



WPD R29



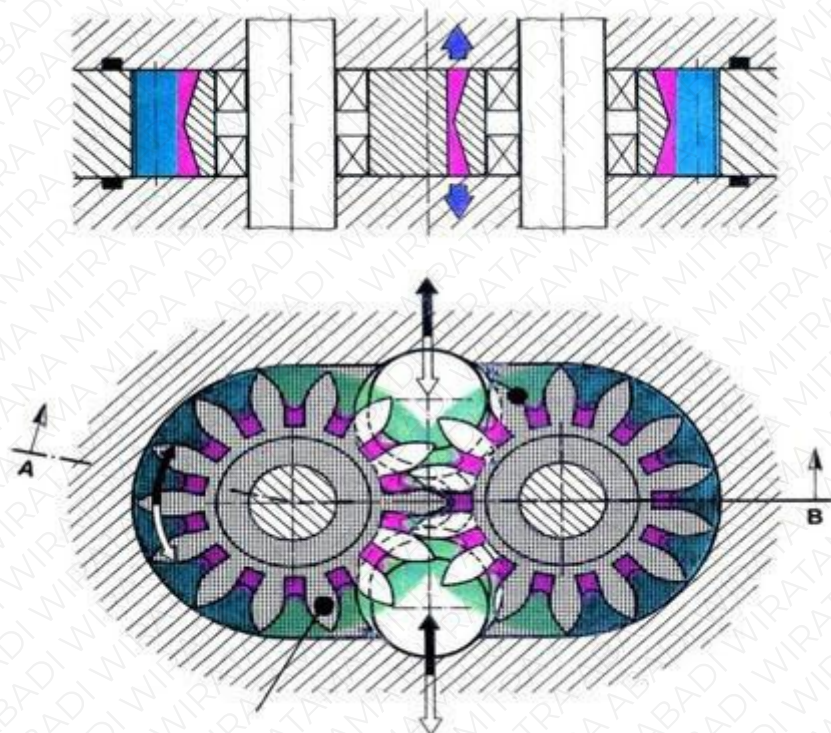
**WIRATAMA POSITIVE DISPLACEMENT
FLOW METER
CATALOG**

General Overview

It is a new type of volumetric flowmeter that is also called fuda flowmeter. It is used to precisely and continuously or discontinuously measure the flow or instant flow of liquid in the pipeline. It is applicable to measurement of flow of media whose viscosity is relatively high, such as heavy oil, polyving alcohol, resin and so on. Micro flow can also be measured precisely.

Operating principle and structure

There is a pair of gears that intermesh as rotor inside the cavity of the flowmeter. The two gears and the cavity can respectively constitute a fixed volume that is called standard volume. The flow is measured out by calculating the number going through this standard volume during a period of time.



Structure principle graph of gear flowmeter

Features

- Flow measurement has nothing to do with flow condition of fluid.
- For media whose viscosity is larger, the leakage rate of fluid leaking from the gear and measuring gap is smaller. Therefore, the larger the viscosity of media measured is, the smaller the leakage error is, the more benefit it is to measurement.
- The gear flowmeter features high measuring precision. It is applicable to flow measurement of media whose viscosity is high. However, it is not applicable to fluid containing solid particles. Filter installation is needed for this condition. Measurement error is also caused if the media is mixed up with gas.



- It features small volume and light weight and makes low vibration noise when operating. It can measure fluid whose viscosity is up to 10,000pa.s. The measuring precision is 0.5 grade and 0.2 grade. The widest measuring range can be up to 50: 1.
- There are many types such as universal type, high pressure type, food type and so on. They are applicable to micro flow measurement of various kinds of cleaning liquid.

Technical Parameters

(I) Instrument parameter

Type	Flow range L/h	Max flow range	Pressure rating Mpa	Material	Connection way	Media viscosity MPa.s	Temperature ℃
	0.5 grade						
R29-I	10～300	10～600	1.6 2.5 4.0 6.3 10.0 25 42	304 316	Flange Thread Clamp	0～10000	0～200
R29-II	20～600	20～1000					
R29-III	50～1000	50～1500					
R29-IV	100～2000	100～3000					
R29-V	200～5000	200～5500					

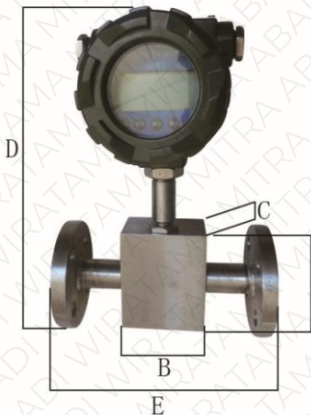
(II) Using environment

Temperature -20℃ To +50℃ humidity 5% to 95% air pressure 85kpa to 106kpa

(III) Electric indicator

1. Power supply: internal power supply is 3.6V lithium battery with power dissipation of less than 1mw. Exterior power supply is 12VDC～24VDC with power dissipation of less than 2w.
2. Output mode: pulse, current, RS485Mudbus, Hart agreement and so on.

Boundary dimension



	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
R29-I	80	70	40	250	220
R29-II	80	70	60	250	220
R29-III	100	90	60	270	220
R29-IV	100	90	70	270	220



Installing Way

At any direction. Straight pipes are unnecessary for the previous section. Filter installation is needed if there were impurities.



Type Code

Basis	1	2	3	4	Note
	Counter	Nominal pressure	Material	Degree of accuracy	
R29					Fuda-typed flowmeter
	I				I type
	II				II type
	III				III type
	IV				IV type
	V				V type
		1.6~42			Nominal pressure 1.6~42mpa
			C304		Rotor is 304 stainless steel
			C316		Rotor is 316 stainless steel
				0.5	0.5 grade

