

**1 YEAR**  
WARRANTY

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## **FSW-25 Paddle Type Liquid Flow Switch**



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# ***FLOW SWITCH***

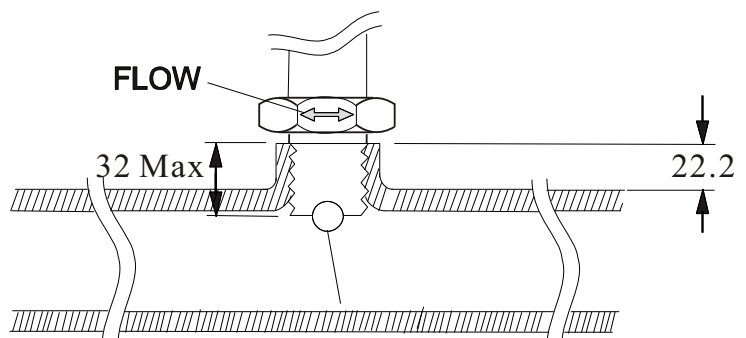
## ***Operation Manual***

### **INSTALLATION**

1. Paddle length established approximate actuation setting  
Of a Flow Switch unit. Paddle length is decided according to the lowest point of paddle while actuating the reed switch and the diameter of the pipe. Cut off the paddle at proper pipe size mark or wherever desired but not less than 1" left.
  2. The paddle must be parallel to the cutting face of a pipe and the mounting screw is 1" PT or 1" NPT.
  3. The FLOW mark on the screw hexagon must be parallel to the pipe and the Ground.
  4. Before installing the unit to a tee pipe, be sure to apply tape seal to the screw  
Then tighten up.
- ★ It is not recommended for plastic pipe use.

### **CAUTION**

1. The pressure and temperature ranges as shown in the catalog, must not be exceeded and also take the abrupt pressure and temperature into considerations.
2. Operating temperature changes do affect switch set points. In case of the liquid temperature would vary with the specific gravity changes during processing, please contact us for assistance.
3. The flow switch is designed for shock and vibration resistance. However, shock and vibration should be as minimized as possible.
4. Excessive contamination in fluid might inhibit paddle operation, occasional wipedown would be necessary.
5. Electrical entry and mounting require sealing from moisture.



# ***Trim To Size Paddle Type Liquid Flow Switch***

## Standard Actuation and De-Actuation Setpoints

Pipe Line Size												
	1"	1 ¼"	1 ½"	2"	2 ½"	3"						
Approximate Actuation and De-Actuation Flow Rates–GPM Water												
Paddle Length	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.	Act.	De-Act.
1	5	4	8.5	6.5	12	9	17	15				
1 ¼			6.5	4.5	9	7	15	12	23	20		
1 ½					14	10	23	16	32	25		
2							18	12	24	17	33	27
2 ½									20	13	27	22
3											22	16

Model No.	Description
FSW-25	Paddle flow switch with head and 1" PT threads
FSW-25-NPT	Paddle flow switch with head and 1 NPT threads

## WARRANTY/DISCLAIMER

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 adds 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 triacs.

**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 purchaser 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 misused 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.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

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.

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, and
3. Repair instructions and/or specific problems relative to the product.

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

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