# TS Series Tri-Clamp Turbine Flow Meter

### Common Uses

The TS Series Tri-Clamp turbine flow meters are specifically designed for industries where regulations are in place requiring flow meters to meet accuracy requirments and allow for ease of maintenance, cleaning, and installation.

Typical industries include:

- · Food & Beverage
- · Brewing & Distilling
- · Pharmaceutical Processing
- Cosmetics



# **Technical Specifications**

| General Meter Data          |  |
|-----------------------------|--|
| 6 Flow Ranges               | .75 up to 600 GPM (over entire product series - see page 2 for meter data by size) |
| Measuring Accuracy          | ±0.5% over standard range  |
| Repeatability               | ±0.1% over standard range  |
| Max. Operating Pressure     | 1300 (see page 2 for meter data by size)   |
| End Connections             | Sanitary Tri-clamp   |
| Turndown                    | 10:1   |
| Operating Temperature Range | -100°F to 450°F (consult factory for other options)                                |

## Meter Materials of Construction

| Body     | 316 stainless steel                 |
|----------|-------------------------------------|
| Rotor    | 17-4 PH Stainless Steel             |
| Bearings | Hard Carbon Composite or Rulon® 123 |



Products may be subject to change without notice - Contact factory for the most up-to-date product information.



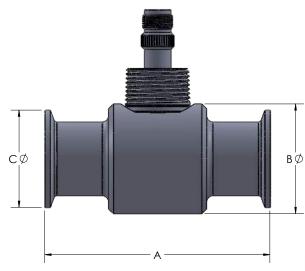
# TS Series Tri-Clamp Turbine Flow Meter

## Meter Data - Sizes

| Part Number | Port Size & Type | Flow Range (GPM) | Flow Range (LPM) | K-Factor | Pressure Rating (PSI) | Filtration (Mesh) | Weight (Lbs) |
|-------------|------------------|------------------|------------------|----------|-----------------------|-------------------|--------------|
| TS-1.5-7.5  | 1-1/2" Sanitary  | 0.75-7.5         | 2.84-28.39       | 11,500   | 1000                  | 60x60             | 8            |
| TS-1.5-50   | 1-1/2" Sanitary  | 5-50             | 18.93-189.93     | 950      | 1000                  | 60x60             | 8            |
| TS-1.5-180  | 1-1/2" Sanitary  | 15-180           | 56.8-681.3       | 325      | 990                   | 20x20             | 7            |
| TS-2-180    | 2" Sanitary      | 15-180           | 56.8-681.3       | 325      | 1300                  | 20x20             | 7            |
| TS-2.5-400  | 2-1/2" Sanitary  | 40-400           | 151-1514         | 46       | 200                   | 20x20             | 7            |
| TS-3-600    | 3" Sanitary      | 60-600           | 227-2270         | 50       | 1000                  | 8x8               | 12           |

## Meter Dimensions





| Part Number | A (OAL) | B (OD) | C (Flange Dia.) | D (Inlet Dia.) |
|-------------|---------|--------|-----------------|----------------|
| TS-1.5-7.5  | 4"      | 2.45"  | 1.98"           | 1.37"          |
| TS-1.5-50   | 5"      | 2.45"  | 1.98"           | 1.37"          |
| TS-1.5-180  | 6"      | 2.45"  | 1.98"           | 1.37"          |
| TS-2-180    | 6"      | 2.4"   | 2.52"           | 1.37"          |
| TS-2.5-400  | 6"      | 2.5"   | 3.05"           | 2.065"         |
| TS-3-600    | 9.8"    | 3.75"  | 3.58"           | 3.06"          |



# **Compatible Electronics**

| Standard (included) | Pulse output  |
|---------------------|---|
| EDGE Sensor         | Pulse, analog, or Modbus outputs                      |
| Digital Display     | EX rated, flow rate & total, analog and pulse outputs |

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#### End-of-Life Disposal:

At the end of its service life, this product and its associated electronics should **not be discarded with municipal solid waste.** We strongly recommend recycling the unit in accordance with **all applicable local, state, and federal regulations.** Electronic components may qualify as universal waste and should be handled through an appropriate recycling or collection program. Responsible recycling supports our commitment to environmental stewardship under **ISO 14001.** 



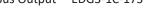
# HM-U Hydraulic System Turbine Flow Meter

## Recommended Sensor

AW-Lake offers a wide selection of Sensors/Pickups and Monitors/Controllers to optimize flow measurement and deliver your flow data where you need it and in the format you need it.

#### **HM-U Standard Sensor: EDGE Sensor**

| Output  | Part Number |  |
|---|-------------|--|
| Pulse Output  | EDG3-1A-17S |  |
| Analog Output   | EDG3-1B-17S |  |
| Modbus Output   | EDG3-1C-17S |  |
| * Consult factory for high temp (over 185°) pickup options. |             |  |





for Intrinsically Safe, High Temperature, Local or Remote Displays, or other sensor options.

Visit AW-Lake.com for more information.

| EDGE Sensor Data           |  |
|----------------------------|--|
| Supply Voltage Range       | 2 4VDC ±10%; max. current draw 40-100mA (model-specific, contact factory)              |
| Analog Output Options      | Default: 4-20mA & 0-10V; Available through PC Toolkit or mobile app: 0-5V, 1-5V, 2-10V |
| Standard Max. Cultrat      | ±2.5% of max scaling (20.5mA/5.125V/10.25V)  |
| Error Indication           | ±10% of max scaling (22mA/5.5V/11V)  |
| Analog 1. Itput Resolution | 16 bit   |
| Analog Output Update Time  | 100 mSec minimum   |
| Pulse/Frequency Output     | Default: Push/Pull output  |
|                            | Optional: Sinking or Sourcing  |
|                            | Easy setup through PC Toolkit  |
| Close Proximity Wireless   | Contains BT Transmitter Module (FCC ID: 12208A-01)                                     |

### AW-Lake Mobile Toolkit

Monitor your flow from your phone and complete all setup of the EDGE Sensor quickly using AW-Lake Mobile Toolkit App using the below QR code:









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