



Inexpensive Microflow Coriolis Flowmeters

CoriMateII

Easy to use...Exceeding your expectations of Coriolis flowmeters!

[Mass flow measurement]

[Measurement of multiple kinds of liquid at laboratories or research facilities]

[Medicinal solution, solvent process]

[Slurry liquid, mixture process]

[Paint, spray, additive applications]



We add value to the flow



OVAL

OVAL Corporation

GENERAL SPECIFICATIONS

Item	Description
Model	CR002 CR003 CR004
Materials	Wetted parts SUS316L and SCS16A (*1)
	Base ADC12 ADC12 SUS304
	Housing and cover ADC12
	Display shield Polycarbonate
Process connection	Rc 1/8
Acceptable fluid	Liquid (Density range: 0.3 to 2.0 g/mL)
Operating temperature range	-10 to +60°C (Free of dew condensation)
Max. operating pressure	2MPa
Flow directions	Forward flow only
Power supply (*2)	20 to 30VDC
Power consumption	Max.10W
Furnished cable	AWG24x7 conductor, φ6.8x3m
Dustproof, waterproof construction	IP66
Installation	• Horizontal installation (clamp not required) • Vertical installation (Bolthole provided)
Display	Backlit dot matrix: 8 digits
Variables displayed	Instant mass flow, mass flow total, temperature
Weight	Approx. 3kg Approx. 3kg Approx. 6.5kg
Communication interface	Bell 202 (using the HART protocol)
Pulse output (*3)	Mass flow total open collector output (30V, 50mADC max.) FS: 0.1 to 10000Hz selectable •CR002: 0.01g/P at 125Hz •CR003: 0.01g/P at 500Hz •CR004: 0.1g/P at 450Hz
Analog output (*3)	4 to 20mADC Max. load 600Ω Instant mass flowrate Damping: 1 sec. (std.) •CR002: 0 to 75g/min •CR003: 0 to 300g/min •CR004: 0 to 2700g/min
Applicable EU directive	EMC directive : 2004/108/EC

(*1): Corrosion resistance of nickel brazing used in wetted parts is equivalent to SUS314.

(*2): SU1503 power unit is acceptable to this meter. (SU1303 power unit cannot be applied.)

(*3): The pulse output at the time of the shipment and analog output are standard setting. (Setting change possible)

OUTLINE DIMENSIONS

●CR002 and CR003

4-7 drill 12 c.bore 0.5 deep
Bolthole
(For hex socket headed bolt M6)

No.	Name
①	Nozzle
②	Flowtube
③	Housing and Cover
④	Base
⑤	Display shielding
⑥	Interconnect Cable (7-conductor, shielded)
⑦	Cable Gland
⑧	Magnet for Switching
⑨	Base pad

Detail of A (Wiring)

- Power DC +(Brown)
- Power DC -(Pink)
- Pulse output +(Blue)
- Pulse output -(Gray)
- Analog output +(Green)
- Analog output -(White)
- Ground (Yellow)

GENERAL PERFORMANCE

Item	Description
Model	CR002 CR003 CR004
Flow rate (Liquid)	Max. Flow rate g/min 75 300 2700
	Min. Analog range g/min 5 20 180
	Cutoff g/min (*1) 1.5 6 54
	Factory calibration accuracy ±0.1% of F.SF. (Below 33% of flow rate) ±0.3% RD. (33% to 100% of flow rate)
	Repeatability ±0.07% of F.SF. (Below 33% of flow rate) ±0.2% RD. (33% to 100% of flow rate)
Analog accuracy	Accuracy ±0.1% of full scale

(*1) : The flow rate (output signal and indication level) becomes zero at cutoff level or lower. (Setting change by the customer is available.)

PRODUCT CODE EXPLANATION

Item	Product Code													Description
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	
Model	C	R												CoriMate
Nominal size		0	0	2										0.7mm, Flow range (g/min): 2.5 to 75, Rc 1/8
		0	0	3										1.5mm, Flow range (g/min): 10 to 300, Rc 1/8
		0	0	4										3mm, Flow range (g/min): 90 to 2700, Rc 1/8
Structural category	D	-												CoriMate II
Material		S	S	-										SUS316L
Process connection									2					Screw connection
Connection rule									0					Always "0"
Pressure category									0					Always "0"
Transmitter construction										N				Non-explosionproof, integral type transmitter
Version code													B	

●CR004

4-7 drill 12 c.bore 10 deep
Bolthole
(For hex socket headed bolt M6)

No.	Name
①	Nozzle
②	Flowtube
③	Housing and Cover
④	Base
⑤	Display shielding
⑥	Interconnect Cable (7-conductor, shielded)
⑦	Cable Gland
⑧	Magnet for Switching
⑨	Base pad

Detail of A (Wiring)

- Power DC +(Brown)
- Power DC -(Pink)
- Pulse output +(Blue)
- Pulse output -(Gray)
- Analog output +(Green)
- Analog output -(White)
- Ground (Yellow)

The specification as of June, 2014 is stated in this catalog. Specifications and design are subject to change without notice.