber, Outer - 1½" BSP Tapered         1           196.196.110E         Chamber, Outer - 1½" BSP Tapered         1           9         286.005.360         Diaphragm         2           286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.365         Diaphragm         2           286.005.361         Diaphragm         2           286.005.351         Diaphragm         2           286.005.357         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Activator         1           17         612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1		196.194.156	•	1
196.196.010E         Chamber, Outer - 1½" BSP Tapered         1           196.196.110E         Chamber, Outer - 1½" BSP Tapered         1           196.196.112E         Chamber, Outer - 1½" BSP Tapered         1           9         286.005.360         Diaphragm         2           286.005.361         Diaphragm         2           286.005.365         Diaphragm         2           286.005.351         Diaphragm         2           286.005.351         Diaphragm         2           286.005.357         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.047.330         Plate, Activator         1           17         612.047.330         Plate, Diaphragm Outer - Autu Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1 </td <td>8</td> <td>196.196.156E</td> <td>Chamber, Outer - 11/2" BSP Tapered</td> <td>1</td>	8	196.196.156E	Chamber, Outer - 11/2" BSP Tapered	1
196.196.110E         Chamber, Outer - 1½" BSP Tapered         1           9         286.005.360         Diaphragm         2           286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.365         Diaphragm         2           286.005.365         Diaphragm         2           286.005.351         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Activator         1           17         612.047.330         Plate, Diaphragm Outer - Alum Units Only         1           612.039.010         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.112         Plate, Diaphragm Outer - Stainless Units Only         1		196.196.010E		1
196.196.112E         Chamber, Outer - 1½" BSP Tapered         1           9         286.005.360         Diaphragm         2           286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.365         Diaphragm         2           286.005.354         Diaphragm         2           286.005.354         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm         2           286.005.354         Diaphragm         2           286.005.354         Diaphragm         2           286.005.354         Diaphragm         2           10         286.005.354         Diaphragm         2           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.039.010         Plate, Diaphragm Outer - Alum Units Only         1 <th< td=""><td></td><td>196.196.110E</td><td></td><td>1</td></th<>		196.196.110E		1
9         286.005.360         Diaphragm         2           286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.365         Diaphragm         2           286.005.365         Diaphragm         2           286.005.351         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 1/2-13         1           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Diaphragm Outer - Alum Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.110         Plate, Diaphragm Outer - Cast Iron Units Only         1           618.003.330         Plug, 1/4 Pipe         1           20		196.196.112E	Chamber, Outer - 11/2" BSP Tapered	1
286.005.363         Diaphragm         2           286.005.364         Diaphragm         2           286.005.365         Diaphragm         2           286.005.351         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16.14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Diaphragm Outer - Alum Units Only         1           612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.110         Plate, Diaphragm Outer - Stainless Units Only         1           612.097.112         Plate, Diaphragm Outer - Hastalloy Units Only         1           613.003.330         Plug, 1/4 Pipe         1           20         675.054.080         Ring, Retainer         1           21 </td <td>9</td> <td>286.005.360</td> <td></td> <td>2</td>	9	286.005.360		2
286.005.364         Diaphragm         2           286.005.365         Diaphragm         2           286.005.351         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.043.330         Plate, Activator         1           17         612.047.330         Plate, Diaphragm Outer - Alum Units Only         1           18         612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.110         Plate, Diaphragm Outer - Stainless Units Only         1           612.097.112         Plate, Diaphragm         1           19         618.006.120         Rod, Diaphragm         1           20         675.054.080         Ring, Retainer         1           21         685.067.120         Rod, Activa		286.005.363	Diaphragm	2
286.005.365         Diaphragm         2           286.005.351         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Activator         1           17         612.047.330         Plate, Diaphragm Outer - Alum Units Only         1           612.039.010         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.039.010         Plate, Diaphragm Outer - Hastalloy Units Only         1           612.039.110         Plate, Diaphragm Outer - Hastalloy Units Only         1           612.037.112         Plate, Diaphragm Outer - Hastalloy Units Only         1           19         618.003.330         Plug, 1/4 Pipe         1           20         675.054.080		286.005.364		2
286.005.351         Diaphragm         2           286.005.354         Diaphragm         2           286.005.357         Diaphragm, Overlay PTFE         1           10         286.020.604         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Diaphragm Outer - Alum Units Only         1           17         612.047.330         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.039.010         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.112         Plate, Diaphragm Outer - Stainless Units Only         1           618.003.330         Plug, 1/4 Pipe         1           20         675.054.080         Ring, Retainer         1           21         685.067.120         Rod, Activator         1           22         685.067.120         Rod, Activator         1		286.005.365		
286.005.354         Diaphragm         2           10         286.005.357         Diaphragm         2           10         286.020.604         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Activator         1           17         612.047.330         Plate, Diaphragm Outer - Alum Units Only         1           18         612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.110         Plate, Diaphragm Outer - Stainless Units Only         1           612.097.112         Plate, Diaphragm Outer - Hastalloy Units Only         1           19         618.003.330         Plug, 1/4 Pipe         1           20         675.054.080         Ring, Retainer         1           21         685.066.120         Rod, Activator         1           22         685.067.120         Rod, Activa		286.005.351	Diaphragm	2
286.005.357         Diaphragm         2           10         286.020.604         Diaphragm, Overlay PTFE         1           11         866.078.330         Tube Fitting         1           12         545.007.330         Nut, Hex - 7/16-14         8           13         545.008.330         Nut, Hex - 1/2-13         1           14         560.022.360         O-Ring         1           15         612.043.330         Plate, Activator         1           16         612.044.330         Plate, Activator         1           17         612.039.157         Plate, Diaphragm Outer - Alum Units Only         1           18         612.039.157         Plate, Diaphragm Outer - Cast Iron Units Only         1           612.097.110         Plate, Diaphragm Outer - Stainless Units Only         1           612.097.112         Plate, Diaphragm Outer - Hastalloy Units Only         1           19         618.003.330         Plug, 1/4 Pipe         1           20         675.054.080         Ring, Retainer         1           21         685.066.120         Rod, Diaphragm         1           22         680.07.120         Rod, Activator         1           25         893.021.000         Valve A		286.005.354		2
11       866.078.330       Tube Fitting       1         12       545.007.330       Nut, Hex - 7/16-14       8         13       545.008.330       Nut, Hex - 1/2-13       1         14       560.022.360       O-Ring       1         15       612.043.330       Plate, Activator       1         16       612.044.330       Plate, Activator       1         17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.097.110       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.112       Plate, Diaphragm Outer - Stainless Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1<		286.005.357		2
11       866.078.330       Tube Fitting       1         12       545.007.330       Nut, Hex - 7/16-14       8         13       545.008.330       Nut, Hex - 1/2-13       1         14       560.022.360       O-Ring       1         15       612.043.330       Plate, Activator       1         16       612.044.330       Plate, Activator       1         17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.097.110       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.112       Plate, Diaphragm Outer - Stainless Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1<	10	286.020.604	Diaphragm, Overlay PTFE	1
13       545.008.330       Nut, Hex - 1/2-13       1         14       560.022.360       O-Ring       1         15       612.043.330       Plate, Activator       1         16       612.044.330       Plate, Activator       1         17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.097.110       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Stainless Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Compression	11	866.078.330		1
14       560.022.360       O-Ring       1         15       612.043.330       Plate, Activator       1         16       612.044.330       Plate, Activator       1         17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.039.010       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Stainless Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, C	12	545.007.330	Nut, Hex - 7/16-14	8
15       612.043.330       Plate, Activator       1         16       612.044.330       Plate, Activator       1         17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.039.010       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Compression       1         26       893.023.000	13	545.008.330	Nut, Hex - 1/2-13	1
16       612.044.330       Plate, Activator       1         17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.039.010       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.112       Plate, Diaphragm Outer - Stainless Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.1       095.019.162       Body, Valv	14	560.022.360	O-Ring	1
17       612.047.330       Plate, Diaphragm Inner       1         18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.039.010       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Stainless Units Only       1         612.097.112       Plate, Diaphragm Outer - Stainless Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Compression       1         26       893.023.000       Valve Assembly       1         25.5       780.013.115       Spring, Compression       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppe	15	612.043.330	Plate, Activator	1
18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.039.010       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Stainless Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26.4       693.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring,	16	612.044.330	Plate, Activator	1
18       612.039.157       Plate, Diaphragm Outer - Alum Units Only       1         612.039.010       Plate, Diaphragm Outer - Cast Iron Units Only       1         612.097.110       Plate, Diaphragm Outer - Stainless Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25.1       095.020.162       Body, Valve       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26.4       693.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring,	17	612.047.330	Plate, Diaphragm Inner	1
612.097.110       Plate, Diaphragm Outer - Stainless Units Only       1         612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25       893.021.000       Valve Assembly       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1         2	18	612.039.157		1
612.097.112       Plate, Diaphragm Outer - Hastalloy Units Only       1         19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25       893.021.000       Valve Assembly       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring, Compression       1 <td></td> <td>612.039.010</td> <td>Plate, Diaphragm Outer - Cast Iron Units Only</td> <td>1</td>		612.039.010	Plate, Diaphragm Outer - Cast Iron Units Only	1
19       618.003.330       Plug, 1/4 Pipe       1         20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25       893.021.000       Valve Assembly       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring, Compression       1		612.097.110	Plate, Diaphragm Outer - Stainless Units Only	1
20       675.054.080       Ring, Retainer       1         21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25       893.021.000       Valve Assembly       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1         26.3       780.013.115       Spring, Compression       1		612.097.112	Plate, Diaphragm Outer - Hastalloy Units Only	1
21       685.066.120       Rod, Diaphragm       1         22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25       893.021.000       Valve Assembly       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1	19	618.003.330	Plug, 1/4 Pipe	1
22       685.067.120       Rod, Activator       1         23       720.012.360       U-Cup, Shaft Seal       1         25       893.021.000       Valve Assembly       1         25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1	20	675.054.080	Ring, Retainer	1
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25.1       095.020.162       Body, Valve       1         25.2       560.001.360       O-Ring       1         25.3       622.002.162       Poppet       1         25.4       670.007.162       Spring, Retainer       1         25.5       780.013.115       Spring, Compression       1         26       893.023.000       Valve Assembly       1         26.1       095.019.162       Body, Valve       1         26.2       622.002.162       Poppet       1         26.3       780.013.115       Spring, Compression       1	23	720.012.360	U-Cup, Shaft Seal	1
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26.2         622.002.162         Poppet         1           26.3         780.013.115         Spring, Compression         1		893.023.000		1
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26.4 560.001.360 O-Ring 1				
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26.5 866.010.162 Elbow, Male 1				
27 900.004.330 Washer, Lock - 5/16 1				-
28 900.006.330 Washer, Lock - 7/16 12				
29 901.009.330 Washer, Flat - 5/16 1	29	901.009.330	Washer, Flat - 5/16	1



## 5 - YEAR Limited Product Warranty

#### Quality System ISO9001 Certified • Environmental Management Systems ISO14001 Certified

Versamatic warrants to the original end-use purchaser that no product sold by Versamatic that bears a Versamatic brand shall fail under normal use and service due to a defect in material or workmanship within five years from the date of shipment from Versamatic's factory.

The use of non-OEM replacement parts will void (or negate) agency certifications, including CE, ATEX, CSA, 3A and EC1935 compliance (Food Contact Materials). Warren Rupp, Inc. cannot ensure nor warrant non-OEM parts to meet the stringent requirements of the certifying agencies.

~ See complete warranty at http://vm.salesmrc.com/pdfs/VM\_Product\_Warranty.pdf

#### ECLARATION OF CONFORMIT

DECLARATION DE CONFORMITE • DECLARACION DE CONFORMIDAD • ERKLÄRUNG BEZÜGLICH EINHALTUNG DER VORSCHRIFTEN DICHIARAZIONE DI CONFORMITÀ • CONFORMITEITSVERKLARING • DEKLARATION OM ÖVERENSSTÄMMELSE EF-OVERENSSTEMMELSESERKLÆRING • VAATIMUSTENMUKAISUUSVAKUUTUS • SAMSVARSERKLÄRING DECLARAÇÃO DE CONFORMIDADE

#### **MANUFACTURED BY:**

FABRIQUE PAR: FABRICADA POR: HERGESTELLT VON: FABBRICATO DA: VERVAARDIGD DOOR: TILLVERKAD AV: FABRIKANT: VAI MISTAJA PRODUSENT: FABRICANTE:

**VERSAMATIC** ® Warren Rupp, Inc. A Unit of IDEX Corporation 800 North Main Street P.O. Box 1568 Mansfield, OH 44901-1568 USA

Tel: 419-526-7296 Fax: 419-526-7289



#### PUMP MODEL SERIES: E SERIES, V SERIES, VT SERIES, VSMA3, SPA15, **RE SERIES AND U2 SERIES**

#### This product complies with the following European Community Directives:

Ce produit est conforme aux directives de la Communauté européenne suivantes: Este producto cumple con las siguientes Directrices de la Comunidad Europea: Dieses produkt erfüllt die folgenden Vorschriften der Europäischen Gemeinschaft:

Questo prodotto è conforme alle seguenti direttive CEE: Dir produkt voldoet aan de volgende EG-richtlijnen:

Denna produkt överensstämmer med följande EU direktiv:

Versamatic, Inc., erklærer herved som fabrikant, at ovennævnte produkt er i overensstemmelse med bestemmelserne i Direkktive:

Tämä tuote täyttää seuraavien EC Direktiivien vaatimukstet:

Dette produkt oppfyller kravene til følgende EC Direktiver:

Este produto está de acordo com as seguintes Directivas comunitárias:

#### This product has used the following harmonized standards to verify conformance:

Ce materiel est fabriqué selon les normes harmonisées suivantes, afin d'en garantir la conformité:

Este producto cumple con las siquientes directrices de la comunidad europa:

Dieses produkt ist nach folgenden harmonisierten standards gefertigtworden, die übereinstimmung wird bestätigt:

Questo prodotto ha utilizzato i seguenti standards per verificare la conformita':

De volgende geharmoniseerde normen werden gehanteerd om de conformiteit van dit produkt te garanderen:

För denna produkt har följande harmoniserande standarder använts för att bekräfta överensstämmelse:

Harmoniserede standarder, der er benyttet:

Tässä tuotteessa on sovellettu seuraavia yhdenmukaistettuja standardeja:

Dette produkt er produsert i overenstemmelse med fløgende harmoniserte standarder:

Este produto utilizou os seguintes padrões harmonizados para varificar conformidade:

#### AUTHORIZED/APPROVED BY:

Approuve par: Aprobado por: Genehmigt von: approvato da: Goedgekeurd door: Underskrift: Valtuutettuna: Bemyndiget av: Autorizado Por:

06/14/2017 REV 08

osebe ara

Dave Roseberry **Director of Engineering** 

Authorized Representative: **IDEX Pump Technologies** R79 Shannon Industrial Estate, Shannon, Co. Clare Ireland Attn: Barry McMahon

**DATE: February 27, 2017** FECHA:

DATUM: DATA: DATO: PÄIVÄYS:



EN809:2012

to Annex VIII

2006/42/EC on Machinery, according

EU Declaration of Conformity				
<b>Manufacturer:</b> Versamatic A Unit of IDEX Corporatio 800 North Main Street Mansfield, OH 44902 US				
Warren Rupp, Inc declares that Air Operated Double Diaphragm I listed below comply with the requirements of <b>Directive 2014/34/E</b>				
Applicable Standards:           • EN ISO 80079-36: 2016         • EN ISO 80079-37: 2016	• EN60079-25: 2010			
1. AODD Pumps and Surge Suppressors - Technical File No.: 20	0310400 -1410/MER			
Hazardous Location Applied:				
𝔄 II 2 G Ex h IIC T5225°C (T2) Gb II 2 D Ex h IIIC T100°CT200°C Db				
<ul> <li>Metallic pump models with external aluminum components (E-series)</li> <li>Versa-Surge<sup>®</sup> surge suppressors (VTA-Series)</li> </ul>				
<b>2. AODD Pumps -</b> Technical File No.: 20310400 -1410/MER - On File With: DEKRA Certification B.V. (0344) Meander 1051 6825 MJ Arnhem				
Hazardous Location Applied:	The Netherlands			
I M2 Ex h Mb (Ex) II 2 G Ex h IIC T5225°C (T2) Gb II 2 D Ex h IIIC T100°CT200°C Db				
<ul> <li>Metallic pump models with no external aluminum (E-Series)</li> <li>Conductive plastic pumps (E-Series Non-Metallic)</li> </ul>				
See "Safety Information" page for conditions of safe use				
DATE/OF REVISION/TITLE: 19 DEC 2018	David Reseberry Dave Roseberry Director of Engineering			
	IBEX			

VERSAMATIC

# **Declaration of Conformity**

**Manufacturer: Warren Rupp, Inc., 800 N. Main Street, Mansfield, Ohio, 44902 USA** certifies that Elima-Matic<sup>®</sup> Air-Operated Double Diaphragm Food Processing and Sanitary Pump Models and Surge Suppressor Models comply with the European Community Regulations:

(EC) No 1935/2004 for Food Contact Materials

(EC) No 2023/2006 Good Manufacturing Practice

(EU) No 10/2011 on plastic materials and articles intended to come in contact with food

#### Food Processing Pump Models:

E4SJ5T5S0-FP-ATEX E4SJ5T5S0-FP E4SJYXYY0-FP E4SJ7X770-FP E1SPYX5S9C-FP E1SP7X759C-FP E1SP5T559C-FP E5SP5T5S9C-FP E5SPYX559C-FP E5SP7X7S9C-FP E1SJ5T559C-FP-ATEX E1SJ7X759C-FP-ATEX E1SJYX559C-FP-ATEX E2SJ5T5S0C-FP-ATEX E2SJ7X770C-FP-ATEX E2SJ7D770C-FP-ATEX E2SS7D770C-FP-ATEX E2SJYXYY0C-FP-ATEX E2SSYXYY0C-FP-ATEX E3SJYXYY0C-FP-ATEX E3SJ5T550C-FP-ATEX E3SJ5T550C-FP-ATEX E3SJ5T550C-FP-ATEX E3SSYXYY0C-FP-ATEX E3SS7X770C-FP-ATEX E3SS5T550C-FP-ATEX E3SS5T550C-FP-ATEX

#### Surge Suppressor Models:

VDA051SPTNS00 VTA1,NG1SS. VTA25,NG1SS.

#### Surge Suppressor Models cont.:

VTA1 1/2,NG1SS. VTA40,NG1SS. VTA2,NG2SS. VTA50,NG2SS. VTA3,NG2SS. VTA80,NG2SS.

#### Sanitary Pump Models:

E4SJYXY40-SP E4SJ7X750-SP E2SJYXY40C-SP-ATEX E2SJ7X750C-SP-ATEX E4SJ5T550-SP-ATEX E2SJ5T550C-SP-ATEX E2SS5T550C-SP-ATEX E2SSYXY 40C-SP-ATEX E2SS7X750C-SP-ATEX

Materials used in equipment intended for food contact (Annex I (EC) No 1935/2004):
 Rubber
 Metals & Alloys
 Plastics

Plastic Materials: PTFE and FKM/ PTFE coated

The plastic components are suitable to come in contact with multiple food types, provided that storage contact time does not exceed 1/2 hour, contact temperature does not exceed 40°C and maximum operating temperatures within the instructions manual are not exceeded.

• This Declaration is based on :

- Declaration of Conformities from raw material suppliers
- Total Migration Analysis per (EU) No 10/2011

· Supporting document will be made available to competent authorities to demonstrate compliance

avid Koseberry

Signature of authorized person

David Roseberry Printed name of authorized person February 8, 2013 Date of issue

Director of Engineering

Title

February 6, 2018 Date of revision