



FL-2071 – FL-2128
FLOWMETERS



M3232 / 0505

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INSTALLATION & OPERATION INSTRUCTIONS

FL-2000 Series acrylic block flowmeters are available in various ranges in both SAE and SI units for air and water (see chart on other side). These direct reading meters are also available for other gases and liquids. If the meter will be used with fluids other than air or water, please consult chemical compatibility data for possible effects on the meter. When properly installed and maintained, these durable acrylic meters will provide years of trouble-free operation.

ACHIEVING ACCURATE FLOWRATES

To obtain an accurate flowrate, the float must be read at the position indicated on the meter. Additionally, the flowmeter should be installed in a manner, which minimizes both external vibrations and internal flow variations. Special care should be taken so that the connections to the meter's inlet and outlet fittings do not overly restrict the liquid or gas flow being metered. This could result in a reduced flow volume, preventing the meter from reaching its maximum flowrate. Furthermore, internal pressures could be affected, which can cause inaccurate flow readings. On start-up, slowly purge any fluid trapped in the meter.

SPECIFICATIONS	
ACCURACY:	± 2% Full Scale
FLOATS:	Stainless Steel
WETTED METAL PARTS:	Stainless Steel
METER BODY:	Clear Acrylic
FITTINGS:	1" FNPT PVC Fittings
ELASTOMERS:	Buna-N
MOUNTING INSERTS:	10-32 UNF
MAXIMUM TEMPERATURE:	150°F (65 °C)
MAXIMUM PRESSURE:	100 PSI (690 kPa)

INSTALLATION

These meters are supplied with round 1" FNPT inlet and outlet fittings. When installing the meter, securely hold the meter's fittings from rotating while connecting the flow lines. (Use pipe thread sealant or Teflon® tape to achieve a positive seal when connecting the flowmeter.) **Failure to hold the meter fittings or over-tightening may cause damage to the fitting, flowmeter or both; which will result in leaks or meter failure.** The meter is supplied with #10-32 threaded inserts for mounting. When installing, use slotted screws and torque to a maximum of 35 in-lbs. Mounting dimensions are shown in the figure on the reverse side.

UNPACKING

Precautions have been taken to prevent any damage from occurring during shipment. However, if the meter is received damaged, *report it to the carrier immediately.* Before installing, verify that you have the model and flow range required.

CAUTION

THIS FLOWMETER IS DESIGNED FOR USE WITH NON-HAZARDOUS FLUIDS AT PRESSURES UP TO 100 PSI (690 kPa) AND TEMPERATURES UP TO 150 °F (65 °C). DO NOT USE HAZARDOUS FLUIDS AND DO NOT EXCEED TEMPERATURE OR PRESSURE LIMITS. USE WITH HAZARDOUS FLUIDS OR EXCEEDING THE PRESSURE AND TEMPERATURE LIMITS MAY CAUSE FAILURE WHICH COULD RESULT IN INJURY.



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WARNING: These products are not designed for use in, and should not be used for, human applications.

WARRANTY**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 mis-handling, 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.

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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.

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