FEATURES

- Robust, no moving parts for long life
- Custom flow connectors & installation lengths
- Excellent repeatability (±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.): 28,000 kg/h [1,029 lb/min]
Volumetric Flow Rate (max.): 28,000 l/h
Nominal Meter Size: DN25 [1“]

PRESSURE RATING

100 bar [1,450 psi]

ACCURACY (LIQUIDS)\(^1\)

Basic Accuracy (Mass Flow): ±0.3 % (option: up to ±0.1 %) of flow rate
Repeatability (Mass Flow): ±0.05 % of flow rate
Basic Accuracy (Volume Flow): ±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): ±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/m\(^3\) [2.5 g/cm\(^3\)]
Density Accuracy\(^2\): ±1.0 kg/m\(^3\) [±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 ±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: CF3M [AISI 316L]
- Brazing Alloy: BNi-2

\(^1\) Stated flow accuracy combines the effects of repeatability, linearity and hysteresis.
\(^2\) The specifications refer to standard conditions (for further information see TCM CLASSIC series manual).
CLASSIC Series | TCM 028K Coriolis Mass Flow Meter

METER DIMENSIONS AND WEIGHTS

A) Compact Version
- Weight: 13.1 kg [28.9 lb]
- With meter mount in aluminum diecast housing

B) Remote Version
- Weight: 14.4 kg [31.7 lb]
- With junction box and remote field mount

Standard Process Connection
DN25 PN40 [1” ANSI CL 300] (others on request)

APPROVALS & CERTIFICATIONS

ATEX Zone 1
Compact version:
- II 2G Ex db [ia] IIB T4 Gb
- Remote version:
  - Sensor: II 1G Ex ia IIB T4...T2 Ga
  - Transm.: II 2(1)G Ex db [ia Ga] IIB T4 Gb

Atex Zone 2
All versions: II 3G Ex nA IIB T4

cCSAus
Compact version:
- Cl. 1, Div. 1, Group C, D: T4 (US, Can)
  Ex db [ia] IIB T4 Gb (Can)
Remote version:
- Sensor: Cl. 1, Div. 1, Group C, D:
  T4...T2 (US, Can)
  Ex ia IIB T4...T2 Ga (Can)
- Transm.: Cl. 1, Div. 1, Group C, D:
  T4 (US, Can)
  Ex db [ia Ga] IIB T4 Gb (Can)

EAC (TR-CU)
Compact version:
- 1Ex d [ia] IIB T4 Gb X
Remote version:
- Sensor: 0Ex ia IIB T4...T2 Ga X
- Transm.: 1Ex d [ia Ga] IIB T4 Gb X

KGS (Korean)
Compact version:
- Ex d [ia] IIB T4
Remote version:
- Sensor: Ex ia IIB T4
- Transm.: Ex d [ia] IIB T4

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

---

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

4) For cCSAus the electronic is only available in aluminum housing.

5) Only wall mounting, not panel mounting.

6) Weight: 0.4 kg [0.88 lb].

7) Weight with aluminum diecast housing: 3.8 kg [8.4 lb] with 3 m cable.