

SmartLine® VersaFlow Coriolis 100 CM02 Size 25 Stainless Steel

Model Selection Guide



- Secondary pressure containment around sensor
- Easily drained and easy to clean
- Regardless of type of installation and external factors
- Excellent zero stability
- Low energy consumption, low operating and installation costs
- Rapid signal processing even with product and temperature changes and sudden changes in density
- Modular electronics concept: electronics and sensor easy to replace
- Data redundancy: accurate plug & play replacement of electronics

Instructions

Select the desired key number. The arrow to the right marks the selection available.
Make the desired selections from Tables I through VIII using the column below the proper arrow. A dot (•) denotes availability.

| Table | I | II | III | IV | V | VI | VII | VIII |
|-------|---|------|-----|----|------|------|-----|------|
| CM02 | 4 | ---- | - | -- | ---- | ---- | - | - |

| KEY NUMBER | Description | Selection | Availability |
|------------|-------------|-----------|--------------|
| CM02 | | CM02 | ↓ |

| TABLE I | Selection | Availability |
|---------|-----------|--------------|
| Sensor | 4 | • |

| TABLE II | Selection | Availability |
|---------------------------------|---|--|
| Tube Material | Stainless Steel | S_ _ _ • |
| Surface Finish | Standard Polished Ra 0.5 µm See Note 2 | _ 0 _ _ • _ 1 _ _ • |
| Flange Connection Size | DN 40 PN 40 to DIN 2501 DN 40 PN 100 to DIN 2501 DN 25 PN 40 to DIN 2501 DN 25 PN 100 to DIN 2501 DN 50 PN 40 to DIN 2501 1 1/2" ASME 150 lb 1 1/2" ASME 300 lb 1 1/2" ASME 600 lb 1" ASME 150 lb 1" ASME 300 lb 1" ASME 600 lb 2" ASME 150 lb 40 A JIS 20 K 25 A JIS 20 K | _ _ D A • _ _ D C d _ _ C A • _ _ C C d _ _ E A • _ _ N D • _ _ N E • _ _ N F d _ _ M D • _ _ M E • _ _ M F d _ _ P D • _ _ W H • _ _ V H • |
| Hygienic and Aseptic Connectors | DN 40 DIN 11864-2 Form A Type N DN 40 DIN 11851 SC Threaded DN 40 Tri-clamp to DIN 32676 1 1/2" Tri-clover clamp 1 1/2" Tri-clamp to ISO 2852 1 1/2" SMS 1 1/2" IDF (International Dairy Federation) 1 1/2" RJT | _ _ D L • _ _ D M • _ _ D N • _ _ N R • _ _ N T • _ _ N V • _ _ N W • _ _ N Z • |

| TABLE III | Selection | Availability |
|--------------|--|---------------------------------|
| Sealing face | Standard (Type B1 for PN 40 & B2 for PN 63/100 acc. EN 1092-1) EN 1092-1 Type C with tongue EN 1092-1 Type D with groove | 0 • C c D c |

| TABLE IV | Selection | Availability |
|-----------------------|--|--------------------------------------|
| Secondary Containment | All externals SS 304 L No secondary pressure containment. Typical burst pressure > 100 bar All externals SS 316 L No secondary pressure containment. Typical burst pressure > 100 bar All externals SS 304 L Max Sec. Pressure containment 63 bar/913 psi (PED approved) See Note 1 All externals SS 316 L Max Sec. Pressure containment 63 bar/913 psi (PED approved) None Max Sec. Pressure containment 100 bar/1450 psi (PED approved) | G_ • H_ • 0_ • A_ • B_ • |
| Options | None Liquid/steam heating jacket-Ermeto (max.temp 130°C/266°F) Liquid/steam heating jacket-1/2" NP1 (max.temp 130°C/266°F) Purge fittings-1/2" NPTF | _ 0 • _ 1 • _ 2 • _ 3 • |

TABLE V

| | | |
|--|--|--|
| Hazardous Area Approvals | None ATEX EEx ib (T1-T4) FM Class 1 Div 1/Div 2 CSA Class 1 Div 1/Div 2 (including CRN approval)/Dual Seal for liquids CSA Class 1 Div 1/Div 2 (including CRN approval)/Dual Seal for gases NEPSI Ex ib (T1-T4) None (for Canada only - CRN approved) IEC Ex ib (T1-T4) | 0 __ • 1 __ f 3 __ f 5 __ f 6 __ f 7 __ f C __ • R __ f |
| Hygienic/Sanitary Approvals (requires polishing option) | None 3A (American Dairy Approval) Requires polishing to RA 0.5 µm | _ 0 _ • _ 2 _ e |
| Configuration | Compact/integral mount Remote/field mount Alu Junction box Remote/field mount SS Junction box Direct Digital Comms (DDC) Alu JB via Modbus (with TWC 010 only) Direct Digital Comms (DDC) SS JB via Modbus (with TWC 010 only) | _ _ 0 • _ _ 1 • _ _ 2 • _ _ D b _ _ E b |

TABLE VI

| | | |
|----------------------------|---|--------------------------------------|
| Calibration | Standard 3 point flow and density calibration 5 point flow calibration evenly spread accros nom. flow rate 0 + custom density calibration with water at 3 temps. + certificate 1 + custom density calibration with water at 3 temps. + certificate | 0 __ • 1 __ • A __ • B __ • |
| Cleaning/Degreasing | None Degreasing wetted parts plus certificate | _ 0 _ • _ 1 _ • |
| Extended Options | None | _ _ 0 • |

TABLE VII

| | | |
|---------------------|------|-----|
| No Selection | None | V • |
|---------------------|------|-----|

TABLE VIII

| | | |
|-----------------------|--|-----------------------------------|
| Converter Type | TWC 010 C Requires a separate MSG# to be entered. CM93 MSG # 36-CM-16-24 TWC 9000 Compact mount TWC 9000 Field mount Requires a separate MSG# to be entered. Either CM90 MSG# 36-CM-16-21; CM91 MSG# 36-CM-16-22 or CM92 MSG# 36-16-23 TWC 9000 Wall Mount (non Ex only) TWC 9000 Rack mount (non Ex only) | 1 • g C • D • E • F • |
|-----------------------|--|-----------------------------------|

RESTRICTIONS

| Restriction | Available only with | | Not available with | |
|-------------|---------------------|--|--------------------|-----------|
| | Letter | Table | Table | Selection |
| b | VIII | 1 | | |
| c | II | _ _ DA, _ _ DC, _ _ CA, _ _ CC | | |
| d | IV | B _ | | |
| e | II | _ 1 _ | | |
| | II | _ _ D L, _ _ D M, _ _ D N, _ _ N R, _ _ N T, _ _ N V, _ _ N W, _ _ N Z | | |
| f | VIII | 1, C, D | | |
| g | V | _ _ D, _ _ E | | |

Secondary Containment Information + Polishing Information

Note 1

Secondary Containment Information

The following information is provided to try to simplify the selection of the secondary containment /outer casing option

- G All externals SS 304/L No secondary pressure containment. Typical burst pressure > 100 bar
- H All externals SS 316/L No secondary pressure containment. Typical burst pressure > 100 bar
- 0 All externals SS 304/L Max Sec. Pressure containment 63 bar/913 psi (PED approved)
- A All externals SS 316/L Max Sec. Pressure containment 63 bar/913 psi (PED approved)
- B All externals SS 316/L Max Sec. Pressure containment 100 bar/1450 psi (PED approved)

Notes:

1. There are no longer any flange constraints for options G and H
2. You may now choose the required outer casing (option G and H) in combination with any process connection irrespective of the pressure rating.
3. Most applications do not require secondary containment, so the 304L (option G) may be used unless 316L is specifically requested.
4. The food and pharmaceutical industries require 316L materials in most cases so option H will be suitable here.
5. Options 0, A and B are available for customers who still require PED approved secondary containment.
6. On Options 0, A and B flanges with higher pressure ratings than the secondary pressure containment can not be ordered.

Warning

In the case of high pressure gases, gases kept as liquids at high pressures and/or where there is a danger of the measuring tube failing due to process conditions, e.g. with erosive or corrosive products, it is strongly recommended that a secondary pressure containment option is purchased. Where process pressures exceed the secondary containment pressure rating, an optional burst disc should be fitted. This is highly recommended for High pressure gases. Please consult factory.

Note 2

Polishing Information

1. To guarantee the surface finish of an CM Coriolis Meter, it is mandatory to order the polishing option as per the price list
2. This is also mandatory for a meter requested with hygienic approvals
3. For all other meters, the surface finish can not be guaranteed unless polishing is ordered as per 1.