

DF130 Series

Digital flow readouts

To 800 lpm,
480 bar



The Webster DF series digital flow readouts can be coupled to any Webster flow meters, providing a complete solution to flow measurement on hydraulic test-stands, industrial machines and other fixed and mobile applications. The readout is electrically connected to the flow block which can be installed anywhere in the hydraulic circuit for production, commissioning and development testing.

The readout is designed to be panel mounted and the calibration can be easily adjusted.

A wide range of turbine and positive displacement flow blocks are available which can accurately measure flow in both directions.

These flow meters together with the Webster range of digital pressure meters, tachometers, thermometers and associated transducers, provide the instrumentation needed to analyse the performance of pumps, motors, valves and hydrostatic transmissions.

Features

- **FLOW:** 0.1 - 800 lpm
- **PRESSURE:** Up to 480 bar (7000 psi)
- **ACCURACY:** $\pm 1\%$ of full scale
- **LARGE** easy to read 6 digit display
- **POWER** supply AC or DC
- **BI-DIRECTIONAL** flow meters
- **AVAILABLE** with relays and analogue outputs (4 - 20 mA and 0 - 10 V)

Another quality product from the Webster Range

Specifications

Typical flow test systems - other flow ranges available

Model number	Accuracy and typical flow range		Maximum continuous pressure	Port size
	lpm	Accuracy	bar	
DF130 - 50	10 - 50	± 0.5 lpm	420	3/4" BSPF
DF130 - 125	10 - 125	± 1.2 lpm	420	3/4" BSPF
DF130 - 250	20 - 300	± 3 lpm	420	1" BSPF
DF130 - 400	20 - 400	± 4 lpm	420	1" BSPF
DF130 - 500 HP	20 - 500	± 5 lpm	420	1 7/8" UNF
DF130 - 750 HP	25 - 750	± 7.5 lpm	420	1 7/8" UNF

*High pressure flow meters up to 480 bar available

Measurement and indication

Readout

Large easy to read 6 digit red LED display reading to 999,999. Characters 14.2mm (.56") high, seven segment. The number of decimal places is user programmable to allow the required degree of resolution. Readouts can be scaled in lpm, Imperial and US gpm (specify when ordering).

Readout Input from, 50 mV p-p to 65 V RMS into 34.9 kΩ
Input frequency: Maximum 10 kHz. Turbine 80 mV output at minimum flow.

Accuracy with Webster flow meters

All Webster flow meters have excellent repeatability giving accuracy of better than ±1% of the full-scale reading when used over their full flow range and within the viscosity band 10 - 30 cSt. Improved accuracy can be attained through special calibration for different viscosities and with additional frequency-flow linearisation, accuracy of 1% of the indicated reading can be obtained. Please contact sales to discuss your application.

Flow

Measured by the electronic count of an axial turbine that is designed to minimise the effects of variations in temperature and viscosity. A magnetic transducer monitors the speed of the turbine. Built-in flow straighteners reduce flow turbulence and allow flow measurement in both directions. To measure flows over 800 lpm see LTU bulletin for more details and for flows under 20 lpm, positive displacement type flow meters are used.

Units of measurement

The readouts are available to measure standard units of flow, lpm, gpm (US and Imperial). Readouts can be specially calibrated to the units of your choice, i.e. m³ / hr, mm / min (cylinder stroke).

Construction

Readout

The display is housed in a black plastic case with polyester front label and pull-out terminal blocks for easy wiring.

Models are available with two relays and analogue outputs. The relays can be set for high and low rates, the analogue output is both 4 - 20 mA and 0 - 10 V.

The readout is supplied complete with panel mounting clamps and gasket.

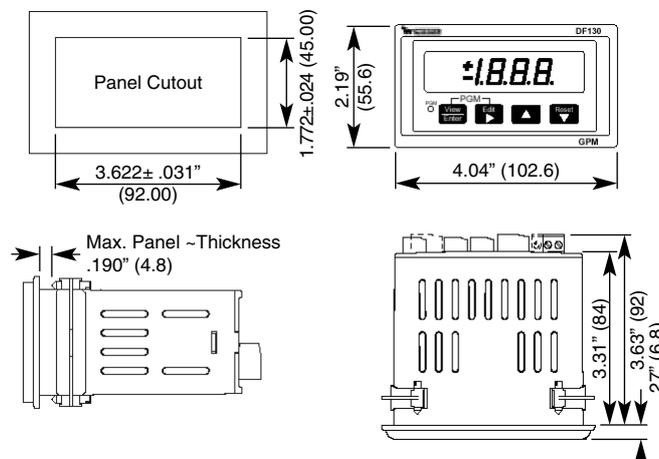
Voltage: 85 - 265 V AC or 9 - 30 V DC

Mass: 0.25kg

Dimensions: See installation details below

Installation

DF130 digital flow readouts are designed to be panel mounted, see details below.



How to order

Choose flow range, outputs required from readout and power supply (AC or DC), then contact your local sales office. Contact details on the front page of the bulletin.