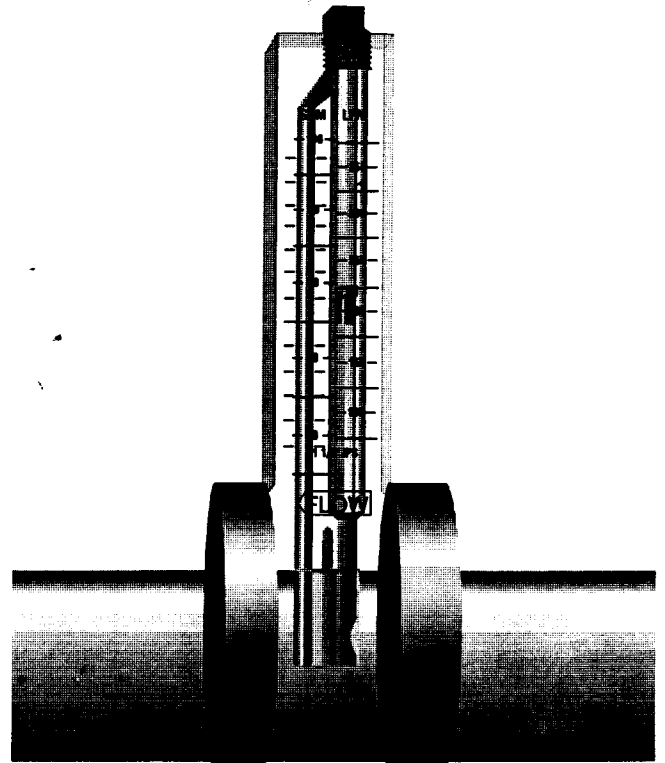


® FL-30000 Series

® Closed Pipe System Water Measurement Flowmeter



Operator's Manual

Unpacking information

Remove the Packing List and verify that you have received all equipment, including the following (quantities in parentheses):

- FL-30000 Series Flowmeter (1)
- Rubber Gasket (1)
- Stainless Steel Clamps (2)
- Operator's Manual (1)

If you have any questions about the shipment, please call the OMEGA Customer Service Department.

When you receive the shipment, inspect the container and equipment for signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

NOTE

The carrier will not honor damage claims unless all shipping material is saved for inspection. After examining and removing contents, save packing material and carton in the event reshipment is necessary.

Description

FL-30000 Series Flowmeters use a pitot tube pickup and a hardedged float design to provide a convenient and economical means of measuring water flow in a closed-pipe system. A one-piece, impact-resistant machined acrylic body offers the strength and long service required in most commercial and industrial applications. The low flow rate models are ideal for applications where flow rates are typically low, and such as in solar-heated pools and spas, electronics and irrigation.

Available Models

Part Number	GPM	LPM	Pipe Size
FL-30001	5-40	20-150	1"
FL-30002	20-100	75-375	1 1/2"
FL-30003	8-30	30-110	1 1/2"
FL-30004	40-150	150-550	2"
FL-30005	15-70	60-260	2"
FL-30006	60-240	250-900	2 1/2"
FL-30007	80-300	300-1125	3"
FL-30008	40-140	160-520	3"
FL-30009	125-500	500-2000	4"
FL-30010	250-1050	900-3900	6"
FL-30011	500-1900	1800-7200	8"

To use flowmeter for copper tube applications, add suffix "-T" to the part number.
All models have scales on both sides.

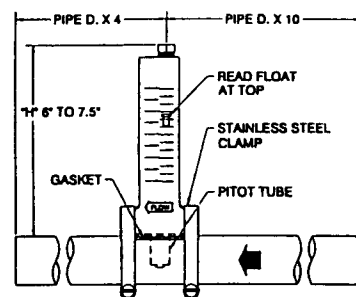
Locating the Flowmeter

Install the flowmeters with at least the minimum dimensions called for in the installation drawing.

For all units except the FL-30010 and the FL-30011 flowmeters, drill a 5/8" to 11/16" diameter hole at the top of the pipe. For the FL-30010 and the FL-30011 flowmeters, drill a 3/4" or 11/16" hole. Carefully remove all burrs. Use a drill guide fixture.

Insert the pitot tube, with a gasket in place, into the drilled pipe. Tighten the clamps alternately, a little at a time. Make certain the flow direction is towards the pitot tube opening.

INSTALLATION DRAWING



Typical Installation

Maintenance

Little flowmeter maintenance is required. Should the meter fail to read, make certain:

- that the pitot tube opening is unobstructed,
- that the pitot tube opening faces in the directions of the flow,
- that you have installed the meter on the correct type and size of pipe.

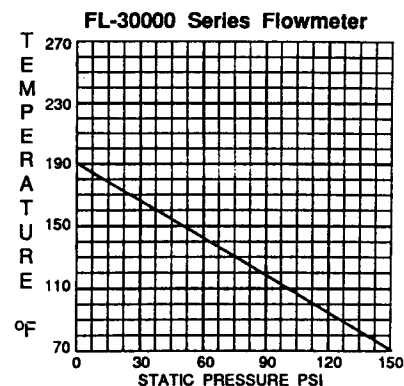
Use mild soap on the outside of the flowmeter.

WARNING

If the pressure is turned on when the cap is off, you will lose the float. Be careful of your eyes. Floats are not sold as spare parts.

Specifications

Accuracy:	±10% of full scale
Meter Body Construction:	Acrylic
Temperature Limit:	88°C (190°F)
Pressure Limit:	150 PSI
Pressure Drop:	0 PSI
Capacity:	2 to 1900 GPM
Mounting:	Horizontal Pipe
Piping Connection:	1" to 8" pipe or copper tube, depending on the model ordered
Shipping Weight:	0.45 kg (1 lb)



Maximum Temperature 190°F

Maximum Pressure 150 PSI



Servicing USA and Canada: Call OMEGA Toll Free

USA

One Omega Drive, Box 4047
Stamford, CT 06907-0047
Telephone: (203) 359-1660
FAX: (203) 359-7700

Canada

976 Bergar
Laval (Quebec) H7L 5A1
Telephone: (514) 856-6928
FAX: (514) 856-6886

Sales Service: 1-800-826-6342 / 1-800-TC-OMEGASM
Customer Service: 1-800-622-2378 / 1-800-622-BESTSM
Engineering Service: 1-800-872-9436 / 1-800-USA-WHENSM
TELEX: 996404 EASYLINK: 62968934 CABLE: OMEGA

Servicing Europe: United Kingdom Sales and Distribution Center

25 Swannington Road, Broughton Astley, Leicestershire
LE9 6TU, England
Telephone: 44 (1455) 285520 FAX: 44 (1455) 283912



WARRANTY

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of **13 months** from date of purchase. OMEGA 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 should malfunction, 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. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being 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 which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

OMEGA is glad to offer suggestions on the use of its various products. Nevertheless, OMEGA only warrants that the parts manufactured by it 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.

Every precaution for accuracy has been taken in the preparation of this manual; however, OMEGA ENGINEERING, INC. neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the products in accordance with the information contained in the manual.

SPECIAL CONDITION: Should this equipment be used in or with any nuclear installation or activity, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING 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. P.O. 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 OR **CALIBRATION**, consult OMEGA for current repair/calibration charges. Have the following information available BEFORE contacting OMEGA:

1. P.O. number to cover the COST of the repair/calibration,
2. Model and serial number of 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.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 1995 OMEGA ENGINEERING, INC. All rights reserved. This documentation may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of OMEGA ENGINEERING, INC.

M2063/0595

CJS0595MAJ2B