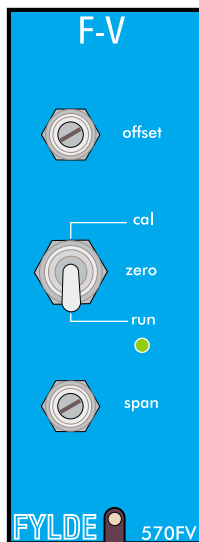


## FE-570-FV frequency-voltage converter



For use with signals from :-

- TOOTHED WHEEL \*
- OPTICAL PICKUPS \*
- MAGNETIC PICKUPS \*
- HIGH & LOW LEVEL FREQUENCY SIGNALS GENERALLY

The FE-570-FV accepts frequency inputs from electromagnetic or light activated sources, or from a low impedance output of other signal conditioning systems for virtually all pulse or frequency waveforms.

A regulated 12 V d.c. transducer power supply is provided together with indication of the detection of the frequency signal.

The frequency of the incoming signal is converted to an output voltage in the range 0-10V with excellent linearity.

The input frequency range can be customer specified (max. frequency for +10V output). Standard range is 20Hz to 20kHz.

The module has an output active filter to reduce ripple whilst maintaining rapid response. The user may adjust this filter to optimise response time for the application if desired.

Outputs are available to drive computer a-d, tape or galvo.

Power requirement is 200-250V AC or alternative 100-120V a.c. 50/60Hz. 12V d.c. power may be utilised by fitment of an FE-605-DCC converter.

Up to 16 modules (plus power switch module) fit standard 2U-PE17 crate. 8 in a PE8 1/2 rack, 4 in a PE4 and 2 in a PE2.

A wide range of compatible amplifiers and signal conditioners are available.

For use with very rapidly changing signals, see FE-578-TT Transient Tacho.

**FE-570-FV FREQUENCY TO VOLTAGE CONVERTER**

INPUT	Frequency	Customer choice of preset full scale frequency from 100 Hz to 30 kHz.
	Sensitivity	25 mV r.m.s. at 100 Hz.
	C.M.R.R.	40 dB D.C. to 1 kHz
	Impedance	20 k $\Omega$ typical
TRANSDUCER SUPPLY	Power	12 V limited to 25 mA
	Protection	Continuous Short Circuit.
	Completion	Pull up or hold down resistor positions are available
OUTPUT	Voltage	10 V full scale, or scaled to order
	Linearity	Better than 0.05%
	Zero Accuracy	$\pm 0.1\%$
	Current	5 mA at 10 V, >10 mA at reduced output
	Impedance	Direct output approximately 1 $\Omega$ in series with system EMC filter. An attenuated output with impedance and scaling configured by on board resistors is also available.
	offset	Jumper configured as either a back off control or a zero offset control. Factory set as zero offset control with range of $\pm 125$ mV. As a back off control, the fully clockwise position is 0 V output for 0 Hz input.
	span	From X 1 to X 3. In the X 1 fully anticlockwise position 10.0 V output corresponds to full scale frequency.
	calibration	Three position switch selects two internal Cal levels of 0.00 V and 5.00 V (with span fully anticlockwise).
	Indication	LED on front panel indicates presence of input signal.
	CONVERSION	method
FILTER	output	Standard 2 pole active filter programmable via plug in resistor network for ripple / settling time tradeoff.
		Optional 3 pole filter available.
TEMPERATURE	coefficient range	<100 ppm/ $^{\circ}$ C 0 -50 $^{\circ}$ C
POWER	requirement	200-240 V 50 Hz standard, 100-120 V 50/60 Hz to order 11-14 V Approx. 50 mA, using FE-605-DCC, to order.
PRESENTATION		Standard Fylde single width (1") module.
DIMENSIONS		Panel 2.75" x 1" (7x 2.5 cm), length 7.7" (18.2 cm)
CONNECTOR		25 way edge connector, 1.0" (2.5 mm) pitch