

LT10

Positive Displacement Flowmeters with Frequency output

Up to

- 10 lpm, 2.5 US gpm
- 250 bar, 3600 psi

The LT10 positive displacement flowmeter with frequency output provides a complete solution to low flow measurement of servo systems, leakage flows, power steering and control systems on fixed and mobile applications. The flowmeter can be installed anywhere in the hydraulic circuit for production testing, commissioning, development testing and control systems.

The compact design allows the LT10 positive displacement flowmeter to be installed where space is limited.

The LT10 positive displacement flowmeter has a frequency output and is the ideal tool for monitoring the performance of pumps, motors, valves and hydrostatic transmissions.



Manufacturers of hydraulic components and test equipment
for the Mobile, Industrial and Agricultural industries



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Features

- **FLOW:** 0.1 - 10 lpm, 0.05 - 2.5 US gpm
- **PRESSURE:** Up to 250 bar, 3600 psi
- **ACCURACY:** $\pm 1\%$ of full scale over normal range
- **BI-DIRECTIONAL** operation*
- **TEMPERATURE** sensor built-in
- **FLUIDS:** Wide range of hydraulic, lubrication oil, and fuels
- **CALIBRATION:** 21 cSt as standard. Special calibration possible

* Calibrated in one direction only



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Specifications

Model number	Flow range	Max pressure	Inlet / outlet ports
LT10	0.2-10 lpm (0.05 - 2.5 US gpm)	250 bar (3600 psi)	3/8" BSPP

Functional specification

Ambient temperature:	5 to 40°C (41 - 104°F)
Fluid temperature:	
Continuous	5 to 90°C (41 - 194°F)
Intermittent (<10 mins)	90 to 110°C (194 to 230°F)
Fluid:	Hydraulic oil, lubrication oil
Flow accuracy:	± 1% of full scale
Temperature accuracy:	± 1 °C +/- 2°F
Repeatability:	± 0.2%
Temperature accuracy:	± 2.5°C (+/-5°F)
Output:	Frequency - 20 -2000 Hz Impedance - 3700 Ohm, Inductance - 1kHz: 1.55H

Construction material

Main block:	Aluminium 2014AT6
Internal parts:	Steel gears, Stainless steel ball bearings,
Seals:	Viton
Size:	112 x 70 x 66mm (4.5" x 2.75" x 2.6")
Weight:	1kg (2.2lbs)

Operation

As fluid is passed through the block it rotates a pair of gears. The gear's teeth are detected by the magnetic reluctance transducer which produces a pulse output.

Reverse flow

The LT10 is capable of measuring flow in either direction.

Calibration

All units are calibrated with 21cSt oil as standard. Calibration certificates are available on request - this is a chargeable option. Other calibration on request - please consult the sales office.

Filtration

It is recommended that a 15 micron filter is installed in the hydraulic circuit prior to the flow meter.

Installation

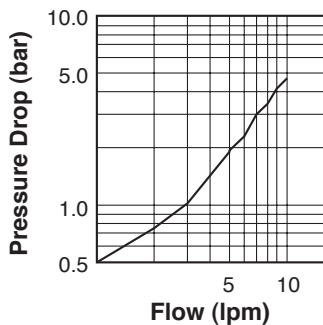
The LT10 positive displacement flow blocks can be used to measure flow in both directions. We recommend the use of a relief or check valve to protect against excessive pressures caused by surge flows.

Accessories

DHCR readout - see separate bulletin
Panel meter - see separate bulletin

Pressure Drop Chart

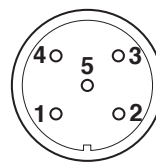
Hydraulic Oil Viscosity 21 Centistokes



Note

- 1 UK gallon = 4.546 litres
- 1 US gallon = 3.785 litres

Connection Details



Pins

- 1 - Freq +ve
- 2 - Freq -ve
- 3 - Temp
- 4 - Temp
- 5 - N/C

Description

- Connecting cable (5m)
- Connecting cable (10m)
- Connector M12

Part number

- FT10228-05
- FT10228-10
- FT9880