

digital YEWFLO

Vortex Flowmeters



Bulletin 01F06A01-02E-A

www.yokogawa.com/us/

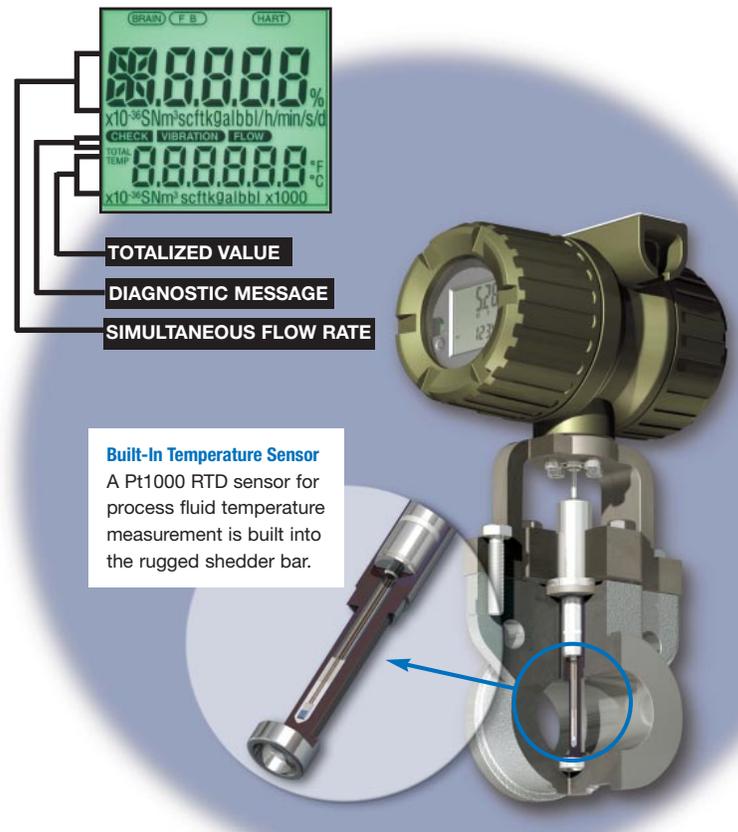
vigilantplant.[®]
The clear path to operational excellence

YOKOGAWA 

With the multivariable option, an integral temperature sensor extends the application of digitalYEWFLO to include mass flow of saturated steam based on steam tables embedded in the software and the mass flow of liquids based on programmed fluid temperature coefficients. The measured temperature can be displayed on the two-line LCD indicator and is also available as an analog output for process temperature management.

With improved resistance to vibration, enhanced output stability at low flow rates, and built-in temperature measurement, digitalYEWFLO with the multivariable option will provide close tracking of sudden and large fluctuations in flow and temperature to maintain precise measurement at all times.

- Provides simultaneous outputs for temperature monitoring and mass flow measurement
- Eliminates the need for separate components and associated installation costs
- Computes mass flow rate in real time based on the measured temperature
- Displays mass flow rate and temperature on two-line LCD indicator



digital YEWFLO family



Hi-Purity

Hi-Purity digitalYEWFLO meets the standards set forth in ASTM G93-6 Level B and ANSI B40.1 Level IV. Electropolished to a 15Ra or better finish and double bagged, the Hi-Purity digitalYEWFLO accurately measures critical high purity steam, water, and gas applications.

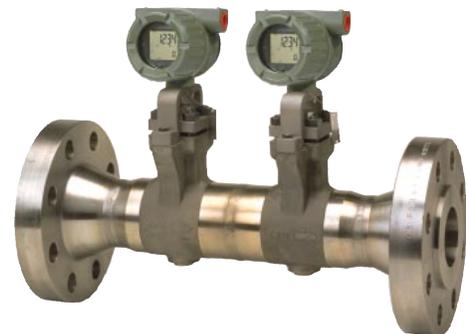


Hi-Pressure

Hi-Pressure digitalYEWFLO is designed to take your toughest high-pressure steam and water applications. The Hi-Pressure digitalYEWFLO is available with ANSI 900, 1500, and 2500# flange connections. Quality, dependability, and now pressure ratings to 5000 PSI!

Dual Sensor Design

When your application requires the highest safeguards for personnel and process, the digitalYEWFLO dual sensor design offers total redundancy and is available in a broad range of sizes and pressure ratings.



YOKOGAWA 

Subject to change without notice.
All rights reserved. Copyright © 2006, by Yokogawa Corporation of America

Yokogawa Corporation of America
2 Dart Road, Newnan, GA 30265-1094, USA
<http://www.yokogawa.com/us/>

Represented by:

digital YEWFLO

Based on the field-proven sensor technology of the YEWFLO series of vortex flowmeters, digitalYEWFLO offers a unique signal processing technique that extends the features of standard Digital Signal Processing (DSP). The advanced processing algorithms are known as Spectral Signal Processing (SSP). SSP analyzes the vortex waveform into its spectral components to filter noise from signal for the most stable measurement possible. The new digitalYEWFLO will provide stable, accurate measurements at low flows even in noisy environments without any need for start-up tuning. The user benefits through greater reliability, reduced maintenance, and a lower total cost of ownership.

DigitalYEWFLO is available in integral or remote configurations, with flanged or wafer connections in line sizes from 0.5 to 16.0 inches, and can be applied in liquid, gas, and steam applications.

More than just Digital Signal Processing...

Yokogawa's YEWFLO vortex flowmeter has employed a dual piezoelectric crystal sensor in a passive noise cancellation circuit for over 20 years. Now, with DSP technology and Yokogawa's SSP algorithms, the information from this rugged dual sensor can further simplify startup and improve measurement performance by employing

Adaptive Noise Suppression (ANS). With the information available from a second sensor, the ANS algorithm maximizes the signal-to-noise ratio. The ANS computation is executed continuously to dramatically and dynamically reduce the noise component of the flow signal. Continuously adapting to changing noise conditions eliminates the need for start up adjustment or readjustment.

No start-up tuning

Automatically selects the optimum settings – even in noisy environments

Low flow stability

Accurately senses vortices at low flow rates for stable, accurate flow measurements

Backward compatible

The SSP amplifier can be retrofitted to provide the best vortex flow measurement available today

Advanced self-diagnostics

Provides diagnostic messages on high vibration environments, excessive flow fluctuations, and clogging or plugging in the area around the shedder bar. Analysis of the process allows true condition-based maintenance

Simplified parameter settings

Frequently used parameters grouped together in a quick-access format decreases commissioning time

Clear, parallel two-line LCD display

Displays simultaneous flow rate and total along with process diagnosis

New compact amplifier housing

Lighter, small and easier-to-handle design with increased reliability and performance

Simultaneous analog and pulse outputs

4-20mA signal for recording and control of flow and a pulse signal for totalizing and batching



digital YEWFLO Reduced Bore Vortex Flowmeter

The Reduced Bore digital YEWFLO meter was designed to capture the low flow applications without the need to install concentric reducers. It is very common in vortex meter applications to use a smaller meter compared to the line size. This requires the installation of concentric reducers along with the correct amount of upstream and downstream meter run to ensure a proper flow profile into the meter. By utilizing built-in concentric reducers, we can reduce the meter ID by either one or two meter sizes. This feature allows you to install a line size meter, reducing installation cost, and measure your low flows expanding the range of applications.

The Reduced Bore digital YEWFLO Vortex Flowmeter features a cast stainless steel body with built-in concentric reducers that enable stable flow rate measurements at low-flow conditions.

Reduce two meter sizes

By utilizing built-in concentric reducers, we can reduce the meter ID by either one or two meter sizes.

Same face-to-face as standard meter

Allows you to change the meter size, if process conditions change, without the additional cost of changing the pipe.

Reduces installation cost

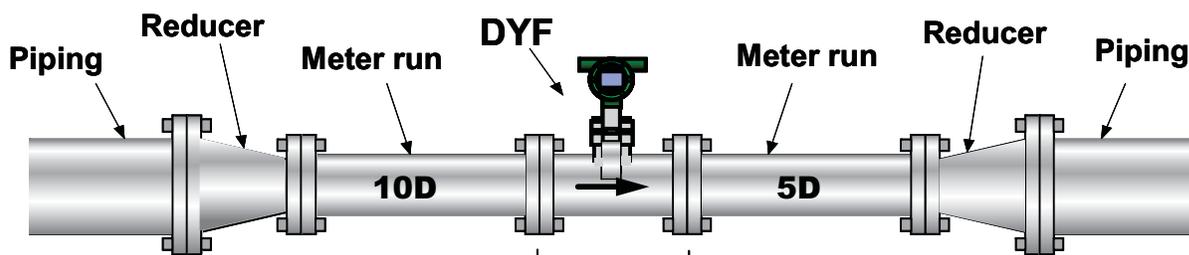
The Reduced Bore DY allows you to measure lower flow rates without the added cost of installing the appropriate meter run.

Expands the range of applications

Measure low flow rates with a line size meter.



Standard installation



Reduced Bore meter

