

# K-Factor Scaler

## Frequency Divider

### SPECIFICATIONS

#### External Power:

Input Voltage 8.5 to 30 VDC, diode protected  
 Maximum  
 Current Draw 18 mA, using internal resistor @ 30 VDC input

**Inputs:** Magnetic pick-up  
 Frequency Range 0-4000 Hz  
 Trigger Sensitivity 30 mV p-p to 30 V p-p

**Output Signal:** 30 VDC max voltage (open collector transistor) 0.25 W max power  
 Pulse type, using internal pull-up resistor;  
 $V_H$  = power input voltage - 0.7 VDC  
 $V_L$  = less than 0.4 V @ max input power  
 Pulse type, using external pull-up resistor;  
 $V_H$  = input voltage to external pull-up resistor  
 $V_L = [V_H / (\text{selected resistor value} + 47\Omega)] \times 47\Omega$   
 Pulse length;  
 150 $\mu$ s, 1ms, 25ms, 100ms, 500ms, 1s or auto mode selectable

#### Internal Pull-up

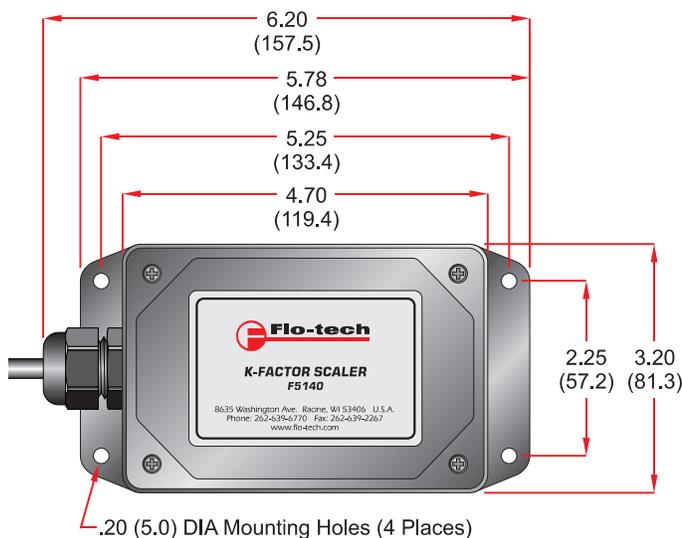
**Resistor:** Jumper disable option 3.6K Ohm

#### Operating

**Temperature:** -22 to +158 °F (-30 to +70 °C)

**Enclosure:** UL 94-5VA flame retardant ABS with mounting flanges

### DIMENSIONS - Inches (mm)



- Pre-amplifier for low level turbine meter
- Interface for pulse output devices to PLC, RTU, PC data acquisition card or similar devices
- Scale turbine meter output to desired engineering units
- On board microcontroller
- Internal or external pull-up resistor
- Compact ABS enclosure with mounting flanges
- Field adjustable (with optional software)
- K-factor range 1- 999,999,999

The K-Factor Scaler is a field adjustable frequency divider that converts the low level frequency output from a turbine meter into a scaled square wave output signal. This amplified, square wave output signal will interface with any frequency or counter input data collection device.

Due to the low level frequency signal of the FSC-375 and the Ultima F6202-F and F6222-F series turbine meters, the K-Factor Scaler is required to amplify the signal of these turbine meters for transmission to the Flo-tech F6600 and F6650 Series digital displays.

The K-Factor Scaler is also capable of converting the frequency output of a turbine meter into a different frequency, representing another unit of measure, such as liters, barrels, cubic feet, etc. This requires the optional programming software kit and the K-factor information unique to the turbine meter.

### ORDERING INFORMATION

| MODEL                    | PART NUMBER |
|--------------------------|-------------|
| K-Factor Scaler          | F5140       |
| Programming Software Kit | F5141       |