



Inexpensive Microflow Coriolis Flowmeters

# CoriMate II

**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 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	20 to 30VDC		
Power consumption	Max.10W		
Furnished cable	AWG24x7 conductor, φ6.8x3m		
Dustproof, waterproof construction	IP66		
Installation	<ul style="list-style-type: none"> <li>Horizontal installation (clamp not required)</li> <li>Vertical installation (Bolthole provided)</li> </ul>		
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 (*2)	Mass flow total open collector output (30V, 50mA 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 (*2)	4 to 20mA 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		

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

(\*2): The pulse output at the time of the shipment and analog output are standard setting. (Setting change possible)

## ■ GENERAL PERFORMANCE

Item	CR002	CR003	CR004
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		

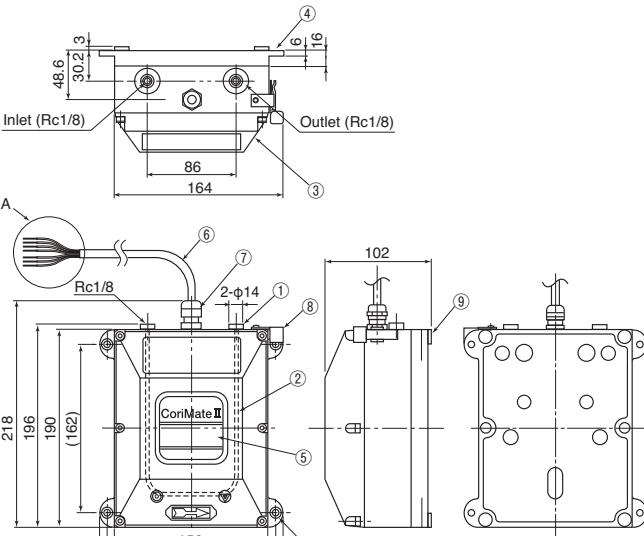
(\*1) : The flow rate (output signal and indication level) becomes zero at cutoff level or lower. (Setting change by the customer is available.)

## ■ PRODUCT CODE EXPLANATION

Item	Product Code													Description	
	①	②	③	④	⑤	⑥	-	⑦	⑧	-	⑨	⑩	⑪	⑫	⑬
Model	C	R													CoriMate
			0	0	2										0.7mm, Flow range (g/min): 2.5 to 75, Rc 1/8
Nominal size			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							

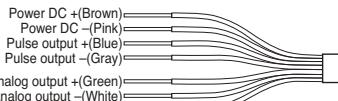
## ■ OUTLINE DIMENSIONS

### ● CR002 and CR003

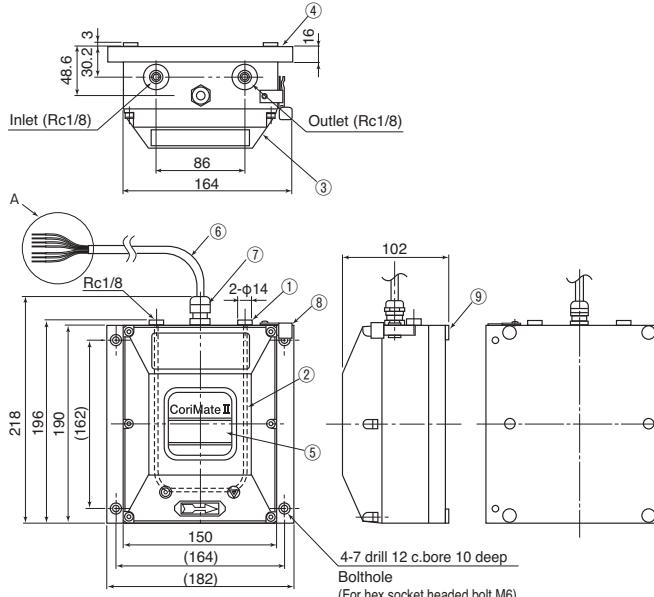


No.	Name
①	Nozzle
②	Flowtube
③	Housing and Cover
④	Base
⑤	Display shielding
⑥	Interconnect Cable (7-conductor, shielded)
⑦	Cable Gland
⑧	Magnet for Switching
⑨	Base pad

#### Detail of A (Wiring)

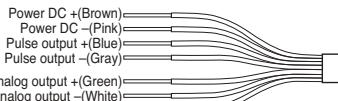


### ● CR004



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)



The specification as of April, 2023 is stated in this catalog. Specifications and design are subject to change without notice.



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