



ISO 9001/14001



ATEX



Hydrogen Coriolis Mass Flow Meter

Model : SCF-3000



SeoJin Instech Co., Ltd.

www.seojin.biz

SCF-3000

Hydrogen Coriolis Mass Flow Meter



Introduction

Coriolis sensing is certainly attractive since, unlike other method, which provide volumetric flow information, Coriolis sensing provide direct and true mass flow measurements. Due to this advantage, the application of this measurements system is getting wider in various industrial fields from micro device to heavy industry which requires very precise measurement and control minimizing the environment condition, especially about the variation of temperature.

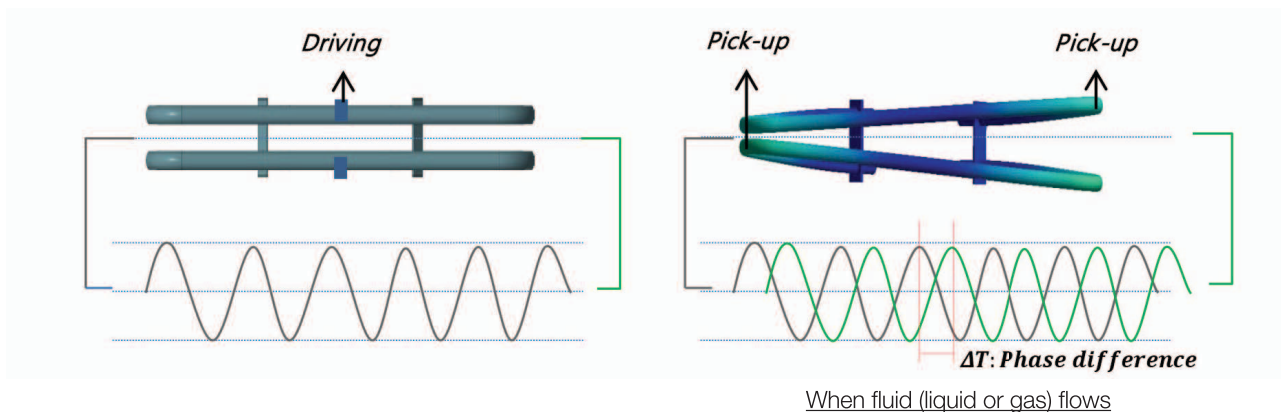
Principle

Coriolis mass flowmeters(SCF-3000) utilize vibrating tubes powered by an electromagnetic drive system. When fluid flows through these tubes, the Coriolis effect causes a deflection proportional to the mass flow rate. Sensors detect the phase difference (ΔT) between upstream and downstream vibrations, which is directly related to the mass flow rate (Q_m).

It makes Coriolis meters reliable method for measuring mass flow of various fluids.

Features

- Operating Pressure up to 1000bar
- Easy maintenance
- Stainless steel case
- Max Measuring Range : 10kg/min
- Accuracy : $\pm 0.5\%$ (Water)



Phase difference ΔT and mass flow rate Q_m are directly proportional, so mass flow rate can be derived as phase difference.

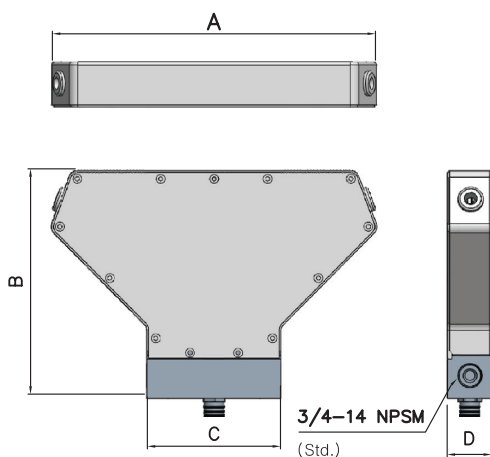
Specifications

► Sensor

Description	Type	Sensor
Tube Material		Stainless Steel 316L
Sensor Base Material		Stainless Steel 316
Ambient Temperature		-50°C ~ +60°C
Process Temperature		-50°C ~ +120°C
Operating Pressure		1,000 bar
Process connection		3/4-14 NPSM
Max. Flow Range		10 kg/min

Dimension

► Sensor



Type	A	B	C	D
High Pressure	365	255	150	50
Medium Pressure	273	194	124	44

Certificates and Approvals

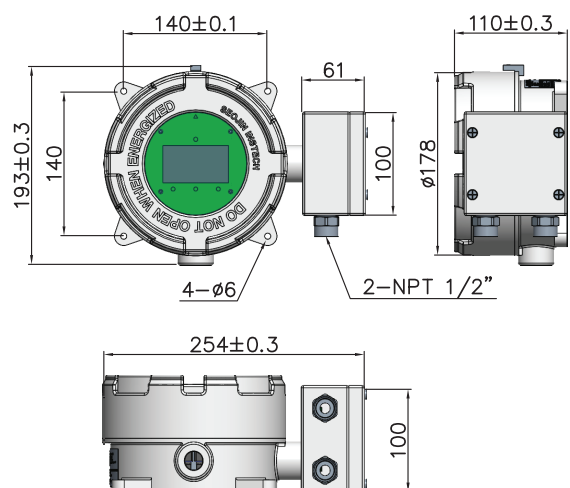
► Sensor

- Certification : IECEx / ATEX / KCs
- Ex ia IIC T6...T1 Ga
- Ambient temperature
 - 50°C ~ 65°C (for T6)
 - 50°C ~ 80°C (for T5 ... T1)

► Transmitter

Description	Type	Transmitter
Housing Material		Stainless Steel 316L
Terminal Box Material		Stainless Steel 316L
Ingress Protection		IP66
Ambient Temperature		-40°C ~ +60°C
Humidity		10 to 90% RH
Weights		8 kg / 17 lb
Power Supply		100-240 VAC, 5W 12 ~24 VDC, 5W
Cable Entries (Power Supply & I/O)		2 - NPT 1/2" (Increased Safety box)

► Transmitter



► Transmitter

- Certification : IECEx / ATEX / KCs
- Ex db [ia Ga] eb IIC T4 Gb, IP66
- Ambient temperature : -40°C ~ 60°C

Ordering Information

■ Sensor Part

SCF -	3000S	1	A	1
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Enclosure

- 1 = Weather Proof (Std.)
- 2 = KCs (Ex ia IIC T6...T1 Ga)
- 3 = ATEX/IECEX (Ex ia IIC T6...T1 Ga)
- 4 = etc.

Operating Pressure

- A = Standard Pressure (450 bar)
- B = High Pressure (1,000 bar)

Detection Parts Material

- 1 = Stainless Steel 316L

Model Type

3000S Sensor

■ Transmitter Part

SCF -	3000T	1	A	1
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Conduit Connection

- (2 Way Cable Gland Type)
- 1 = NPT 1/2" (Std.)

Enclosure

- A = Weather Proof (Std.)
- B = KCs (Ex db [ia Ga] eb IIC T4 Gb, IP66)
- C = ATEX/IECEX (Ex db [ia Ga] eb IIC T4 Gb)
- D = etc.

Power Supply

- 1 = 100 to 240 VAC
- 2 = 12 to 24 VDC

Model Type

3000T Transmitter

- When placing an order, selected ordering code should be indicated on the purchase order sheet.



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- Specification subject to change without notice.