

# TCM 230K Series Coriolis Mass Flow Meter

## Advantages:

- > Robust for long life
- > Customized installation length
- > Excellent repeatability
- > Optional net oil functionality

## Benefits:

- > Increased productivity
- > Considerable cost savings for installation
- > Increased product quality
- > Increased well efficiency

**Pressure Rating:** 100 bar, 1450 psi

## Specifications:

Mass Flow Rate (max.): 230000 kg/h, 8433 lb/min  
 Volumetric Flow Rate (max.): 230000 l/h, 1012 gpm, 34700 bbl/d  
 Nominal Meter Size: DN80, 3"

## Accuracy [liquids]:<sup>1</sup>

Basic Accuracy [Mass Flow]:  $\pm 0.1\%$  of flow rate  
 Mass Flow Repeatability:  $\pm 0.05\%$  of flow rate  
 Basic Accuracy [Volume Flow]:  $\pm 0.15\%$  of flow rate  
 Volume Flow Repeatability:  $\pm 0.05\%$  of flow rate  
 Zero Stability:  $\pm 0.01\%$  of full scale

## Accuracy [gases]:

Basic Accuracy [Mass Flow]:  $\pm 0.5\%$  of flow rate  
 Mass Flow Repeatability:  $\pm 0.25\%$  of flow rate

## Density:

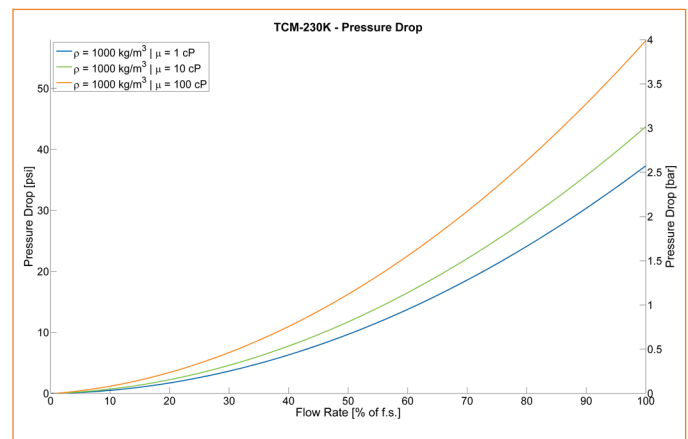
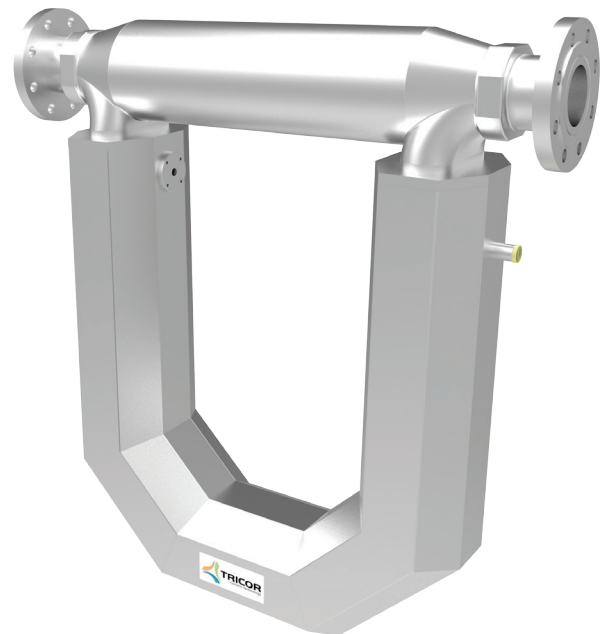
Density Range: up to 2500 kg/m<sup>3</sup>, 2.5 g/cm<sup>3</sup>  
 Density Accuracy: Liquids  $\pm 1.0$  kg/m<sup>3</sup>,  $\pm 0.001$  g/cm<sup>3</sup>  
 Density Repeatability:  $\pm 0.5$  kg/m<sup>3</sup>,  $\pm 0.0005$  g/cm<sup>3</sup>

## Temperature:

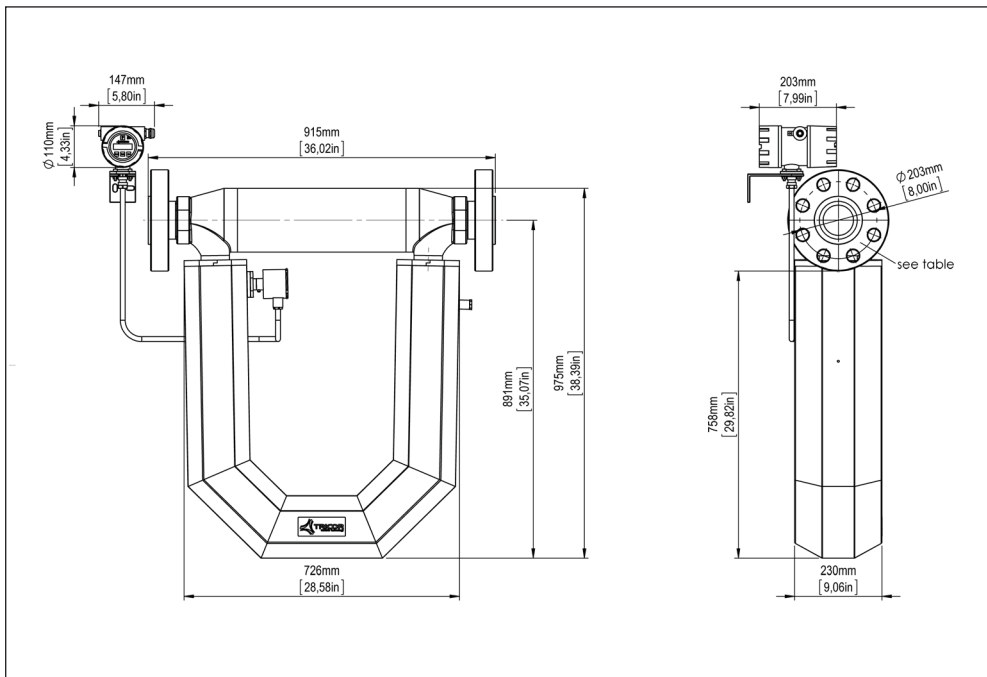
Process Temperature Range: -40 °C ... +100 °C, -40 °F ... +212 °F  
 Temperature Accuracy:  $\pm 1$  °C  $\pm 0.5\%$  of reading  
 $\pm 1.8$  °F  $\pm 0.5\%$  of reading  
 Temperature Repeatability:  $\pm 0.2$  °C,  $\pm 0.36$  °F

## Materials of Construction [wetted parts]:

Tubes: 1.4404 / AISI 316L  
 Case: 1.4301 / AISI 304 (1.4404 / AISI 316 L)  
 Flow Splitter: CF3M / 1.4409 / AISI 316L  
 Brazing Alloy: BNi-2



## Meter Dimensions:<sup>1</sup>



weight: 87 kg/194.4 lb  
with junction box & remote field mount  
meter connection:  
standard meter connection according table

## Electronics:

The TCE-8000 transmitter offered with the TRICOR Coriolis Mass Flow Meter is also available with other mounting options.

## Ex Certifications:

ATEX	Zone 1: Group IIB, T4 Zone 2: II 3G Ex nA IIC, T4 Gc
IECEX	Zone 1: Group IIB, T4
cCSAus Ex	Class I, Division 1: Group C, D, T4

<sup>1</sup> Drawing of the Meter Dimensions reflects one standard connection, other connections on request.  
(Installation length can vary depending on selected connection)

<sup>2</sup> weight: 0.4 kg/0.88 lb

<sup>3</sup> weight: 3.8 kg/8.3 lb with 3 m cable

## Panel Mount<sup>2</sup>



## Remote Field Mount<sup>3</sup>



Power Supply: 24 V DC  $\pm 20\%$  or 90 ... 264 V AC  
Outputs: Analog, Frequency, Pulse, Status  
Interface: RS485 RTU (Modbus), HART®  
More options on request