

OVAL GEAR FLOW METER

ALC-Series

Product Description

The oval gear flowmeter is a kind of volumetric measuring instrument and mainly composed of meter shell, oval gear rotor and transmission parts. It is an instrument used for continuous or discontinuous metering and controlling liquid in the pipeline. It has an advantages of large meterin range, excellent accuracy, small pressure loss, high viscosity adaptability, capability of measuring high-temperature and high-viscosity liquid, convenient demarcation and simple installation etc... it is applicable to measure crude oil, chemical, chemical fiber, traffic, commerce, food, medicine and health, scientific research and military etc..



Model and Function

ALC11-type: displays flow on site



ALC12-type: displays accumulated flow, pulse voltage signal or 4-20mA current signal out- put on site.



ALC13-type: solely standard signal output for users to collect and receive.

The provided signals are: pulse voltage signal or 4-20mA current signal



Applicable Condition

The ALC-A type Cast iron oval gear flowmeter is widely used in measuring various of oil products and liquid having no corrosion to the cast iron material.

The ALC-E type Cast steel oval gear flowmeter is used in measuring high-pressure and low-corrosion liquid.

The ALC-Q type Cast iron oval gear flowmeter with aluminium alloy rotor is widely used in measuring low-viscosity and low-corrosion liquid.

The ALC-B/C type Stainless steel oval gear flowmeter is widely used in measuring high-corrosion liquid, such as acid, alkali, salt and organic compound etc..

Technical Parameters

- Accuracy: 0.5%, 0.2%
- Line size: 10~200mm (We do offer 6mm and 8mm as well, but the material is stainless steel)
- Repeatability: not exceed 1/3 of the absolute value of the basic error limit of the flowmeter
- Output: 4~20mA, pulse
- Environment temperature: -40~50deg C
- Process temperature: normal is up to 100deg C,max 280deg C
- Pressure: 1.6, 2.5, 4.0, 6.3MPa
- Viscosity: 0~2000mPa.s
- Enclosure rating: NEMA4(IP65)
- Explosion proof: Exia II CT5, Exid II BT4
- Display: Rate, total flow
- Unit: L, m3
- Material and Nominal Pressure of Main Components

	Enclosure	Cover plate	Oval gear	Shaft Sleeve	Pressure(MPa)
ALC-A	Cast iron	Cast iron		ball bearing	1.6
ALC-E	Cast steel	Cast iron, SS			<DN50, 6.3 DN80~100, 4.0 DN150~200, 2.5
ALC-Q	Cast iron	Cast iron	Aluminum alloy	Graphite	1.6
ALC-B/C	Stainless steel	SS	Stainless steel	Graphite	1.6, 2.5
ALC-L	Aluminum alloy	Cast iron, SS	Cast iron, Aluminum alloy	Graphite/ball bearing	1.6

Flow Range

(unit: m3/h)

Accuracy		0.5	0.5	0.2	0.5	0.2	0.5	0.2	0.5
Model	Size	Viscosity mPa.s							
		<0.3	0.3~0.8	0.8~2		2~8		8~200	
ALC-10	10		0.2~0.4		0.08~0.4	0.1~0.4	0.08~0.4	0.08~0.4	0.04~0.4
ALC-15	15		0.75~1.5		0.3~1.5	0.3~1.5	0.3~1.5	0.3~1.5	0.15~1.5
ALC-20	20		1.5~3	1~3	0.4~3	0.6~3	0.4~3	0.5~3	0.3~3
ALC-25	25	4~6	3~6	2~6	0.8~6	1.2~6	0.8~6	1~6	0.6~6
ALC-40	40	9~15	7.5~15	5~15	2~15	3~15	2~15	2.5~15	1.5~15
ALC-50	50	10~24	8~24	8~24	3~24	3~24	3~24	4~24	2.4~24
ALC-65	65	16~40	20~40	15~40	5~40	8~40	5~40	6~40	4~40
ALC-80	80	24~60	30~60	20~60	6~60	12~60	6~60	10~60	6~60
ALC-100	100	40~100	50~100	34~100	10~100	20~100	10~100	16~100	10~100
ALC-150	150	75~190	95~190	64~190	19~190	38~190	19~190	32~190	19~190
ALC-200	200	140~340	170~340	114~340	34~340	68~340	34~340	56~340	34~340