

The Thermo Scientific TX10 transit time flowmeter provides superior performance under the most demanding conditions. It features non-intrusive, clamp-on transducers that ensure leak-free measurement with zero pressure drop and install without flow interruption to eliminate downtime.

Thermo Scientific TX10

Time Transit Flowmeter



Features

- 9,000-point data logger
- Velocity range of ± 0 to 40 ft/s (± 0 to 12 m/s)
- Two-line, 20-character, high-resolution, backlit LCD
- RS232 digital communication interface
- Easy-to-install, clamp-on design
- Bi-directional flow measurement
- Thermo Scientific UltraScan interface software
- Set of standard transducers

Applications

- HVAC
- Ultrapure liquids
- Potable water
- Liquefied gases
- Petroleum products
- Water and wastewater management

The Thermo Scientific TX10 transit time flowmeter combines digital signal processing (DSP) with advanced digital correlation techniques to accurately measure flow variables, including velocity, flow rate and volumetric flow. This flexible instrument is an economical alternative to magnetic, vortex and differential pressure flow transmitters. Principally designed for clean liquid applications, the TX10 is tolerant of liquids with higher concentrations of gas bubbles or entrained solids than other transit time flowmeters. The non-intrusive, clamp-on transducers can be installed without flow interruption and ensure leak-free measurement with zero pressure drop.

The TX10 is housed in a rugged NEMA 4X enclosure and features a two-line, 20-character, high resolution, backlit LCD display for excellent visibility even in poorly lit conditions. Outputs include a 12-bit digital, optically-isolated, 4-20 mA analog signal and a Modbus communications port.

Programming of the flowmeter is simple and can be accomplished in minutes with Thermo Scientific UltraScan software, a Microsoft® Windows®-compatible configuration and signal analysis program. It features easy-to-use, pull-down menus and provides access to an extensive range of diagnostics information to quickly determine the quality and accuracy of the flow measurement.

“Hot Tap” Insertion Transducers

Ideal for water and wastewater applications, Thermo Scientific insertion transducers install easily on concrete pipes, heavily corroded steel pipes and pipes with considerable calcium buildup, using the standard “Hot Tap” process. Wetted materials include a brass seal housing, a stainless steel insertion stem and an Ultem® transducer facing. A double “O”-ring seal mechanism prevents leakage during insertion and extraction as well as during normal operation for optimal performance.

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Performance Specifications

Velocity Range	±0 to 15 m/s (±0 to 50 ft/s)
Accuracy	±1% of velocity or ±0.03 m/s (±0.1 ft/sec)
Pipe Size	25 mm to 5 m (1 in to 200 in)

Functional Specifications

Outputs	4-20 mA (into 1K to 5K Ohms), 12-bit, 5kV, opto-isolated; Loop or self-powered; Modbus; additional relay (optional)
Power Supply	85-265 VAC, 50/60 Hz (standard) 100-240 VAC, 50/60 Hz (FM certified) 10-32 VDC (optional)
Temperature Range	Standard transducers: process temperature, -40°C to +100°C (-40°F to +212°F) High temperature transducers: process temperature, -40°C to +200°C (-40°F to +392°F) Transmitters: ambient temperature, -20°C to +55°C (-4°F to +131°F)
Display	Two-line, 20-character, high-resolution, backlit LCD indicating flow rate, signal strength, total and other selectable parameters

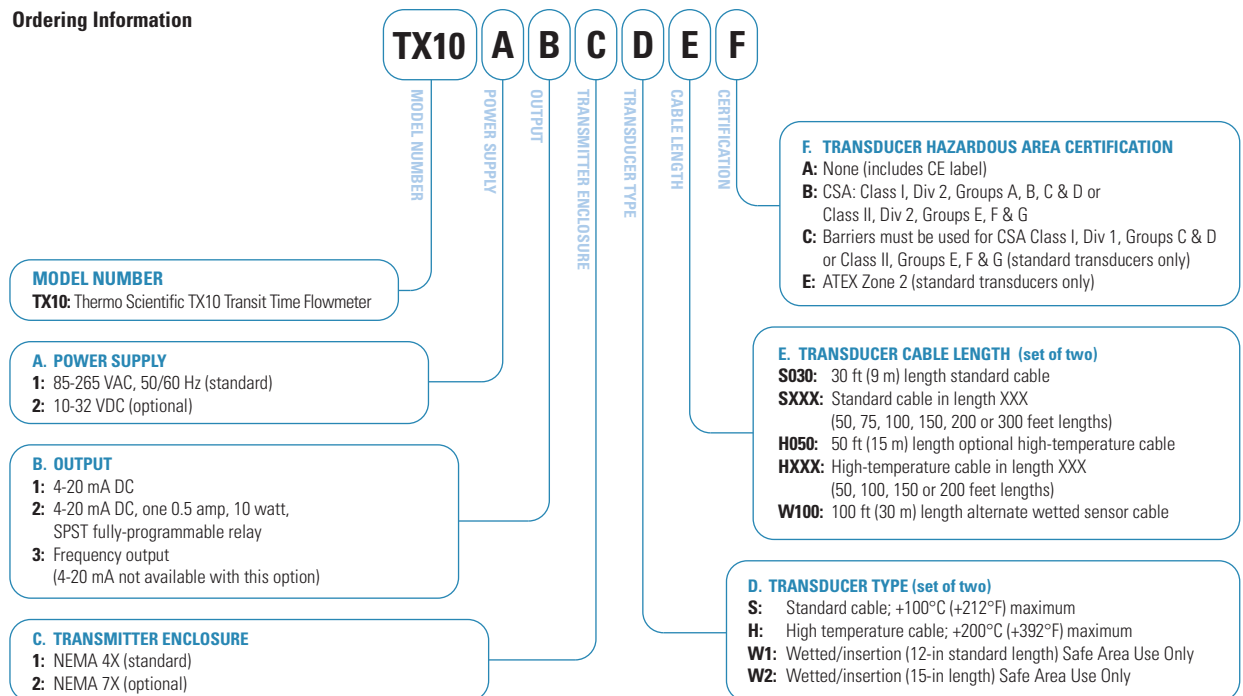
Physical Specifications

Transmitter	NEMA 4X (IP65), flame retardant, fiberglass-reinforced polyester
Transducers	Two encapsulated transducers; 30 ft. (9m) standard cable length
Weight (approx.)	3.2kg (7 lb) without options

Compliance

CSA	Class I, Div 1, Groups C & D; Class I, Div 2, Groups A, B, C & D; Class II, Div 1, Groups E, F & G (intrinsically safe barriers installed in transmitter); Class II, Div 2, Groups E, F & G
ATEX	Zone 2 (LCIE 03 ATEX 6539); Available with standard transducer configuration only

Ordering Information



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