

# User's Guide



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## **FTB4700 SERIES**

### **Low Flow Meter**



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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.

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

# FTB4700 SERIES Low Flow Meter

## FEATURES

- Single-jet meter
- Compact brass body
- Union couplings
- Easy installation and maintenance
- Interfaces with many controls and displays

## APPLICATIONS

- Industrial control operations
- Low flow situations
- Clean water



## GENERAL INFORMATION

The FTB4700 is a plated brass low flow meter suited for clean water. It is available in 1/2" and 3/4" thread, with union-type meter couplings for easy installation and service. This meter is ideal for flow rates between 0.2 and 18 GPM. The FTB4700 has only one moving part, the propeller.

A 5-30 Vdc square wave output makes the FTB4700 ideal for many industrial control applications. This signal interfaces easily with programmable logic controllers and computer input boards. For metering pump pacing applications, a standard pulse divider is recommended.

## SPECIFICATIONS\*

<b>Sensor</b>	GMR 5-30 Vdc current sinking pulse	
<b>Fittings</b>	1/2", 3/4" male NPT union couplings	
<b>Materials</b>	<b>Body</b>	Nickel-plated brass
	<b>Rotor Chamber</b>	Brass
	<b>Rotor</b>	Thermoplastic
	<b>Shaft</b>	Tungsten carbide
	<b>Bearings</b>	Water-cooled thermoplastic
<b>Maximum Temperature</b>	185° F (85° C)	
<b>Maximum Pressure</b>	175 psi (12 bar)	
<b>Cable</b>	#22 AWG 3-cond, 12' Maximum run 2,000' (610 m)	
<b>Flow Range</b>	1/2": 0.2 - 10 gallons per minute	
	3/4": 0.2 - 18 gallons per minute	
<b>Standard K-Factor</b>	1/2": 550 pulses per gallon	
	3/4": 330 pulses per gallon	
<b>Accuracy</b>	+/- 1% of full scale	
<b>Regulatory</b>	CE Mark	

\*Specifications subject to change.

# FTB4700 SERIES Low Flow Meter

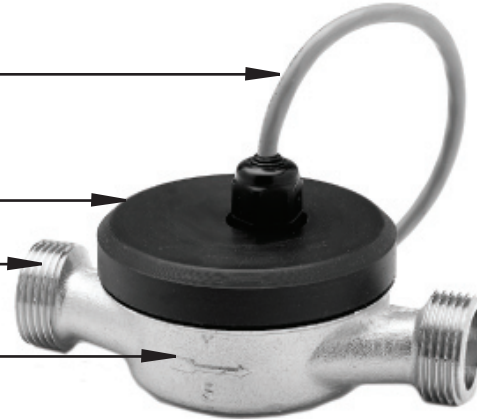
## FEATURES

Hall-effect 12 Vdc signal interfaces  
with a variety of electronics

Removeable top contains electronics,  
isolated from fluid

Union ends with couplings  
Easy installation and service

Compact nickel-plated body

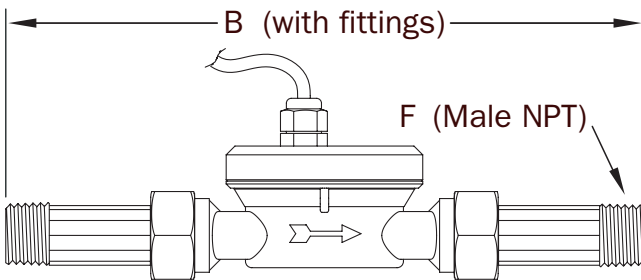
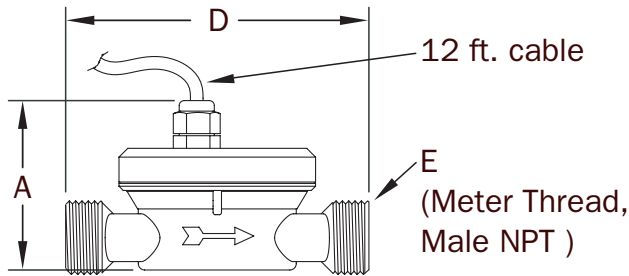


## INSTALLATION and MAINTENANCE

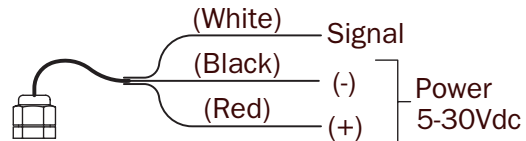
**Installation.** Single-jet meters like the FTB4700 are somewhat insensitive to upstream and downstream flow conditions. For best results, however, upstream and downstream straight pipe of five pipe diameters is recommended.

**Maintenance.** The FTB4700's Hall-effect sensor and cap are field-replaceable.

## DIMENSIONS



## SENSOR CONNECTION



Dim.	1/2 Inch	3/4 Inch
A	2.5	2.5
B	9.2	10.4
C	2.8	2.8
D	4.35	5.1
E	3/4 in. BSP	1 in. BSP
F	1/2 NPT	3/4 NPT

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## 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.

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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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