

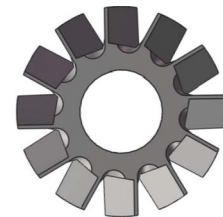
FTB400 Turbine Meters With Female Threads

- ▶ High pressure resistance
- ▶ Fast response time
- ▶ High repeatability and accuracy
- ▶ Range specific width is up to 50:1
- ▶ Compact structure

FTB400 contains a magnetic detector and a magnetic rotor (impeller) that drives the rotor (impeller) when a medium flows in the pipe. The speed of the rotor (impeller) is proportional to the velocity of the medium. The detector detects the rotor speed and converts it into a standard industrial electrical output or display.

FTB400 can be used for measuring medium and low viscosity medium, light fuel oil, hydraulic oil, lubricating oil, etc. Optional viscosity compensation allows FTB400 to be used in media where viscosity varies with temperature.

The impeller of FTB400 has more blades than other series products, up to 12 blades, so it has faster response speed and higher resolution.



FLOW

Specifications

Measuring range	6...600L/Min
Measuring medium	Medium or lower viscosity liquids
Accuracy	Better than +1% of reading
Repeatability	±0.2% of reading
Pressure Rating	MAX 420bar
Ambient Temperature	-40...85°C
Medium Temperature	-40...120°C
Materials	
Body	304 stainless steel、Aluminum
Rotor Support	304 stainless steel
Turbine	304 stainless steel
Shaft	304 stainless steel
Bearing	Stainless steel ball bearing
Process Connection	BSPF female thread

Applications

- ▶ Petrochemical/energy industry
- ▶ Hydraulic /lubrication system
- ▶ Water treatment
- ▶ Oil / gas industry
- ▶ Experimental equipment
- ▶ Test systems

Electronics

The electronic part includes sensors and amplifiers. Selecting the appropriate sensors and amplifiers for different applications can ensure the measurement accuracy of the flowmeter. Sensors and amplifiers can be made in one piece or separate pieces according to user requirements.

Sensor

The sensor is divided into magnetic induction sensor and non-magnetic sensor. The difference between the two is that magnetic induction sensor adopts the principle of electromagnetic induction. The sensor is magnetic and will cause braking effect on the turbine at low flow rate, while non-magnetic sensor adopts the principle of carrier and the non-magnetic sensor has no influence on the turbine.

Magnetic sensor (V series) :

Can be used for most common applications

Measure ultra-high temperature or ultra-low temperature media (-200... 400°C)

Applications requiring output mv signals

When it is used for small flow, the flow range needs to be reduced (due to the nonlinear braking effect at ultra-low flow rate). When replacing the sensor, the flowmeter needs to be re-calibrated

No magnetic sensor (R series) :

Can be used for most common applications

Extended range applications

Ultra-small flow measurement

No need to re-calibrate flowmeters when changing sensors

Amplifier

The amplifier can be used in conjunction with magnetic or non-magnetic sensors, with V for magnetic sensor, R for non-magnetic sensor, and H for high temperature resistance.

VS, RS series pulse output amplifier - The output is a square wave signal whose frequency is proportional to the instantaneous flow value.

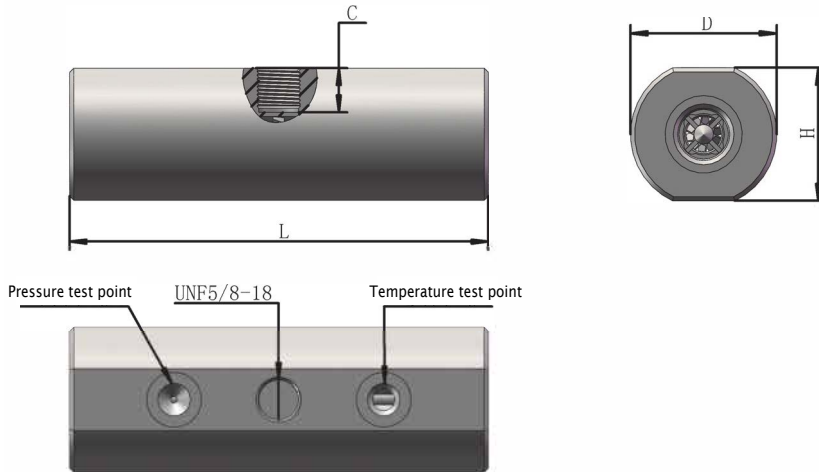
RF series linearized frequency output amplifier - Extended measuring range and multi-point linearization, the output is square wave, optional 24V, 10V, 5V square wave, the frequency is proportional to the instantaneous flow value.

RA Series linearized analog output amplifiers - Output voltage or current models such as 0-10V, 0-5V, 0-20mA, 4-20mA, and the output value is proportional to the instantaneous flow value.

DW series intelligent amplifier - with digital display, optional analog output, alarm output, linearization correction with the help of the operation menu, optional no magnetic or magnetic probe.

BT series explosion-proof intelligent amplifier - explosion-proof shell with digital display, optional analog output, communication output, alarm output, with the help of the operation menu for linearization correction, optional no magnetic or magnetic probe

Dimensions in inch[mm]



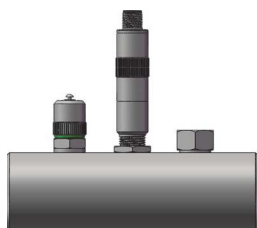
Dimensions in inch[mm]

DN	L		H		D		C	
	inch	mm	inch	mm	inch	mm	inch	mm
DN06	5.43	138	1.7	43	1.92	49	0.6	15.2
DN13	5.98	152	1.89	48	2.08	53	0.63	16
DN20	6.3	160	2.17	55	2.36	60	0.65	16.5
DN25	7.04	179	2.44	62	2.6	66	0.63	16.05

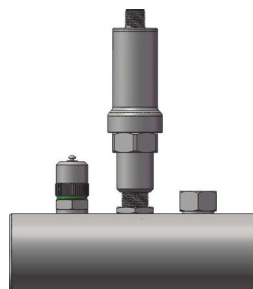
Model Number

OrderNO.	Type	Housing Material	DN	Measuring range L/Min	Connection	Max. Filter Diameter (micron)
FT4013	FTB400GF12ABBC75L	High strength Aluminium	13	6-75	G1/2	30
FT4020	FTB400GF01ABBC300L		20	25-300	G1	50
FT4025	FTB400GF114ABBC600L		25	50-600	G1-1/4	50
FT4113	FTB400GF12SBBC75L	304 stainless steel	13	6-75	G1/2	30
FT4120	FTB400GF01SBBC300L		20	25-300	G1	50
FT4125	FTB400GF114SBBC600L		25	50-600	G1-1/4	50

Optional sensor type



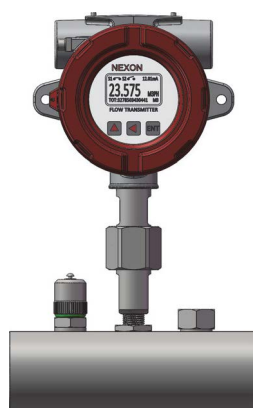
Pulse output
VS1000
RS1000



Analog output VA1000, RA1000, KA1000
Frequency output VF1000, RF1000, KF1000



DWE Digital display
DW1001
DW1002
DW1003



BT Explosion-proof digital display
BT1001
BT1002