ROSEMOUNT™ T-200 GAS ULTRASONIC TRANSDUCER

New non-wetted design provides robust stable performance in all environments

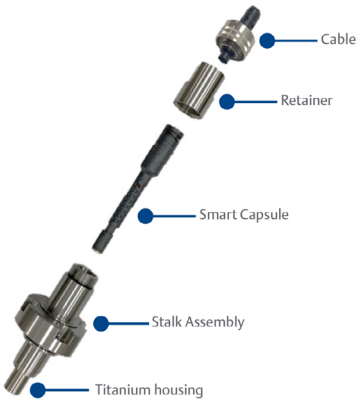
Robust, Reliable, Powerful

Designed for long-term reliability, Rosemount™ T-200 Transducers are titanium encapsulated and well-suited for even harsh process environments containing oil, wet gas and corrosive chemicals. This full metal design virtually eliminates the possibility of hydrocarbon corrosion and protects all transducer components for increased longevity and stability over time. Fully serviceable without depressurization of the line and without special tools, they will maximize operational uptime. The transducer smart capsule reduces parts and is easy to replace or rewet while gas is flowing.

The core of this high-performing technology is the innovative mini-horn array which mechanically amplifies the signal through the titanium barrier while remaining intrinsically safe, increasing overall signal strength and performance with minimal ringing or reverberation effects.

The T-200 transducers can be offered on all direct path meter models up to DN1050 (42" line size) and existing meters can be easily upgraded to enhance long-term performance and to extend the warranty of the meter. They are compatible with both Mark III and 3410 Electronics for 4-path or 8-path meters.

- **Non-wetted:** Full metal encapsulated smart capsule located outside the pressurized process, increasing tolerance to liquid borne dirt and corrosive fluids
- **Long-term reliability:** Isolated transducer design provides a barrier from corrosive hydrocarbon fluids and extends the life of transducer components
- **Extractable under pressure:** Innovative smart capsule is easily retractable without the need to depressurize the line or use of a high-pressure extraction tool
- **Higher temperature rating:** Allows for higher operating temperature and cleaning while inline
- **Retrofittable:** Easily upgrade existing meters with T-11/T12 or T-21/T-22 transducers2
- **Extended warranty:** 3 year warranty standard



T-200 Series Gas Ultrasonic Transducer

All new Rosemount 3414, 3417 and 3418 gas ultrasonic meters will be equipped with the T-200 ultrasonic transducers. Consult your Emerson Flow representative for details.

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ROSEMOUNT T-200 GAS ULTRASONIC TRANSDUCER

Technical Specifications

Product Compatibility	3414 DN100-DN1050 (4”– 42”), 3417 DN200-DN1050 (8”– 42”), 3418 DN250-DN1050 (10”– 42”)[1]
Electronics Compatibility	3410 Series electronics or gas 4-path models with Mark III electronics DN100 - DN1050 (4”– 42”)[1]
Materials of Construction	316/316L SS(optional Inconel) stalk assembly
Fluid Types	Hydrocarbons, industrial gases
Fluid Temperature	–50 °C to 125 °C (–58 °F to +257 °F)

Ordering Conversion Kits

Transducer conversion kits are available for 4-path, 4+4 path, and 8-path meters. The meter serial number will be needed to determine the conversion kit model string below. Please consult your Emerson Flow representative for assistance in selecting a conversion kit for your meter.

Converting to the T-200 Series Transducers

- 3414 DN100-DN1050 (4”– 42”), 3417 DN200-DN1050 (8”– 42”), or 3418 DN250-DN1050 (10”– 42”) meters using T-11/T-12 or T-21/T-22 series transducers as a complete meter upgrade
- Recalibration is recommended
- Required firmware and software
  - 3410 gas firmware 1.42 and later
  - Mark III gas firmware 1.82 and later
  - MeterLink 1.60 and later

Converting to the T-200 Series Transducers

Safety Classifications

Underwriters Laboratories (UL/cUL)
- Hazardous Locations – Class 1, Division 1, Groups C and D

CE Marked Directives
- Explosive Atmospheres (ATEX)

International Electrotechnical Commission (IECEx)

Metrology Approval

Measurement Canada

NMI/MID
- OIML R137 Class 0.5
- MID Class 1.0

[1] Consult factory on meters greater than DN300 (12”). Minimum operating pressures vary with line size.

[2] Consult factory for T-11 or T-21 transducer upgrade.

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Product Description
Rosemount, Gas USM Flow Meter, 4-Path.....4
Rosemount, Gas USM Flow Meter, 4+4 Path..7
Rosemount, Gas USM Flow Meter, 8-path 8

Pressure Rating
ANSI 150, 300, 600 / PN 25, 50, 100 05
ANSI 900, 1500 / PN 150, 250 07

Mount Type
J, K, Y or Z Style Mount .....A
M Mount.....M
P Mount.....P

Transducer Type
T-200 Transducer .....A

Stalk Assembly Lengths
Center Chords (B & C) or A1, B1, C2, D2 for 4" size
T-200-A1.....A1
T-200-01.....01
T-200-02.....02
T-200-03.....03
T-200-04.....04
T-200-06.....06
T-200-07.....07
T-200-08.....08
T-200-09.....09
T-200-10.....10
T-200-11.....11
T-200-12.....12
T-200-13.....13
Contact flow support to determine correct stalk lengths for your application

Stalk Assembly Lengths
Edge Chords (A & D) or A2, B2, C1, D1 or 4" size
T-200-A1.....A1
T-200-01.....01
T-200-02.....02
T-200-03.....03
T-200-04.....04
T-200-05.....05
T-200-06.....06
T-200-07.....07
T-200-08.....08
T-200-09.....09
T-200-10.....10
T-200-11.....11
Contact flow support to determine correct stalk lengths for your application

Stalk Assembly Lengths - Reflective Chords
None.....00

Stalk Assembly Material
316/316L SS - Standard.....C
Inconel B44.....B

O-ring Material
NBR O-ring (-50°C to + 125°C).....N
FKM O-ring (-40°C to + 125°C).....F

For more information, visit
Emerson.com/RosemountUltrasonic

00807-0100-3106 AA

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