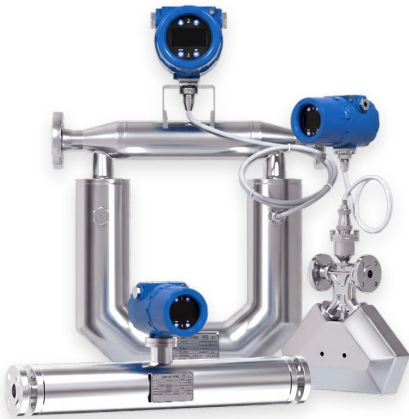


**FULLKON**

Special characteristics

- Supports measurement of multiple parameters including mass flow, density and temperature
- Can derive concentration of solute in solutions
- Applicable to a wide range of industrial media
- Suitable for complex working conditions

Features

- Direct measurement of mass flow rate
- No requirement for upstream and downstream straight pipe sections
- Suitable for difficult media such as high viscosity fluids, slurry and suspension
- Wide measurement range with high accuracy
- Online measurement of density and temperature

Measuring principle

The Coriolis mass flow meter operates based on the Coriolis force principle. When fluid flows through a vibrating tube, Coriolis forces cause a phase shift between different parts of the tube. This phase difference is proportional to the mass flow



Recorder



Flow



Temp



Analyzer



Level



Pressure

The Coriolis mass flow meter is a flow measurement instrument designed based on the Coriolis force principle. It can directly measure the mass flow rate, density and temperature of fluids in closed pipelines. The product complies with GB/T 31130-2014 standard and is suitable for various industrial applications.

Preferred areas of use are



Used for direct mass flow measurement of liquids in industries such as chemical, petroleum, food, pharmaceutical and paper making.

Material and test



Parameters	
Measured variable	Mass flow, density, temperature
Nominal caliber	Straight pipe type: DN8~DN80 U-type: DN20~DN150 Triangular type: DN3 to DN15
Flow range (L/min)	Refers to Tables 1 and 2
Density measuring range	(0.3~3.000)g/cm ³
Temperature measuring range	(-200~300)°C
Converter output	(4 to 20) mA, output load (250 to 600) Ω
Communication output	RS485 interface, MODBUS-RTU communication protocol; Hart
Frequency (pulse) output	Pulse width: 50% Active: Output current 10mA, open circuit voltage 24V
Power supply	24VDC/220VAC
Power consumption	≤15W
Electrical interface	M20*1.5
Accuracy	Flow rate: 0.2, 0.5 Density: ±0.002g/cm ³ Temperature: ±1°C
Repeatability	1/2 of the measurement error
Medium temperature	Standard type: (-50 ~ 200) °C, (-20 ~ 200) °C High temperature type: (-50 ~ 350) °C Low temperature type: (-200 ~ 200) °C
Process pressure	The maximum flow rate corresponds to the pressure loss of 100kPa (water as the medium)
Temperature	-40°C ~ +60°C
Humidity	35%~95%
Ingress protection	IP67

Table 1 Flow range of straight tube mass flow meter

Diameter (mm)	Conventional flow meter flow range (kg/h)	Sanitary flow meter flow range (kg/h)	Zero point stability (kg/h)
8	0~960~1440	/	0.096
10	0~1500~2250	/	0.15
15	0~3000~4500	/	0.3
20	0~6000~9000	0~4500	0.6
15	0~9600~14400	0~9000	0.96

32	0~18000~27000	0~14400	1.8
40	0~30000~45000	0~27000	3
50	0~48000~72000	0~45000	4.8
80	0~120000~180000	/	12

Table 2 Flow range of non-straight tube mass flowmeter

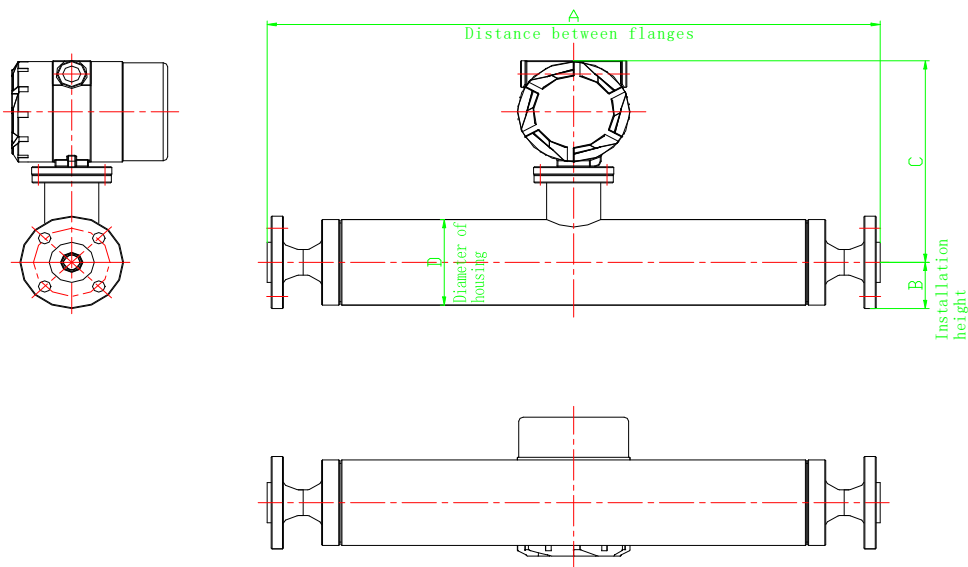
Diameter (mm)	Conventional flow meter flow range (kg/h)	High pressure flow range flow meter Flow range (kg/h)	Zero point stability (kg/h)
3	0~96~144	/	0.0096
6	0~540~810	/	0.054
8	0~960~1440	/	0.096
10	0~1500~2250	/	0.15
15	0~3000~4500	/	0.3
20	0~6000~9000	0~3000~4500	0.6
25	0~9600~14400	0~6000~9000	0.96
32	0~18000~27000	0~9600~14400	1.8
40	0~30000~45000	0~18000~27000	3
50	0~48000~72000	0~30000~45000	4.8
80	0~120000~180000	0~75000~90000	12
100	0~192000~300000	/	19.2
150	0~360000	/	36

Note: Two parameters are given in the flow range, the middle parameter is the standard flow range, the general factory inspection is carried out according to this range, and it is also recommended that users choose instruments within this range; The latter parameter is the upper limit flow range to ensure the stable operation of the flow meter

Dimension

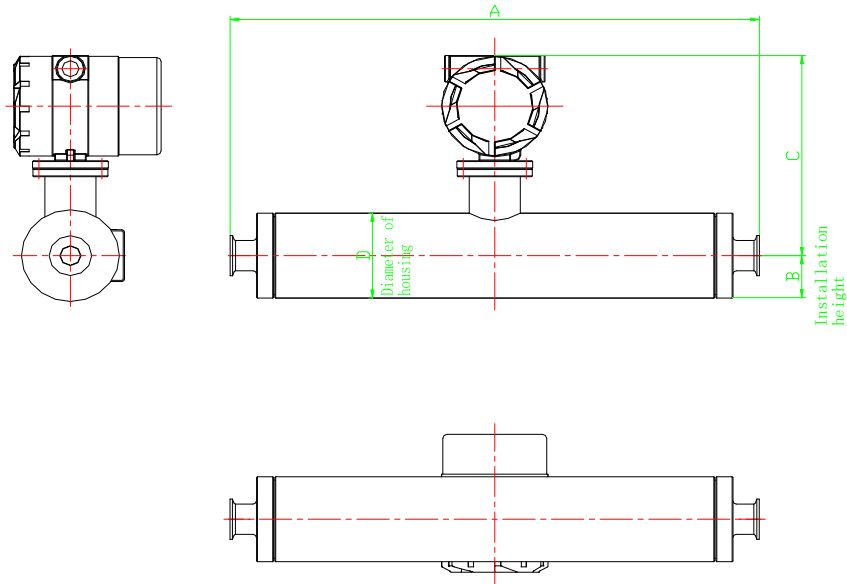
Coriolis mass Flow Meters are divided into straight tube Coriolis mass Flow Meters and non-straight tube Coriolis mass Flow Meters according to the shape of the converter

Ordinary straight tube mass Flow Meter integrated overall size



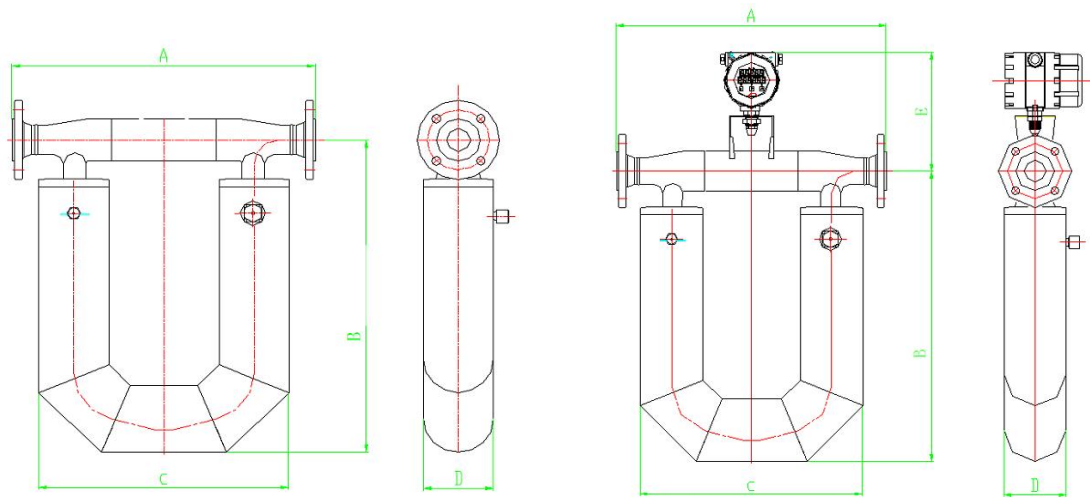
DN (mm)	A mm	B mm	C mm	D mm	Weight kg
DN 8	492	45	235	82	10
DN 10	542	47.5	238	87	12
DN 15	622	52.5	238	87	13
DN 20	685	57.5	251	106.5	18
DN 25	751	70	257	117	23
DN 32	867	70	264	137	31
DN 40	963	78.5	279	157	37
DN 50	1053	82.5	279	157	42
DN 80	1185	115	311.5	219	66

Sanitary straight tube mass Flow Meter integrated shape size



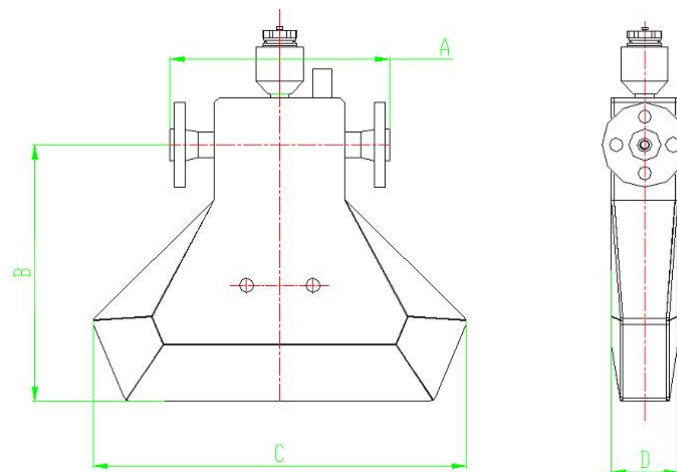
DN (mm)	A mm	B mm	C mm	D mm	Weight kg
DN20	598	54	257	108	17
DN25	680	66.5	261	133	23
DN32	680	66.5	261	133	23
DN40	792	70	273	140	28
DN50	864	79.5	283	159	36
DN65	948	79.5	283	159	42

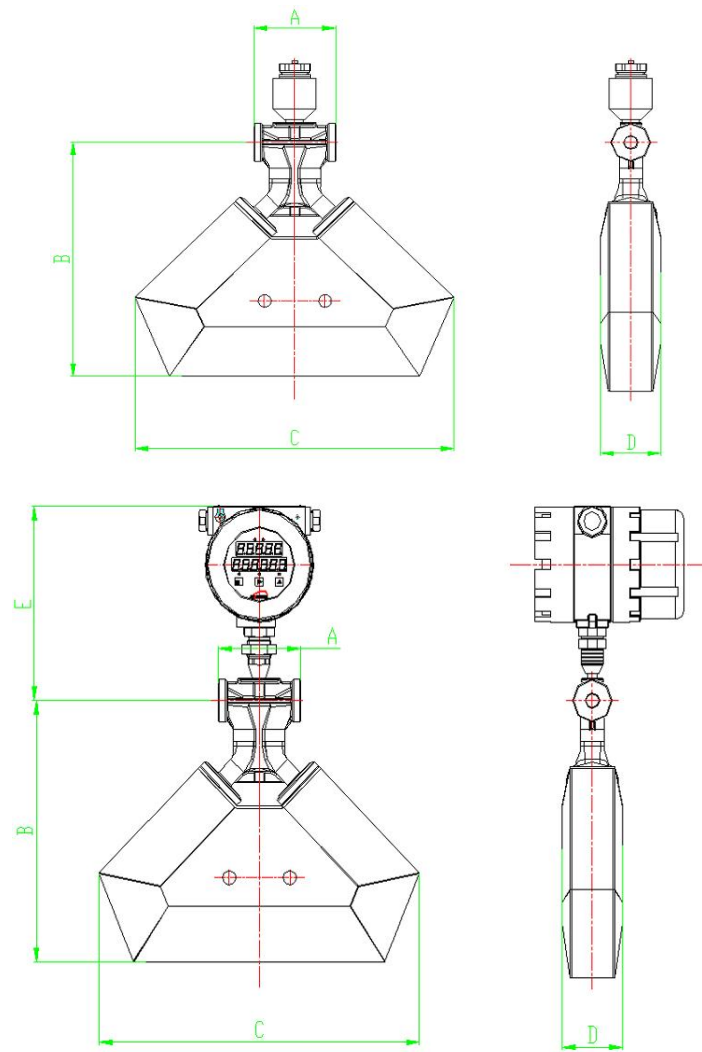
U type Coriolis mass Flow Meter dimensions



DN (mm)	A mm	B mm	C mm	D mm	E mm	Weight kg
DN 20	540	478	468	108	245	17
DN 25	540	492	468	108	245	17.5
DN 32	544	549	468	108	245	24
DN 40	600	635	500	140	267	32
DN 50	606	653	500	140	267	36
DN 80	866	857	779	219	316	87.5
DN1 00	950	977	833	273	340	165
DN1 50	1300	1211	1144	324	340	252

Triangle Coriolis mass Flow Meter overall dimensions





DN(mm)	A mm	B mm	C mm	D mm	E mm	Weight kg
DN3	196	176	250	62	270	4.8
DN6	250	263	360	74.5	289	8.1
DN8	250	275	395	70.5	289	8.2
DN10	161	283	370	80	264	6.5
DN15	161	302	405	80	264	6.5

■ Ordering Code

FK-FCC300-U-03-H-E-C1-F-AM-TM-WD-10-E8														Description
FCC300	-	-	-	-	-	-	-	-	-	-	-	-	-	Coriolis Mass Flow Meter
Sensor type	U													U-Shape
	S													Triangle
														Straight pipe
	Z													
Nominal diameter	03													DN3
	06													DN6(1/8")
	08													DN8(1/4")
	10													DN10(3/8")
	15													DN15(1/2")
	20													DN20(3/4")
	25													DN25(1")
	32													DN32(1.25")
	40													DN40(1.5")
	50													DN50(2")
	80													DN80(3")
	1C													DN100(4")
	1G													DN150(6")
	XX													Other
Process connection	H													HG/T 20592 Flange
	I													ISO2852 Clamp
	A													ANSI B16.5 Flange
	S													JIS B2220 Flange
	X													Other
Nominal pressure	E													PN40
	D													PN25
	C													PN16
	G													Class 150
	H													Class 300
	J													JIS 10K
	R													JIS 16K
	S													JIS 25K
	XX													Other
Measuring tube, process connection material and body material	C1													316SS,304SS,304SS
	XX													Other
Accuracy	K													Level 0.5
	F													Level 0.2
	XX													Other

Output and power supply	AM					4-20mA+pulse+RS485, 24VDC
	AK					4-20mA+HART+pulse, 24VDC
	AA					4-20mA+pulse+RS485, 220VAC
	AB					4-20mA+HART+Pulse, 220VAC
	BK					4-20mA+pulse+RS485, 24VDC/220VAC dual power supply
	BL					4-20mA+HART+pulse, 24VDC/220VAC dual power supply
Heat resistant temperature	TM					-50-200℃
	TN					-50-300℃
	TP					-200-200℃
	TQ					-20-200℃
						Other
Electrical interface, housing material and protection level	WD					Integrated type, M20×1.5 cable gland, aluminum alloy, IP67
	W8					Remote type, M20×1.5 cable gland, aluminum alloy, IP67
	XX					Other
Cable length for remote type	00					0m
	02					2m
	10					10m
	15					15m
	20					20m
	25					25m
	30					30m
	40					40m
	50					50m
	XX					Other
Explosion proof	00					None
	E8					ZJEx Ex db ia IIC T6 Gb