



FL46300 Series

IN-LINE FLOW METERS

INSTRUCTION SHEET

M3584/0119

The FL46300 Series of in-line flow meters offers individual, handmade quality, combined with excellent accuracy and repeatability.

These flow meters are machined of high Quality acrylic rod stock, carefully Polished to a clear-as-glass finish. Easy To read scales are screen printed on the Meter body. Adapters are glass filled Polypropylene, and O-ring seals are FKM.

SPECIFICATIONS

Accuracy: ±5%

Meter Construction: Acrylic body

O-ring Material: FKM

Float: 316SS (PVC for FL46301 and FL46302) *The lower GPM scale ranges (.025-.250 and .1-1.0) are not available with SS floats.*

Temperature Limit: 65°C (150°F) at 0 psig

Pressure Limit: 150 psig at 21°C (70°F)

Pressure Drop: 2.0 psi max.

Dimensions: FL46301-06:208 H x 32 Mm D (8-3/16 x 1-1/4"); FL46307-09: 279 H x 32mm D (11 x 1-1/4")
Weight: 680 g (1.5 lb)

INSTALLATION

- ✓ Always use Teflon® tape or similar material on pipe threads when making connections. Never use oil base pipe dopes or solvents.
- ✓ Remember you are installing an Instrument and fittings should be tightened only enough to prevent leaking. Over tightening may result in damage to the meter.
- ✓ Never hold the meter with pliers or like tools during installation.
- ✓ Install the meter in an exactly vertical plane to obtain the best possible reading.
- ✓ Whatever the installation circumstances, meter should never be allowed to support the weight of The related pipe or tubing.

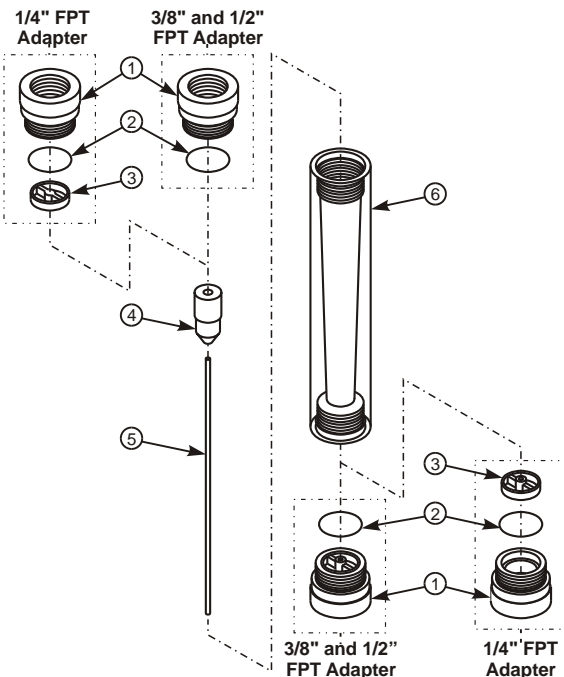
- ✓ When installing the FL46300 series meters, be certain of proper pipe alignment, misalignment will put excessive stress on the meter.

MAINTENANCE

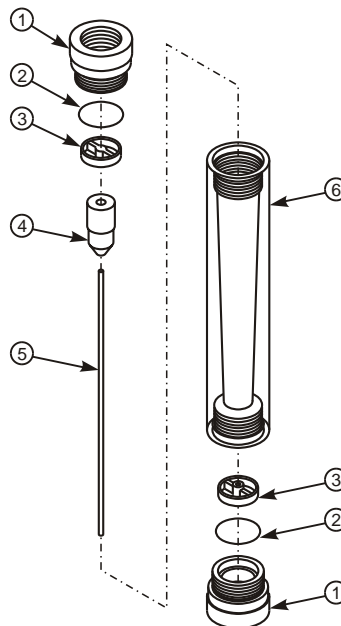
The "Exploded View" drawings illustrate assembly of the FL46300 series meters. If your flow meter needs to be cleaned, refer to these drawing when reassembling the unit. The tapered tube may be cleaned with a soft bottle brush. Use a **MILD** soap and water solution for cleaning purpose.



1/4", 3/8" and 1/2" FPT



3/4" and 1" FPT



Parts

1. Adapters (2)
2. "O" Ring Seal (2)
3. Wire Holder (2)*
4. Float (1)*
5. Guide Wire (1)
6. Meter Body (1)*

*Parts not available need to buy a new unit.

Teflon® is a registered Trademark of DuPont.



omega.com info@omega.com

Servicing North America:

U.S.A. Headquarters:

Omega Engineering, Inc.
800 Connecticut Ave. Suite 5N01, Norwalk, CT. 06854
Toll-Free: 1-800-826-6342 (USA & Canada only)
Customer Service: 1-800-622-2378 (USA & Canada only)
Engineering Service: 1-800-872-9436 (USA & Canada only)
Tel: (203) 359-1660 Fax: (203) 359-7700
e-mail: info@omega.com

For Other Locations Visit omega.com/worldwide

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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. OMEGA is a trademark of OMEGA ENGINEERING, INC.

© Copyright 2019 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.