CLASSIC Series | **TCM 3100** Coriolis Mass Flow Meter

FEATURES

- Robust, no moving parts for long life
- Custom flow connectors & installation lengths
- Excellent repeatability (±0.05 % of flow rate)
- High pressure option: 345 bar [5,000 psi][1)]

BENEFITS

- Increased productivity, lower maintenance
- Lower installation cost
- Increased product quality
- Broad applications: dosing, paint, chemical injection

FLOW RATE

Mass Flow Rate (max.):	3,100 kg/h [114 lb/min]
Volumetric Flow Rate (max.):	3,100 l/h [13.65 gpm, 468 oi bbl/d (US)]
Nominal Meter Size:	DN6 [¼"]

PRESSURE RATING

200 bar [2,900 psi]
(option: up to 345 bar [5,000 psi])[1)]

ACCURACY (LIQUIDS)[2)]

Basic Accuracy (Mass Flow)[3)]:	±0.3 % (option: up to ±0.1 %) of flow rate
Repeatability (Mass Flow):	±0.05 % of flow rate
Basic Accuracy (Volume Flow)[3)]:	±0.3 % (option: up to ±0.15 %) of flow rate
Repeatability (Volume Flow):	±0.05 % of flow rate
Zero Stability:	±0.01 % of full scale

ACCURACY (GASES)

Basic Accuracy (Mass Flow)[3)]:	±1 % (option: up to ±0.5 %) of flow rate
Repeatability (Mass Flow):	±0.25 % of flow rate

DENSITY

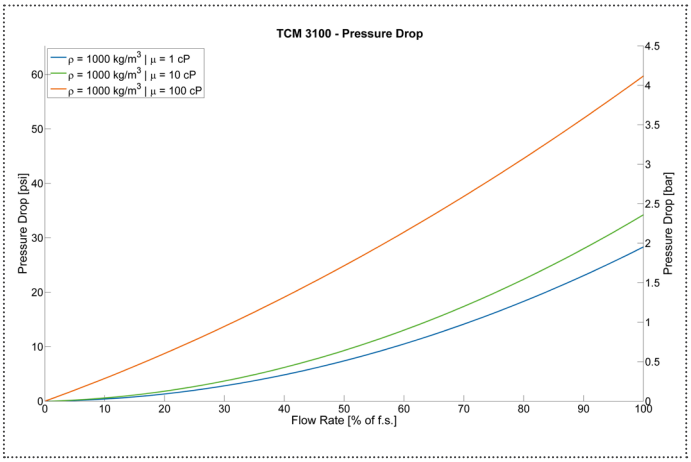
Density Range:	up to 2,500 kg/m³ [2.5 g/cm³]
Density Accuracy[3)]:	±1.0 kg/m³ [±0.001 g/cm³]
Density Repeatability:	±0.5 kg/m³ [±0.0005 g/cm³]

TEMPERATURE

Process Temperature Range:	-40 °C ... +100 °C [-40 °F ... +212 °F] Option: -60 °C ... +200 °C [-76 °F ... +392 °F]
Temperature Accuracy:	±1 °C ±0.5 % of reading [±1.8 °F ±0.5 % of reading]
Temperature Repeatability:	±0.2 °C [±0.36 °F]

MATERIALS (WETTED PARTS)

Tubes:	1.4404 [AISI 316L]
Case:	1.4404 [AISI 316L]
Flow Splitter:	1.4404 [AISI 316L]
Brazing Alloy:	BNi-2



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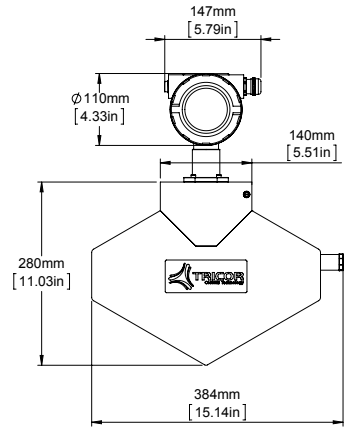
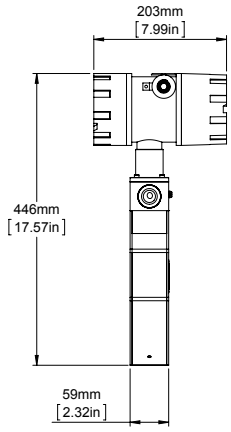
[1)] *The 200 bar standard pressure rating is per ASME. The 345 bar option is non-ASME rated.*
[2)] *Stated flow accuracy combines the effects of repeatability, linearity and hysteresis.*
[3)] *The specifications refer to standard conditions (for further information see TCM CLASSIC series manual).*

TRICOR Coriolis Technology

A)





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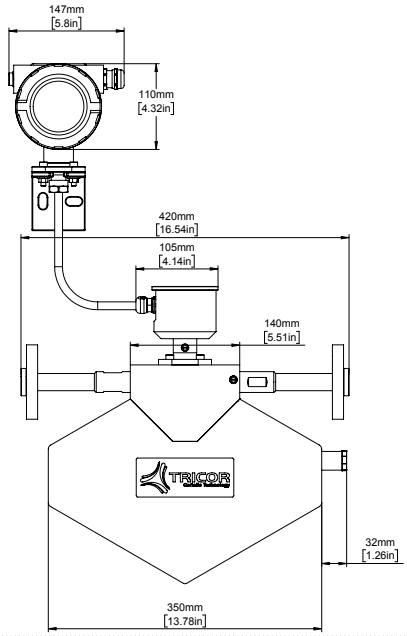
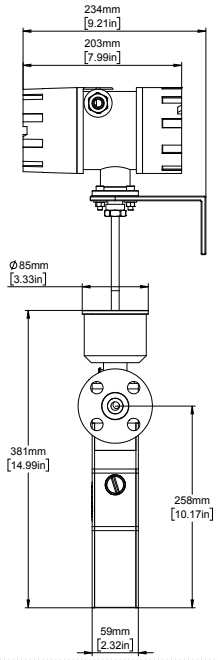




METER DIMENSIONS[4] AND WEIGHTS

A) Compact Version
Weight: 11.6 kg [25.6 lb]
With meter mount in aluminum diecast housing

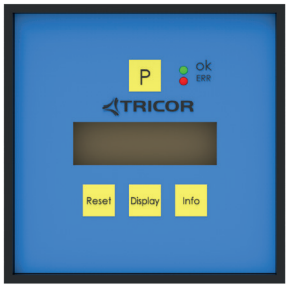
B) Remote Version
Weight: 12.9 kg [28.4 lb]
With junction box and remote field mount

Standard Process Connection
G½" thread (others on request)

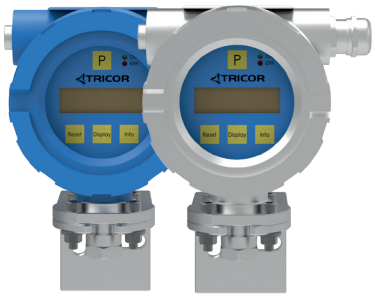
APPROVALS & CERTIFICATIONS

ATEX Zone 1 IECEx	**Compact version:** II 2G Ex db ia IIC T4 Gb **Remote version[6]:** Sensor: II 1G Ex ia IIC T4...T2 Ga Transm.: II 2(1)G Ex db [ia Ga] IIC T4 Gb
Atex Zone 2	**All versions:** II 3G Ex nA IIC T4
cCSAus[5]	**Compact version:** Cl. 1, Div. 1, Group A-D: T4 (US, Can) Ex db ia IIC T4 Gb (Can) **Remote version[6]:** Sensor: Cl. 1, Div. 1, Group A-D: T4...T2 (US, Can) Ex ia IIC T4...T2 Ga (Can) Transm.: Cl. 1, Div. 1, Goup A-D: T4 (US, Can) Ex db [ia Ga] IIC T4 Gb (Can)
EAC (TR-CU)	**Compact version:** 1Ex d ia IIC T4 Gb X **Remote version[6]:** Sensor: 0Ex ia IIC T4...T2 Ga X Transm.: 1Ex d [ia Ga] IIC T4 Gb X
KGS (Korean)	**Compact version:** Ex d [ia] IIC T4 **Remote version[6]:** Sensor: Ex ia IIC T4 Transm.: Ex d [ia] IIC T4

PANEL MOUNT[7]



REMOTE MOUNT[8]



ELECTRONICS

Power Supply:	24 V DC or 100 ... 240 V AC (version dependent)
Outputs:	Analog, Frequency, Pulse, Status
Interfaces:	RS485 RTU (Modbus), HART®
Cable Gland:	M20 | ½" NPT

[4] Drawing of the Meter Dimensions reflects one standard connection, other connections on request (Installation length can vary depending on selected connection).
[5] For cCSAus the electronic is only available in aluminum housing.
[6] Only wall mounting, not panel mounting.
[7] Weight: 0.4 kg [0.88 lb].
[8] Weight with aluminum diecast housing: 3.8 kg [8.4 lb] with 3 m cable.

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www.tricorflow.com

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