

Coriolis mass flowmeter

Custody transfer/Two-way metering/Water-content monitoring

The Coriolis mass flow meters in the RIF500 line offer an advanced solution for precise and reliable measurement of fluids in industrial environments. Thanks to the Coriolis effect technology, these instruments guarantee high performance even under complex operating conditions, ensuring accurate process control.

Main features:

- High accuracy in mass flow, density and temperature measurement.
- Wide flow range, suitable for a wide range of industrial applications.
- Compact and robust design, with options for hygienic installations and harsh environments.
- Resistance to extreme temperatures, -240° C to +350° C.
- Versatile outputs: analogue, digital and pulse, compatible with standard protocols such as Modbus and HART.
- Hazardous area certifications, with IP66/IP67 protection and compliance with international standards.



Operational advantages:

- Advanced DSP technology to reduce thermal and time drift.
- Low pressure drop and easily drainable design.
- High repeatability and zero stability, even at low flow rates.
- Integrated diagnostics for meter status monitoring and predictive maintenance.

Typical applications:

- Energy and petrochemical industry
- Food and pharmaceutical industry
- Automation and process control systems
- Water treatment and environmental monitoring

Flow Rate Table:

Model	Flange Compatibility	Nominal Flowrate (kg/h)	Maximum Flowrate (kg/h)	Zero Stability (BPM-B) (kg/h)	Zero Stability (BPM-E) (kg/h)
K005	DN10/DN15	19.5	28	0.0015	0.0005
K010	DN10/DN15/DN20/DN25	96	110	0.0072	0.0024
K015	DN10/DN15/DN20/DN25	270	310	0.02025	0.0068
K025	DN15/DN20/DN25	1000	1420	0.075	0.025
K050	DN15/DN20/DN25	3000	4200	0.015	0.075
K075	DN25/DN32	7700	11000	0.385	0.19
K100	DN25/DN32/DN40	15200	21600	0.76	0.38
K150	DN40/DN50	32500	46000	1.625	0.81
K200	DN40/DN50/DN65	52500	75000	2.62	1.31
K280	DN80/DN100	96000	136000	4.80	2.4
K300	DN80/DN100/(DN125)	155000	220000	7.76	3.88
K350	DN100/(DN125)/DN150	290000	403000	21.75	7.25
K400	DN150/(DN175)/DN200	462000	652000	34.65	11.55
K600	DN200/(DN225)/DN250/ DN300	950000	1550000	71.25	23.75
K800	DN200/(DN225)/DN250/ DN300	1600000	2500000	120.00	40.00
K1200	DN250/DN300/DN350	2380000	3266000	178.50	59.50

Accuracy and Repeatability

Mass flow	Accuracy	Repeatability	Volume Flow Accuracy
Within turndown 20:1 (-B)	±0.1%	±0.1%	±0.1%
Within turndown 30:1 (-E)	±0.1%	±0.025%	±0.1%
Within turndown 40:1 (-E)	±0.15%	±0.025%	±0.1%
Density	Accuracy	Repeatability	Measurement Range
	±0.0005 g/cm ³	±0.0001 g/cm ³	0.2...2.0 g/cm ³
Temperature	Accuracy	Repeatability	Measurement Range
	±0.2%	±0.1°C	-240...+350°C

Electrical Parameters

Power Supply (AC or DC)	AC Power Supply	85...265 Vac, 50/60 Hz
	DC Power Supply	18...100 Vdc

Output Signal and Integration

Analog Communication (two optional output channels)	Typical output channel options: two-way current communication, two-way pulse communication or one-way current communication and one-way pulse communication	
Pulse output	Output range	0...10 kHz
	Measured Error	< 1 pulse
	Temperature Effect	±0.001% F.S/°C
Digital Communication	RS485 interface, Modbus communication protocol, HART Baud Rate options: 9600, 19200, 38400, etc. Multi-machine communication and Modbus connection are available.	
Current Output	Output Range	4...20 mA
	Measured Error	±0.05%
	Temperature Effect	±0.005% F.S/°C
Power Consumption	BPM transmitter maximum powers	

Hazardous Area Classifications

Ex Approval	Sensor	Ex ib IIC T1...T6Gb
	Transmitter	Exd [ib] IIC T6 Gb
	Ex-proof Appliance	Complies with GB3836.1-2010, GB3836.2-210, GB3836.4-2010.
	Application Area	Applicable to hazardous area Zone I, Zone 2.
	Device Category	IIC, compatible with IIA & IIB
Ingress Protection Rating	Temperatura Class	T1-T6
	Sensor	IP66/IP67
	Transmitter	IP66/IP67