

TECHNOLOGY

HOLYKELL®

FLOWMETER

• DATASHEET •

1. Pressure Measurement
2. Level Measurement
3. Temperature Measurement
- 4. Flow Measurement**
5. Display & Control Instruments

MDR-E Dual Rotor Flow Meter

Product Introduction



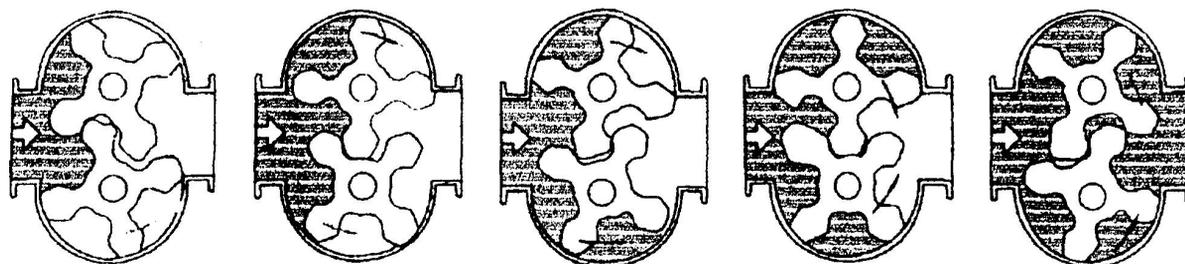
MDR-E dual rotor flow meter is a new type of volumetric flow meter with unique design and precision machining and assembly. A pair of spiral rotors are the only moving bodies in the metering chamber, and play a role in dividing, measuring, transporting and discharging the liquid to be measured. The structure of this flow meter is additionally provided with a positioning gear, so that the two rotors do not contact each other when rotating. The flow meter has stable operation, low noise, less wear, high accuracy and strong viscosity adaptability, and can allow the fine particles in the liquid to be measured to pass through, thus preventing the meter from sticking.

Product features

1. It is suitable for thin oil, light oil, heavy oil, crude oil with large sand content and large water content, and the viscosity range of the measured liquid is large.
2. The flow rate of liquid passing through the flow meter is large, and the maximum flow rate is about twice as large as that of the common volume meter with the same diameter.
3. Long service life, high accuracy and strong reliability.
4. The internal pressure loss is extremely small.
5. The longest distance of wired remote transmission is 1,000 meters, and the output of pulse signal $N=0.1L$ (1N for one pulse), which can be directly connected to the computer.

Working Principle

As shown in the following figure, the flowmeter directly measures the volume of liquid flow through a pair of rotating special spiral rotors. The measurement of fluid flow by flowmeter is completed in the metering chamber. A pair of spiral rotors rotate under the pressure of liquid, and the enclosed space (shaded part in the figure) formed between the rotor and the wall of the metering chamber discharges 8 times of shaded volume per rotation. Therefore, according to this relationship, as long as the number of revolutions of the rotor is measured, the cumulative flow can be calculated, and the instantaneous flow can be measured according to the number of revolutions per second.



Specification

Parameter	Specification
Material	Stainless steel
Accuracy	0.5% / 0.2%
Measuring range	5-340 m ³ /h
Diameter (MM)	DN40-DN250
Output	4-20mA / Pulse / RS485
Press	6.3Mpa
Power	24VDC or 3.6V Lithium battery
Connection	Flange
IP grade	IP65