



EsuMass® SERIES

CORIOLIS MASS FLOW METER KF900

Data Sheet

STIX Durchflusssmesstechnik GmbH
info@stix-flowmeter.de

1. IDENTIFICATION

Manufacturer: STIX Durchflussmesstechnik GmbH
Product type: Coriolis mass flow meter
Product name: EsuMass® Series

2. RANGE OF APPLICATION

The EsuMass® coriolis mass flowmeter is a new generation of intelligent flowmeter developed by our company, which can not only measure the flow of ordinary conductive liquids, but also can be used for the volume flow of pure water and gas-liquid two-phase suspension liquid. Widely used in petroleum, chemical industry, metallurgy, textile, pharmaceutical, food and beverage, paper, electricity, urban water supply and drainage and environmental protection and other fields.

- Full intelligent design, strong anti-interference ability, high measurement accuracy.
- The integrated microprocessor offers a fast operation speed to ensure stable and reliable operation of products.
- No moving parts in the sensor, free flow parts, long product life, small pressure loss.
- The flow signal is linear to the average flow rate and is not affected by changes in fluid density, viscosity, temperature, pressure and conductivity.
- High definition LCD screen displays instantaneous flow, cumulative flow, temperature and density simultaneously.
- With a variety of current signal, pulse signal and frequency signal output. Current output can output parameters such as flow or density as well as temperature.

3. FEATURES

- S-Version: DN15 to DN100
- U-Version: DN15 to DN50
- V-Version: DN15 to DN50
- Accuracy: 0.1、0.15、0.2、0.3
- Flow velocity: 0.3 m/s – 10 m/s
- Protection Class: IP65, IP67 and IP68 (remote)
- 220VAC / 24VDC (Universal power)
- Depending on model and size: PN16 or PN40
- Output: Analogue 4-20 mA, Frequency output / Pulse
- Communication: RS485 / HART

4. TECHNICAL DATA

The EsuMass® transmitter utilises the latest DSP digital signal processing technology and fully digital drive technology, which greatly improves flow stability. The display features a large LED screen, providing smoother and clearer visuals, and it can maintain stable display performance even at low temperatures. The instrument is capable of real-time self-diagnosis, monitoring various issues in real-time and providing alarms. At the same time, the instrument is equipped with multiple signal interfaces such as current, pulse, and RS485, as well as various functional options to meet different working conditions. It employs a capacitive button design, allowing for convenient operation of the instrument without the need to open the converter's cover.

Display		OLED
Size of display		58x29
Decimal		1,2,3
Display unit	Mass flow	kg/s, kg/m, kg/h, t/s, t/m, t/h
	Mass totalizer flow	kg, t
	Cubic flow	L/s, L/m, L/h, m³/s, m³/m, m³/h
	Cubic totalizer flow	L, m³
	Density	g/cm³, g/L, kg/L, kg/m³
Temp of Environment		-40~65°C
Output	Pulse,frequency	equivalent signal/frequency signal(10KHz)
	4-20mA	Flow signal/density signal/temperature signal
Accuracy of pulse output		0.01%
Accuracy of current output		0.05%
Communication		RS485/HART
Power supply		220VAC/24VDC(universal power supply)
IP		IP67
Explosion grade		Ex d IIC T6 Gb
Product size		181.5x171x141
Weight		1.35Kg

5. FLOW RANGE BY TYPE

S-Version

Model	DN size (mm)	flow range (kg/h)	zero stability (kg/h)	accuracy
S15	DN15	300~3000	0.20	0.10、0.15 0.20、0.30
S25	DN25	1500 ~ 15000	1.25	
S40	DN40	3500 ~ 35000	3.00	
S50	DN50	5000 ~ 50000	4.00	
S80	DN80	15000 ~ 150000	12.5	
S100	DN100	20000 ~ 200000	17.5	

U-Version

Model	DN size (mm)	flow range (kg/h)	zero stability (kg/h)	accuracy
U15	DN15	300~3000	0.25	0.10、0.15 0.20、0.30
U25	DN25	800 ~ 8000	0.75	
U40	DN40	3200 ~ 32000	3.00	
U50	DN50	3500 ~ 35000	3.20	

V-Version

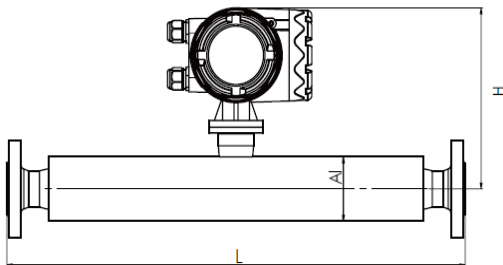
Model	DN size (mm)	flow range (kg/h)	zero stability (kg/h)	accuracy
V15	DN15	300~3000	0.25	0.10、0.15 0.20、0.30
V25	DN25	800 ~ 8000	0.75	
V40	DN40	3200 ~ 32000	3.00	
V50	DN50	3500 ~ 35000	3.20	

6. EsuMass® Series KF900S-FA



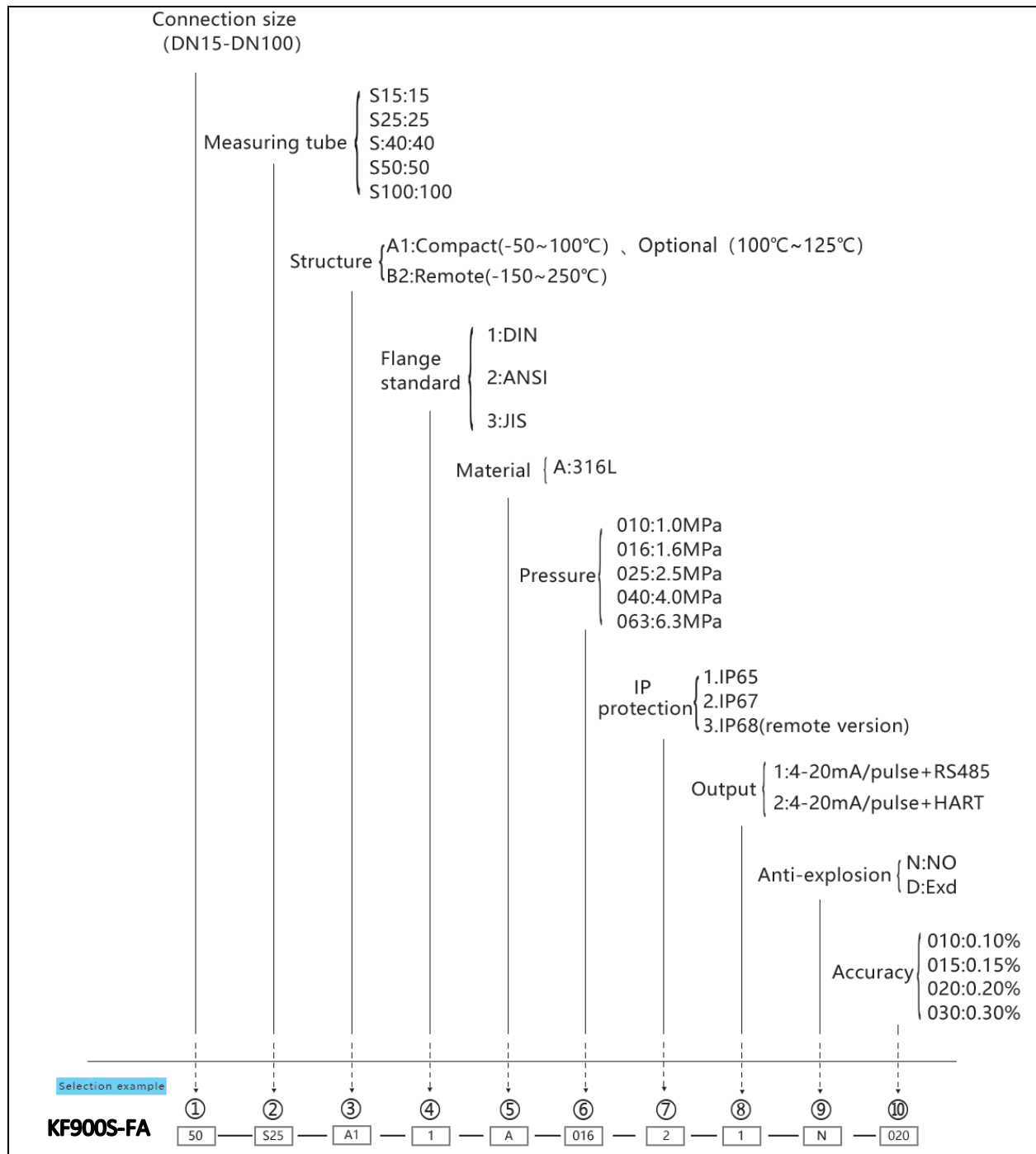
EsuMass® KF900S-FA straight shaped Coriolis Mass Flowmeters use flange connections. The Coriolis meter is widely used in petroleum, chemical industry, metallurgy, textile, pharmaceutical, food and beverage, paper, electricity, urban water supply and drainage and environmental protection and other fields.

DN size	DN15 to DN100
Material	316L
Accuracy	0.1、0.15、0.2、0.3
Velocity	0.3 m/s to 10 m/s
Working Temp	≤100 °C for compact version / optional 100°C to 125°C
Working Pressure	0.6 Mpa to 4.0 Mpa (with different size)
IP	IP65, IP67, IP68 (remote)
Output	4-20 mA / Frequency / pulse
Power supply	220VAC / 24VDC (Universal power)
Installation	Compact
Flange standard	DIN, ANSI, JIS



DN size	Pressure	L	A	H
DN15	PN40	498	76	202
DN20		498	76	202
DN25		531	89	214
DN32		531	89	214
DN40		620	114	226
DN50		712	133	236
DN65		712	133	236
DN80	PN16	880	168	254
DN100		1200	190	265

EsuMass® KF900S-FA model code description:



7. EsuMass® Series KF900S-KA sanitary mass flowmeter

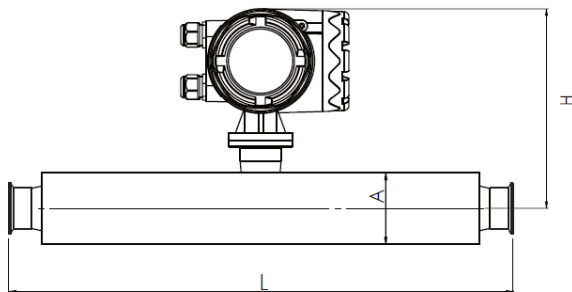


EsuMass® KF900S-KA straight Coriolis mass flowmeters use tri-clamp connections.

This version is mainly used in the chemical, metallurgical, pharmaceutical and food & beverage industries.

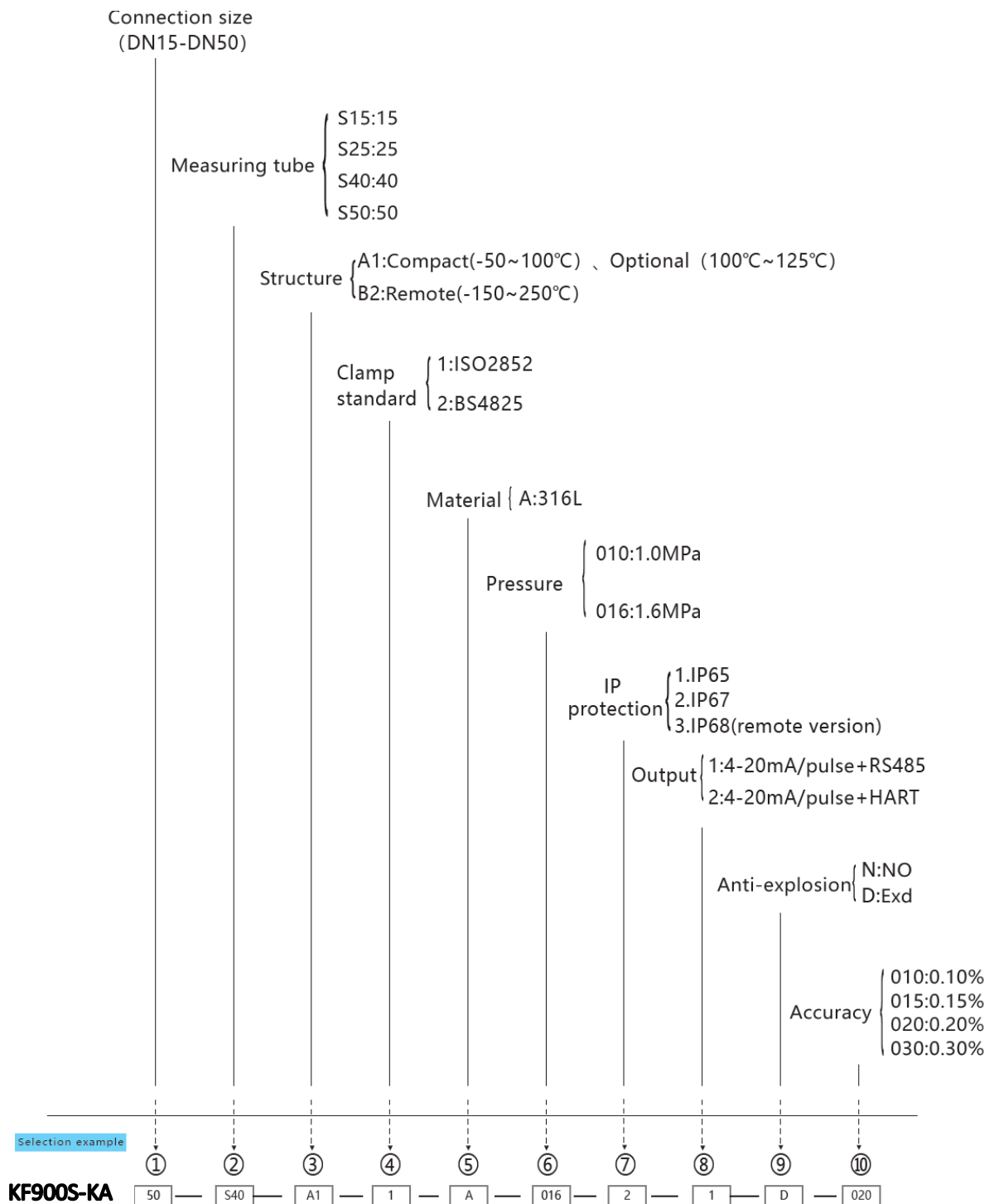
Flanges different from those shown.

DN size	DN15 to DN50
Material	316L
Accuracy	0.1、0.15、0.2、0.3
Velocity	0.3 m/s to 10 m/s
Working Temp	≤100 °C for compact version / optional 100°C to 125°C
Working Pressure	0.6 Mpa to 4.0 Mpa (with different size)
IP	IP65, IP67, IP68 (remote)
Output	4-20 mA / Frequency / pulse
Power supply	220VAC / 24VDC (Universal power)
Installation	Compact
Flange standard	ISO2852 (tri-clamp), BS4825



DN size	Pressure	L	A	H
DN15	PN16	498	76	202
DN20		498	76	202
DN25		531	89	214
DN32		531	89	214
DN40		620	114	226
DN50		712	133	236

EsuMass® KF900S-KA sanitary mass flowmeter model code description:

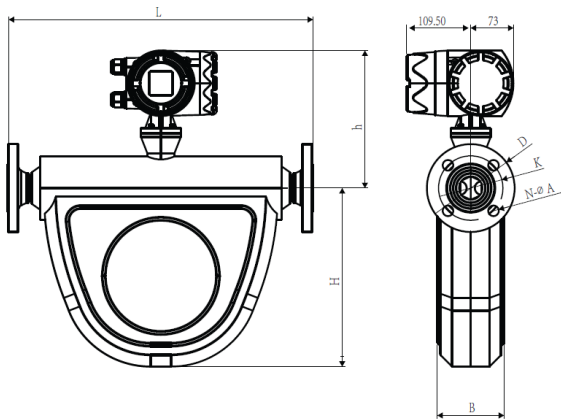


8. EsuMass® Series KF900U-FA



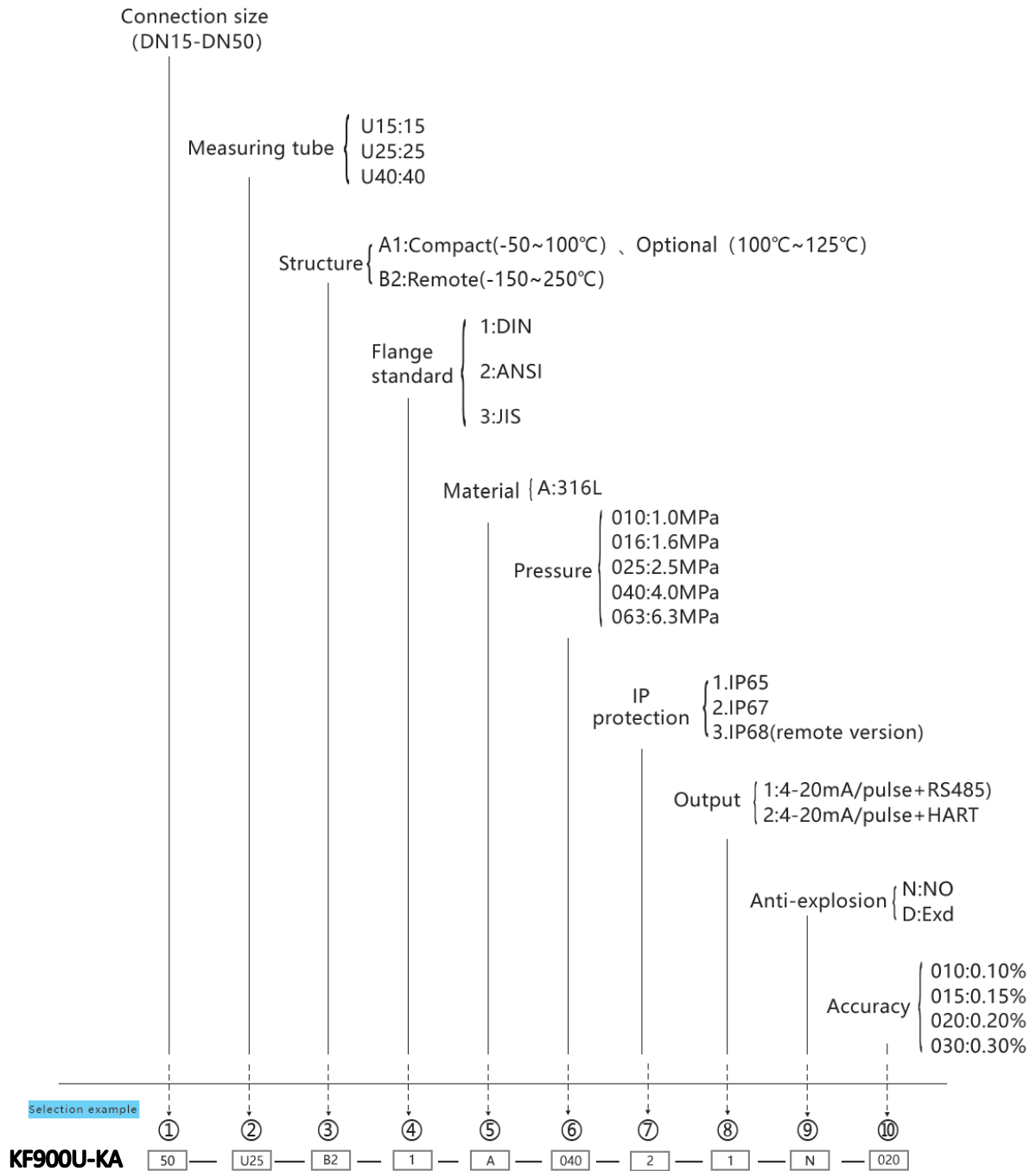
EsuMass® KF900U-FA U-shaped coriolis mass flowmeters uses flange connections. Widely used in petroleum, chemical industry, metallurgy, textile, pharmaceutical, food and beverage, paper, electricity, urban water supply and drainage and environmental protection and other fields.

DN size	DN15 to DN50
Material	316L
Accuracy	0.1、0.15、0.2、0.3
Velocity	0.3 m/s to 10 m/s
Working Temp	≤100 °C for compact version / optional 100°C to 125°C
Working Pressure	0.6 Mpa to 4.0 Mpa (with different size)
IP	IP65, IP67, IP68 (remote)
Output	4-20 mA / Frequency / pulse
Power supply	220VAC / 24VDC (Universal power)
Installation	Compact
Flange standard	DIN, ANSI, JIS



DN size	Pressure	L	D	K	N-ΦA	B	H	h
DN15	PN40	304	95	65	4-14	80	190	202
DN20		330	105	75	4-14	80	190	202
DN25		420	115	85	4-14	90	230	214
DN32		430	140	100	4-18	90	230	214
DN40		520	150	110	4-18	103	303	226
DN50		532	165	125	4-18	103	303	226

EsuMass® KF900U-FA model code description:



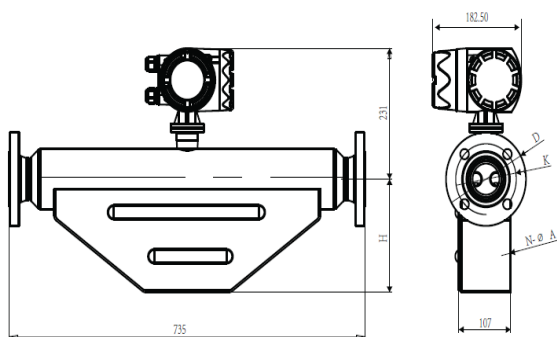
9. EsuMass® Series KF900V-FA



EsuMass® KF900V-FA V-shaped coriolis mass flowmeters uses flange connections.

Widely used in petroleum, chemical industry, metallurgy, textile, pharmaceutical, food and beverage, paper, electricity, urban water supply and drainage and environmental protection and other fields.

DN size	DN15 to DN50
Material	316L
Accuracy	0.1、0.15、0.2、0.3
Velocity	0.3 m/s to 10 m/s
Working Temp	≤100 °C for compact version / optional 100°C to 125°C
Working Pressure	0.6 Mpa to 4.0 Mpa (with different size)
IP	IP65, IP67, IP68 (remote)
Output	4-20 mA / Frequency / pulse
Power supply	220VAC / 24VDC (Universal power)
Installation	Compact
Flange standard	DIN, ANSI, JIS



DN size	Pressure	L	D	K	N-Ø A	B	H
DN15	PN40	304	95	65	4-14	80	202
DN20		330	105	75	4-14	80	202
DN25		420	115	85	4-14	90	214
DN32		430	140	100	4-18	90	214
DN40		520	150	110	4-18	103	226
DN50		532	165	125	4-18	103	226

EsuMass® KF900V-FA model code description:

