**FSW-140 Series**  
**Plastic Flow Switch**

**Installation:** All NPT threads should be installed using a suitable thread sealant (Teflon tape or Permatex "No more Leaks"). Sealant must be kept out of unit during installation.

FSW-140 Flow Switches Can be Mounted In Various Positions  
Flow settings are based on a vertical position (inlet port down), using water at +70°F on increasing flow. Slight variation in set point actuation will occur in other mounting orientations.

### Switch Ratings
- Contact rating: 10W  
- Switching Voltage (DC or AC Peak): 200 Max.  
- Switching Current (DC or AC): 0.4 A Max.  
- Carry Current (DC or AC): 0.4 A Max.  
- Break down Voltage: 230 VDC Min.

### Specifications

<table>
<thead>
<tr>
<th>Wetted Parts</th>
<th>Hydrolytically Stable Glass Reinforced Polypropylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing, End Fitting</td>
<td>PPS Composite</td>
</tr>
<tr>
<td>Piston</td>
<td>316 Stainless Steel</td>
</tr>
<tr>
<td>Spring</td>
<td>Fluorocarbon</td>
</tr>
<tr>
<td>O-ring</td>
<td>100 Micron or better</td>
</tr>
<tr>
<td>Operating Pressure</td>
<td>200 psi at 70°F, 100 PSI at 212°F</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20° to +212°F (100°C)</td>
</tr>
<tr>
<td>Filter</td>
<td>100 Micron or better</td>
</tr>
<tr>
<td>Set Point Accuracy</td>
<td>20%, Maximum</td>
</tr>
<tr>
<td>Set Point Differential</td>
<td>20%, Maximum</td>
</tr>
<tr>
<td>Switch</td>
<td>SPST, 10 VA (See &quot;Switch Ratings&quot;)</td>
</tr>
<tr>
<td>Inlet/Outlet</td>
<td>3/8” NPT Male or Quick Connect</td>
</tr>
<tr>
<td>Electrical Termination</td>
<td>No. 24 AWG, 24” to 26” Polymeric Leads</td>
</tr>
</tbody>
</table>

**Important Points:** Omega products must be maintained and installed in strict accordance with the National Electrical Code and the applicable Omega product instruction Bulletin that covers installation, operation and proper maintenance. Failure to observe this information may result in serious injury or damages.

For hazardous area applications involving such things as, but not limited to, ignitable mixtures, combustible dust and flammable materials, use an appropriate explosionproof enclosure or intrinsically safe interface device. Please adhere to the pressure and temperature limitations shown throughout this catalog for our level and flow sensors. These limitations must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/temperatures and their frequencies.

Selection of materials for compatibility with the media is critical to the life and operation of Omega products. Take care in the proper selection of materials of construction, testing is required.

Stainless steel is generally regarded as safe by NSF and FDA.

Life expectancy of switch contacts varies with application. Ambient temperature changes do affect switch set points, since the gravity of a liquid can vary with temperature.

Our sensors have been designed to resist shock and vibration. However, shock and vibration should be minimized.

Filter liquid media containing particulate and/or debris to ensure the proper operation of our products.

Electrical entries and mounting points in an enclosed tank may require liquid/vapor sealing.

Our sensors must not be field-repaired.

Physical damage sustained by product may render it unserviceable.
OMEGA Engineering, Inc. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA’s WARRANTY extends an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA’s Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA’s WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY IS VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and tracings.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of the parties set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used, (1) as a “Basic Component” under 10 CFR 21 (NRC), used in or with any nuclear installation or activity, or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or measured in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA’S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

OMEBA’s policy is to make running changes, not modal changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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This page contains information related to the warranty and return policy of OMEGA Engineering, Inc. It is important to follow these guidelines to ensure proper handling and repair of products. Any questions or concerns should be directed to the OMEGA Customer Service Department.

For warranty returns, the following information is required:
1. Purchase Order number under which the product was purchased.
2. Model and serial number of the product under warranty.
3. Repair instructions and/or specific problems relative to the product.

For non-warranty repairs, consult OMEGA for current repair charges. Have the following information available before contacting OMEGA:
1. Purchase Order number to cover the cost of the repair.
2. Model and serial number of the product.
3. Repair instructions and/or specific problems relative to the product.

The process involves obtaining a return authorization number (AR number) from OMEGA’s Customer Service Department to avoid processing delays. The AR number should be marked on the outside of the return package and any correspondence.