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Cypress™ Ultrasonic Flowmeter

Ultrasonic flowmeters designed for speed and ease.



Cypress is a compact lightweight flowmeter with external power and communications for long-term flow monitoring. The Cypress Flowmeter connects with your mobile device via bluetooth or to the SoundWater Flow Computer. Either way, it works with your SCADA/PLC systems. It's a single piece ultrasonic flowmeter that installs on the outside of your pipe in a snap—and senses flow through the pipe wall.

Whether you're using your mobile device or the Flow Computer, the setup is easy to follow. Quick, simple installation—5 minutes from start to finish.



Fast to install, easy to use.

SoundWater Advantages

MEASUREMENTS YOU CAN TRUST

Our proprietary SoundWater
Reciprocity Architecture™ prevents
zero-flow drift and eliminates the need
for calibration, resulting in long-term
measurement stability and accuracy.

INCREASES PRODUCTIVITY

Featuring compact lightweight construction and intuitive apps—our products streamline installation, training, and setup—saving you time and money.

MADE IN USA

Locally owned and operated out of Wenatchee, Washington, our products are built with American quality and ingenuity.

WORKS IN TOUGH APPLICATIONS

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Our transducers auto-adjust ultrasonic power output depending upon pipe and fluid conditions—giving you more frequent measurements when things get tough (e.g., corroded pipe or murky fluid).

LONG LIFE / LOW MAINTENANCE

SoundWater products are built to last using the highest quality materials, gasketed & double O-ring seals, and silicone gel to protect electronics.

SERVICE & ACCOUNTABILITY

We establish long-term customer relationships based on trust and service. We will respond to your needs and requests within 24 hours.

Advantages & Features

- · Long-term flow monitoring
- Connects with your SCADA/PLC
- SoundWater Reciprocity Architecture
- Auto-Adjusting Ultrasonic Power

- Compatible with Mobile Orcas App or SoundWater Flow Computer; intuitive setup and use
- One-piece construction; no assembly
- Gel-free transducers (optional)
- Wireless design



SoundWater

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Orcas App Features

Interactive smartphone/tablet control app — iOS or Android.



Save location information



Handy built-in pipe specifications - or add your own



Drag and drop output selection



English or metric units



Languages: English, Spanish, **Portuguese**



Easy-to-use data logging



Select liner and liquid types — or define your own









Flow Computer Features

Interactive mounted screen for long-term flow monitoring.



Connects with one or two flowmeters



No contact with fluid



Calculate analytics from two flowmeters



Standard industrial outputs



Touchscreen and intuitive app



Install indoors our outdoors



May be installed long distances from flow sensor

Dimensions

Cypress Txxx-C5





Cypress Txxx-C11





Cypress Txxx-CM5



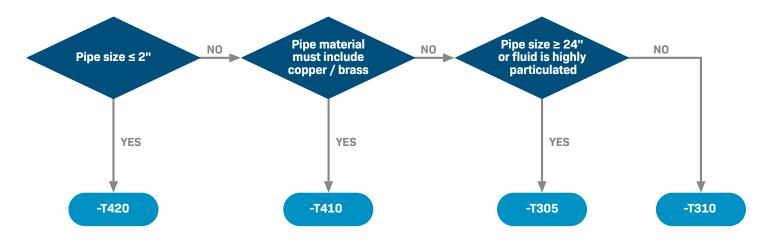
Cypress Txxx-CM11



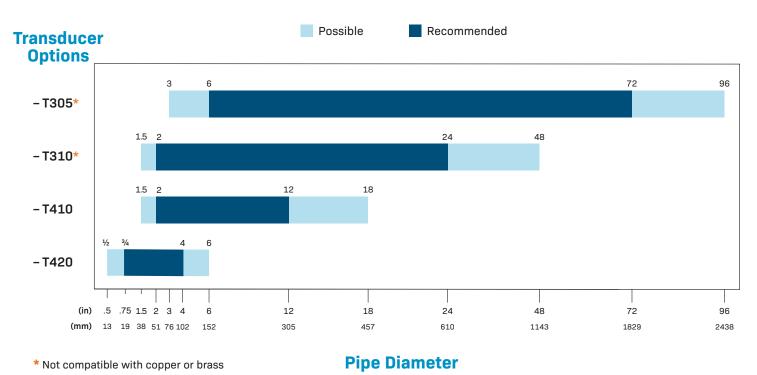
Direct Mount (Cypress CM)
Placement on Pipe



Transducer Selection



Transducer Selection Table



					Specifications subject to charge
Pipe Materials	Metal: Steel, Stainless Steel, Copper, Brass, Aluminum, Ductile Iron Plastic: PVC, CPVC, HDPE, LDPE, PE, PIP, FRP, PEX				
Installation	Installs on pipe from 0.75" to 72" nominal diameter depending on hardware selection 15 pipe diameters upstream, 5 diameters downstream for optimal performance (typical)				
Flow Detection Range	Bi-directional; 0 ft/s to 64 ft/s (0 m/s to 20 m/s)				
Performance	1" to 2" 0.75" to 1" *Under standard conditions, a 15 diameters upstream and 5	ACCURACY ±1.0% to 2.0% typical ±2.0% to 3.0% typical ±3.0% to 4.0% typical assuming fully developed and symmet 5 diameters downstream; flow rate ab		ove 3 ft/s or 1	le (typically taken on a straight run of
Outputs (OPTIONAL)	CURRENT (4-20 mA) Current proportional to flow; user programmable. PULSE NFET (NPN type) open drain output; frequency proportional to flow; user-programmable; Max 39,000 (Hz. MODBUS RTU RS485, user programmable port settings.				
Display	SoundWater Flow Computer (optional; wall mount display) SoundWater Orcas™ App (iOS or Android) connected wirelessly to Cypress with Bluetooth 4.0 (BT LE) Metric and English units; Rate, Total, Velocity, Sound Speed				
Data Logger	Store up to 365 days, 10,000 measurements, 50,000 datapoints				
Security	Six digit password protection restricts unauthorized users from accessing or changing flowmeter setup, data logger, and totalizer				
Software	Save and recall setup information Mobile app for iPhone, iPad, iPod Touch and Android devices LANGUAGES: English, Spanish, Portuguese (app only)				
Hardware	Cypress T420-C2 Cypress T420-CM5 Cypress T410-C5 Cypress T410-C11 Cypress T410-CM5 Cypress T310-C5 Cypress T310-C11 Cypress T310-CM5* Cypress T310-CM11* Cypress T305-CM5* Cypress T305-CM11* *High corrosion, large pipe of		12.0" 16.6" 16.6" 22.6" 16.6" 22.6" 16.6" 22.6" 16.6" 22.6" 16.6" 23-39"	Steels, Irc Steels, Irc Steels, Irc Steels, Irc Steels, Irc Steels, Irc Steels, Irc Steels, Irc Steels, Irc Steels, Irc	estics, Aluminum, FRP, Copper/Brass estics, Aluminum, FRP, Copper/Brass en, Plastics, Aluminum, FRP
Power	12-24 VDC external power for continuous use; 0.6 W Typical (100 mAmp max current)				
Turndown	200:1				
Environmental	Liquid/pipe temperature -40 $^{\circ}$ to 212 F (-40 $^{\circ}$ to 100 $^{\circ}$ C); Ambient temperature -40 $^{\circ}$ to 140 $^{\circ}$ F (-40 $^{\circ}$ to 60 $^{\circ}$ C) IP65 splash-proof and weather resistant				
Materials	BODY: Anodized aluminum channel, PVC electronics housing and footingsMOUNTING STRAPS: Stainless SteelFASTENERS: Stainless steelHARDWARE: Stainlesss steel, acetal, ultemCONNECTOR: M12, nickel plated brass				
Flowmeter Kit	Flowmeter, silicone based coupling gel, mounting straps, power-communication cable				
Manufacture	SoundWater Technologies, Wenatchee WA, USA				
Zero Stability	Reciprocity based hardware for measurement stability and low flow performance.				
Auto-Ranging	Auto-adjusting ultrasonic transducer power, and auto-adjusting transducer receiver gain. Maximizes usable signal and measurement quality.				
Technology	Transit Time Ultrasonic This device complies with Part 15 of FCC Rules and Industry Canac				
Regulatory Certificatio	ulatory Certification FC 📦 🗈 coop-access 🙆				standard(s). Operation is subject to the following two conditions: (1) this device may no cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Contains FCC ID:

MODEL: SWT ORCAS-01

