



FEATURES

- Robust, no moving parts for long life
- Custom flow connectors & installation lengths
- Excellent repeatability ($\pm 0.05\%$ of flow rate)
- Optional Net Oil functionality

BENEFITS

- ▶ Increased productivity, less maintenance
- ▶ Lower installation cost
- ▶ Increased product quality
- ▶ Simpler whole solution for Net Oil without PLC/RTU

FLOW RATE

Mass Flow Rate (max.):	230,000 kg/h [8,450 lb/min]
Volumetric Flow Rate (max.):	230,000 l/h [1,013 gpm, 34,720 bbl/d (US)]
Nominal Meter Size:	DN80 [3"]

PRESSURE RATING

100 bar [1,450 psi]

ACCURACY (LIQUIDS)¹⁾

Basic Accuracy (Mass Flow) ²⁾ :	$\pm 0.3\%$ (option: $\pm 0.1\%$) of flow rate
Repeatability (Mass Flow):	$\pm 0.05\%$ of flow rate
Basic Accuracy (Volume Flow) ²⁾ :	$\pm 0.4\%$ (option: $\pm 0.15\%$) of flow rate
Repeatability (Volume Flow):	$\pm 0.05\%$ of flow rate
Zero Stability:	$\pm 0.01\%$ of full scale

ACCURACY (GASES)

Basic Accuracy (Mass Flow) ²⁾ :	$\pm 1\%$ (option: $\pm 0.5\%$) of flow rate
Repeatability (Mass Flow):	$\pm 0.25\%$ of flow rate

DENSITY

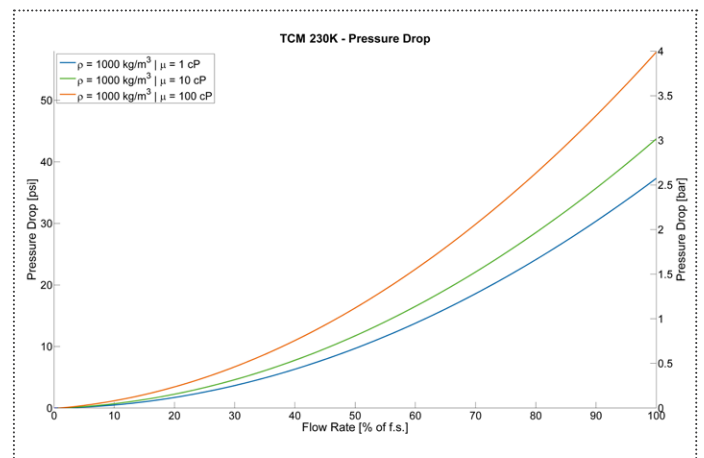
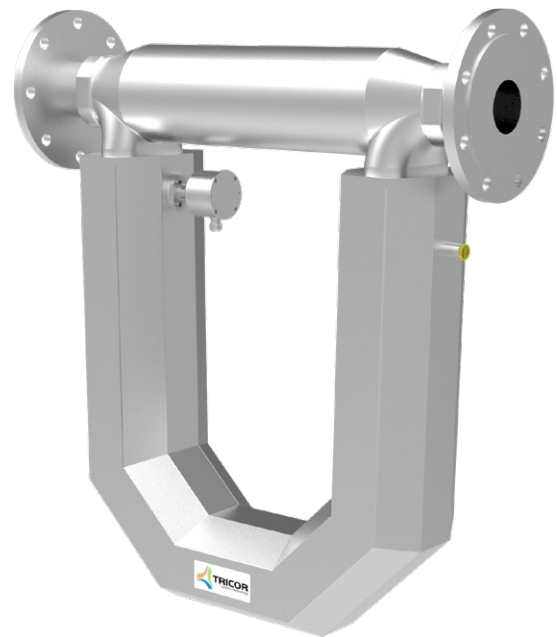
Density Range:	up to 2,500 kg/m ³ [2.5 g/cm ³]
Density Accuracy ²⁾ :	± 5.0 kg/m ³ (option: ± 1.0 kg/m ³) [± 0.005 g/cm ³ (option: ± 0.001 g/cm ³)]
Density Repeatability:	± 0.5 kg/m ³ [± 0.0005 g/cm ³]

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 $\pm 0.5\%$ of reading [± 1.8 °F $\pm 0.5\%$ 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:	CF3M [1.4409]
Option:	NACE MR 0175/0103 compliant

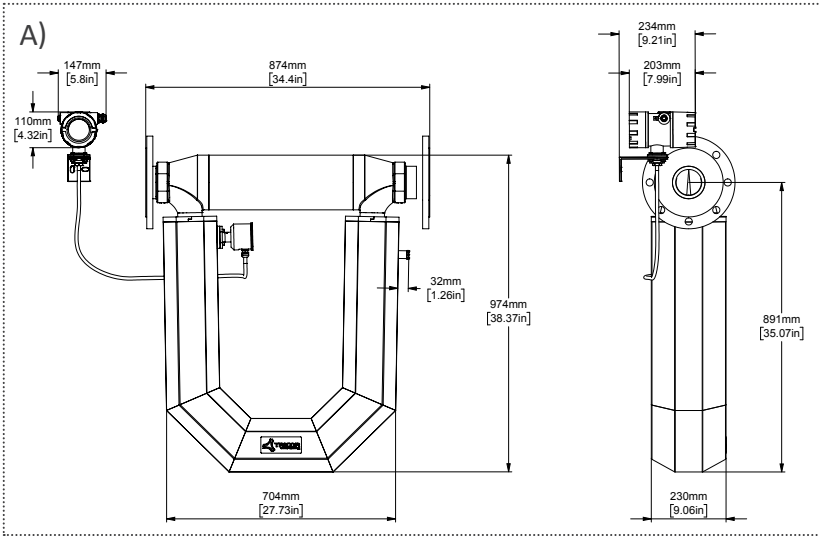


¹⁾ Stated flow accuracy combines the effects of repeatability, linearity and hysteresis.

²⁾ Calibration certificate options for higher accuracy are available.



CLASSIC Series | TCM 230K Coriolis Mass Flow Meter



METER DIMENSIONS³⁾ AND WEIGHTS

A) Remote Version

Weight: 87 kg [191.8 lb]

With junction box and remote field mount

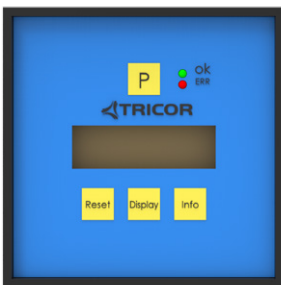
Standard Process Connection

DN80 PN40 [3" ANSI CL 300] (others on request)

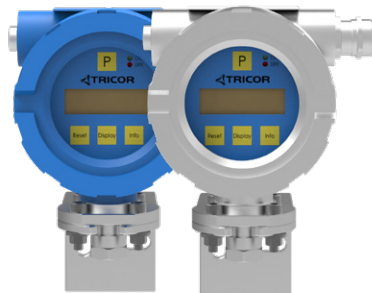
EX-CERTIFICATIONS

ATEX (Ex)	Zone 1: Group IIC or IIB, T2...T4
ATEX (Exn)	Zone 2: II 3G Ex nA IIC T2...T4 Gc
IECEX (Ex)	Zone 1: Group IIC or IIB, T2...T4
cCSAus (Ex1) ⁶⁾	Class 1, Division 1: Group A, B, C, D or C, D, T2...T4
ATEX + IECEX + cCSAus triple approval (Ex3) ^{6) 7)}	Zone 1: Group IIC or IIB, T2...T4 Class 1, Division 1: Group A, B, C, D or C, D, T2...T4
EAC (TR-CU) ⁶⁾	Group IIC or IIB, T2 ... T4

PANEL MOUNT⁴⁾



REMOTE MOUNT⁵⁾



ELECTRONICS

Power Supply:

24 V DC $\pm 20\%$ or 90 ... 264 V AC

Outputs:

Analog, Frequency, Pulse, Status

Interfaces:

RS485 RTU (Modbus), HART[®]

Cable Gland:

M20 | 1/2" NPT

³⁾ Drawing of the Meter Dimensions reflects one standard connection, other connections on request (Installation length can vary depending on selected connection).

⁴⁾ Weight: 0.4 kg [0.88 lb].

⁵⁾ Weight with aluminum diecast housing: 3.8 kg [8.4 lb] with 3 m cable, Weight with 1.4404 [AISI 316L] housing: 6.15 kg [13.56 lb].

⁶⁾ For Ex1, Ex3, EAC (TR-CU) the electronic is only available in aluminum housing.

⁷⁾ Only with remote electronics.

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