



**WEBTEC**

**WEBSTER INSTRUMENTS**

***A Frequency to  
Current Converter  
to suit a variety  
of applications***



***Another quality product from  
the Webster range***

**FC 2420 Linearised Frequency-Current Converter**

# Overview

The FC 2420 converts the output frequency from Webster turbine flow meters into a 4 - 20 mA signal for accurate transmission to a remote readout, or input to a computer

The FC 2420 has two independent microprocessor controlled channels. Each channel can be separately linearised to give an accuracy of better than 1% of the indicated flow.

The unit can also be used in conjunction with a magnetic speed pick-up to calculate speed. The FC 2420 can be customer-programmed with the number of gear teeth so that the current measured is directly proportional to the speed in rpm.

The FC 2420 requires no external amplifiers and is Crystal controlled for long term stability. Transformer and opto-isolators provide isolation.

The front panel has dual indicators to show loop compliance. Together with a DIN standard case and the option of a DIN rail connection, easy installation, calibration and set-up is assured.

Din Rail Connector  
FT8436



FC2420

25 way I/O Cable  
PT# FT8435

# Features & Specification

- Dual channel
- No calibration potentiometers
- Fast operation
- Linearises flow to within 1%
- Flow averaging option
- Outputs can be summed
- DIN Standard case and rail connection
- True current source
- 20 MHz RISC Micro-controller
- CE approved
- Isolation

**Dimensions:** Height: 3.74" / 95 mm  
Width: 3.74" / 95 mm  
Length: 6.70" / 170 mm

**Weight:** 2.2 lb / 1 kg  
**Environmental:** IP54

**EMC:** EN55011 :1991 CLASS A,B  
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ENV50140 :1994  
ENV50204 :1994  
ENV50141 :1994  
EN61000-4-2 :1995  
EN61000-4-4 :1995

Radiated RF Emissions  
Conducted RF Emissions  
Radiated RF Immunity  
Radiated RF Immunity  
Conducted RF Immunity  
Electrostatic Discharge Immunity  
Electrical Fast Transients Immunity

**Electrical Safety:** EN60950

**Functional:**

- 2 Input channels
- Frequency Range : 1 Hz - 3kHz
- Input Sensitivity : 10mv @ 1 Hz, 100mV @ 2 kHz
- Max Input Voltage : 10 volts RMS
- 2 Output channels : 4 - 20 mA / 0 - 16 mA (selected by internal link)
- Max. Load Resistance : 580 ohms
- Response Time : Option 1 less than 1 ms + 1 input period.  
: Option 2 100 ms nominal.
- Accuracy : Timing better than 0.1% FSD  
: Current Generator better than 0.1% FSD  
: Flow better than 1% of indicated
- Noise : Typically 10 micro-amperes (200 ohm load 100 nF)
- Isolation : Opto-isolated output loops
- Power Requirements : 110/240 V ac (selected by internal links) Nominal 6 VA
- Connections : Mains via IEC type captive plug (cable included)  
: I/O via 25 way 'D' style (order part # FT8435)  
: Optional DIN rail connectors (order part # FT8436)
- Controls : None external, Calibration via internal DIP switches
- Indicators : Power, loop alarm

Represented by



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