

FT-110 Series - TurboFlow™

Economical Flow-Rate Sensors

- ▶ Low Cost Plus High Accuracy $\pm 3\%$ of Reading
- ▶ Measures Low Liquid Flow Rates of 0.4 to 30 l/min
- ▶ FDA Approved Materials
- ▶ Lightweight Plastic design enables mounting in any position

GEMS hall effect turbine flow rate sensor is ideal for OEM applications involving low flow liquid monitoring. The low cost coupled with 0.5% repeatability makes it an ideal candidate for replacing dispensing timer systems. Unlike existing timing systems, turbine technology is not influenced by changes in system pressure caused by ageing filters. The sensor's standard power and output specifications make it easy to retrofit to existing controllers.

Specifications

Wetted materials	
Body	Nylon 12
Turbine	Nylon 12 composite
Bearings	PTFE/15% graphite
Operating pressure	14bar max
Burst pressure	170bar
Operating temperature	-20°C to 100°C (ambient +80°C for cable)
Viscosity	32 to 81 SSU (.8 to 16 centistokes)
Filter	<50 Microns
Input power	5 to 24 VDC @ 8mA
Output	NPN sinking open collector @ 50mA maximum (1 to 2.2K Ohm pull-up resistor required) (Hz Output)
Accuracy	$\pm 3\%$ of reading
Repeatability	0.5% of full scale
Electrical connection	Spade terminals 2.8/6.3 x .8mm : 1m cable
Inlet/outlet ports	3/8" NPT male : G 3/8" male

How to Order

Specify Part Number based on desired flow range and thread type

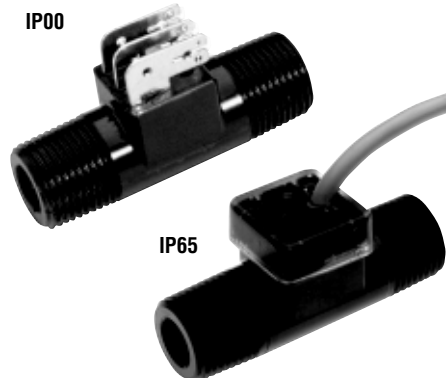
Flow Range	Pulses per Litre	Frequency Output	Part Number						Pressure Drop Code
			Terminals		Cable		Mini Din*		
Litres/m			3/8" NPT	G 3/8"	3/8" NPT	G 3/8"	3/8" NPT	G 3/8"	
.5-5	6900	58-575 Hz	173931	173936	173931-C	173936-C	027-1001	027-1006	A
1-10	3300	55-550 Hz	173932	173937	173932-C	173937-C	027-1002	027-1007	
1-15	4600	76-1150 Hz	173933	173938	173933-C	173938-C	027-1003	027-1008	
1-15	2200	37-550 Hz	173934	173939	173934-C	173939-C	027-1004	027-1009	B
2-30	1000	33-500 Hz	173935	173940	173935-C	173940-C	027-1005	027-1010	

● Consult Sales Office if there is a possibility of particles in the flow stream.

* Mating Connector supplied

FT-110 Accessories

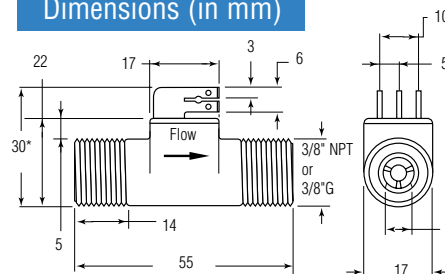
Description	Part Number
Mating connector w/1m, 3 conductor, PVC pigtail leads	173941
Mating connector w/3m, 3 conductor, PVC pigtail leads	173942



FT-110 with Din IP65



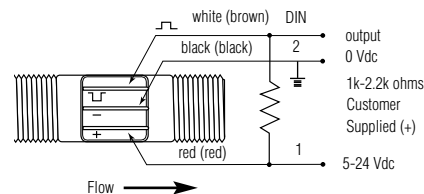
Dimensions (in mm)



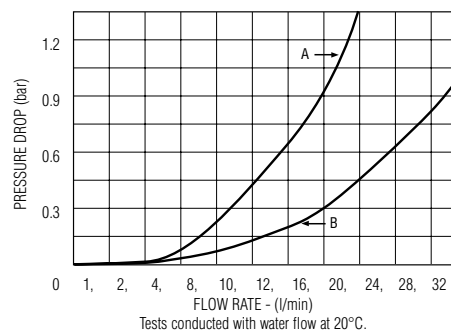
*with Din = 52mm

Wiring

(Integral Cable in brackets)



Pressure Drop - Typical



FT-210 Series - Flow Sensor

Economical Flow-Rate Sensors

- ▶ Low Cost Plus High Accuracy $\pm 3\%$ of Reading
- ▶ Measures Low Liquid Flow Rates of 0.1 to 2.5 l/min
- ▶ FDA Approved Materials
- ▶ Lightweight plastic design enables mounting in any position

GEMS Sensors hall effect turbine flow sensor is ideal for OEM applications involving low flow liquid monitoring. The FT-210 is the small brother of the FT-110 and allows lower flow rate monitoring. The low cost coupled with 0.5% repeatability makes it an ideal candidate for replacing dispensing time systems. Unlike existing timing systems, turbine technology is not influenced by changes in system pressure caused by ageing filters. The sensor's standard power and output specifications make it easy to retrofit to existing controllers.



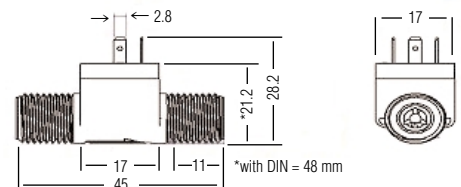
IP65

Specifications

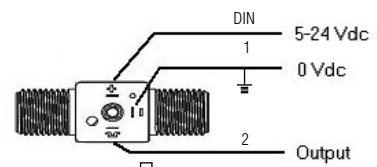
Wetted materials

Body	Nylon 12
Turbine	Nylon 12 Composite
Bearings	PTFE/ Graphite
Operating pressure	25 bar max
Burst pressure	200 bar
Max Flow	2.5 l/min
Operating temperature	-20°C to 100°C
Viscosity	up to 15 Centistokes
Filter	<50 Microns
Input power	5 to 24 VDC @ 8mA
Output	NPN Sinking Open Collector @ 20mA Maximum (1 to 2.2K Ohm Pull-Up Resistor Required) (Hz Output)
Accuracy	+3% of Reading
Repeatability	0.5% of Full Scale
Electrical connection	DIN 43650C (Mate supplied)
Intet/outlet ports	G 1/4" or 1 / 4 NPT Male

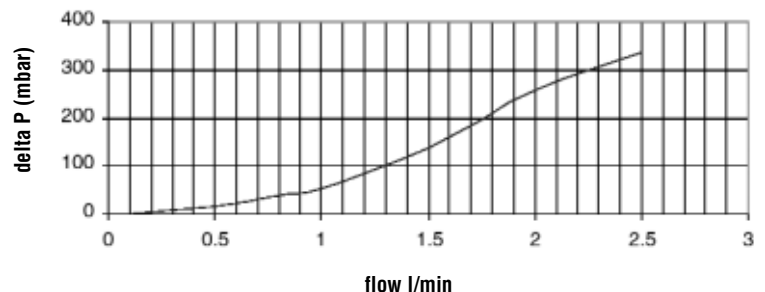
Dimensions (in mm)



Wiring



Pressure Drop - Typical



How to Order

Specify Part Number based on thread type

Flow Range	Pulses / litre	Frequency	Thread	Part Number
0.1-2.5	22000	37- 917 Hz	G 1 / 4	212460E
0.1-2.5	22000	37- 917 Hz	1 / 4 NPT	212465E

Mating Connector supplied

- Consult Sales Office if there is a possibility of particles in the flow stream.

Standard Products in **bold**