



ROCKSENSOR AUTOMATION

 **RF3800 Series**
Oval Gear
Flowmeter

Introduction

Oval Gear Flowmeter is a volumetric meter for continuous or intermittent measurement and control of liquid flow in a pipeline. It has a large range, high accuracy, small pressure loss, strong viscosity adaptability. It can measure high viscosity liquid at high temperature. It is convenient to calibrate and install. These flowmeters are suitable for flow measurement in petroleum, chemical, fiber, transportation, food, medicine and health industries.

The RF3800 Series Oval Gear Flowmeter is equipped with a pointer and character wheel accumulation device which can directly display the liquid flow and instantaneous flow through the pipeline on site. The additional signaling device and electric display instrument in the counting mechanism can realize the centralized control of quantitative and instantaneous flow with remote transmission. Install a radiator or ellipsoidal tooth to measure high temperature and high viscosity liquid.

The flowmeter body is made of different materials as per their suitability to different liquids such as acid, alkali, salt, organic solution, etc.

Technical Specifications

• Low Viscosity Oval Gear Flowmeter

Flowmeter MOC	Cast Iron RF3800-A	Stainless Steel RF3800-B	Cast Steel RF3800-E
Nominal Pressure, Mpa	1.6	1.6, 2.5	1.6, 2.5, 4.0, 6.3
Temperature Range, °C	-20 ~ +80° C, +100 ~ +200° C		
Accuracy	0.5%		
Flow Range, m³/h			
Line Size, mm	Measuring Liquid Viscosity, mPa.s		
	0.16 - 2	2 - 200	
10	0.16 ~ 0.4	0.08 ~ 0.4	
15	0.6 ~ 1.5	0.3 ~ 1.5	
20	0.75 ~ 3	0.6 ~ 3	
25	1.5 ~ 6	0.8 ~ 6	
40	5 ~ 15	3 ~ 15	
50	6 ~ 24	4 ~ 24	
65	8 ~ 40	8 ~ 40	
80 (Light)	8 ~ 40	8 ~ 40	
80 (Heavy)	15 ~ 60	10 ~ 60	
100	30 ~ 100	15 ~ 100	
150	45 ~ 190	34 ~ 190	
200	68 ~ 340	56 ~ 340	

• High Viscosity Oval Gear Flowmeter

Flowmeter MOC	Cast Iron RF3800-NA	Stainless Steel RF3800-NB	Cast Steel RF3800-NE
Nominal Pressure, MPa	1.6	1.6, 2.5	1.6, 2.5, 4.0, 6.3
Temperature Range, °C	-20 ~ +80° C, +100 ~ +200° C		
Accuracy	0.5%		
Flow Range, m³/h			
Line Size, mm	Liquid Viscosity, mPa.s		
	200 - 1000	1000 - 2000	
10	0.04 ~ 0.3	0.03 ~ 0.2	
15	0.2 ~ 1.0	0.1 ~ 0.7	
20	0.4 ~ 2.1	0.25 ~ 1.5	
25	0.8 ~ 4.2	0.6 ~ 3	

40	2.1 ~ 10.5	1.0 ~ 7.5
50	2.4 ~ 16.8	2 ~ 12
65	5.6 ~ 28	4 ~ 20
80 (Light)	5.6 ~ 28	4 ~ 20
80 (Heavy)	6 ~ 42	6 ~ 30
100	14 ~ 70	10 ~ 50
150	27 ~ 133	19 ~ 95
200	48 ~ 238	34 ~ 170

• **High-Precision Oval Gear Flowmeter**


Flowmeter MOC	Cast Iron RF3800-A	Stainless Steel RF3800-B	Cast Steel RF3800-E
Nominal Pressure, Mpa	1.6	1.6, 2.5	2.5, 4.0, 6.3
Temperature Range, °C	-10 ~ +60° C		
Accuracy	0.2%		
Flow Range, m³/h			
Line Size, mm	Measuring Liquid Viscosity, MPa.s		
	0.16 - 2	2 - 200	
10	Inquiry	0.2 ~ 0.4	
15	Inquiry	0.3 ~ 1.5	
20	1.5 ~ 3	1.2 ~ 3	
25	3 ~ 6	1.6 ~ 6	
40	8 ~ 15	6 ~ 15	
50	12 ~ 24	8 ~ 24	
65	20 ~ 40	13 ~ 40	
80 (Light)	20 ~ 40	13 ~ 40	
80 (Heavy)	30 ~ 60	20 ~ 60	
100	50 ~ 100	30 ~ 100	
150	90 ~ 190	68 ~ 190	
200	170 ~ 340	112 ~ 340	



With Digital LCD display



With Analog display



Rocksensor (RKS), headquartered in Switzerland, is specialised in the Research & Development and Manufacturing of Industrial Automation equipment, especially High Accuracy Pressure Sensors and Transmitters. RKS also designs and manufactures various flowmeters such as Coriolis, Magnetic and other types, Temperature Transmitters and Level Transmitters.

These Field Instruments are suitable for measurement & control of various parameters in the industrial process conditions such as Pressure, Flow, Density, Level & Temperature and gas & liquid analysis. These products find widespread applications in Oil & Gas, Petrochemical, Power, Cement, Metal & Mining, Water, Food & Beverages, Pharmaceuticals, Glass, Engineering and various other industries.

As a responsible and an industry key player, RKS is committed to provide excellent & reliable products, technical services and support in the field of automation to the Customers all over the world.

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Disclaimer: Specifications & features are subject to continual improvement as an Organization Policy. RKS reserves the right to make changes to the datasheet and its functions at any time without notice.