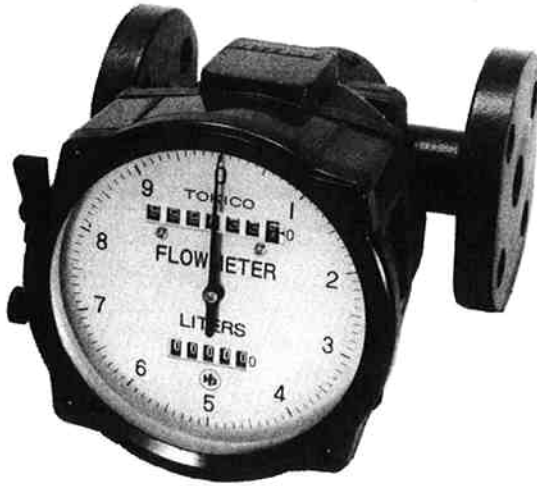


Roots and CCG Oil flowmeters



FGB type



FRO type

Tokico oil flowmeters are positive displacement type flow meter which are used in a wide variety of applications including measuring of boiler fuel oil and diesel oil, as well as for transactions for kerosene, light oil and heavy oil.

FGB type

This flowmeter employs a gear-type rotor for small-volume flow of low-viscosity oil in heat control applications, etc. It can be used without modification to measure kerosene, light oil or heavy oil. Measuring accuracy is $\pm 0.5\%$.

Two types, namely FGB type (gear type) and FRO type (Roots type) are available to provide optimum performance in accordance with the particular application.

FRO type

This flowmeter is widely used for transaction and in other applications in which a Roots type flowmeter is most suitable. The Roots rotor rotates without physical contact, resulting in extremely low pressure loss. In addition, its accuracy remain virtually unchanged over a long period of time.

Features

● Wide flow range and high accuracy

The accuracy of these flowmeters is within $\pm 0.5\%$ over a wide range of flow rates (max. range of 1:150 for heavy oil).

● Small pressure loss.

Because the pressure loss of these meters is low, it is possible to perform accurate measuring at the suction side of a pump as well as accurate measurement of high viscosity fluids.

● Compact design.

A positive displacement type flowmeter can be used at

relatively high rotating speeds, making for compact design. In addition, the counter unit of these meters is compact yet easy-to-read, and construction is simple.

● Excellent durability

The simple construction of these meters makes for longterm durability with virtually no degradation of accuracy.

● An electrical transmitter unit attachable.

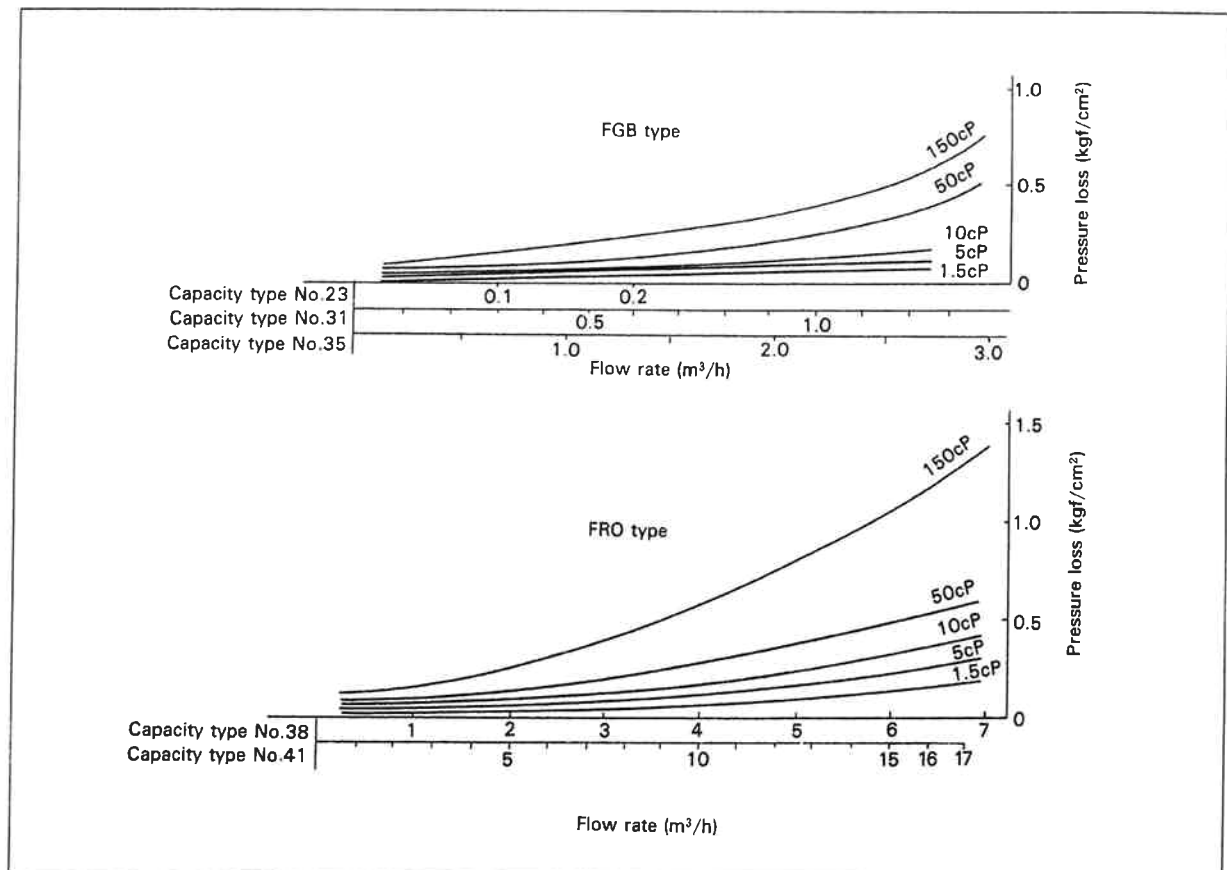
A microswitch or a reed switch type transmitter unit having simple construction and high reliability is available.

Standard specifications

Accuracy		± 0.5%
Flow range		See next page.
Max. working pressure		10kgf/cm ²
Hydraulic test pressure		20kgf/cm ²
Max. working temperature		60°C for kerosene and light oil 100°C for heavy oil (120°C with the FGB-00X and FGB-02X types)
Flange rating		JIS 10kgf/cm ² FF
Material	Body	FGB type: Bore 15mm – FC250 (Cast Iron), Bore 20, 25mm – FCD400 (Ductile Iron) FRO type: FC250 ※ 1
	Rotor	FGB type: Resin FRO type: Aluminium alloy casting
Counter unit		Integrating pointer and integrating counter (a reset counter is also available.)
Electrical transmitter unit	Transmitter	FGB type: Reed switch(S) , FRO type: Microswitch(M)
	Power supply	AC100V, 50/60Hz as standard
	Number of pulse	0 ~ 5 PPS
	Output signal	ON - OFF contact
Transmission cable		2-wire cable with cabtype
Flow direction		Right → left
Paint color		Munsell 1.4PB3.1/1.2

※ 1: Available for body material FCD400 (Ductile Iron on bore 40, 50mm). Please inform us when enquiring.

Pressure loss characteristics



Note: This table shows general pressure loss characteristics.

In the case of high viscosity fluids, it is possible to reduce pressure loss even further.