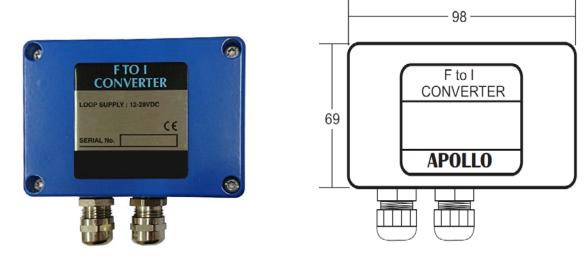# TURBINE FLOW METER FREQUENCY TO CURRENT CONVERTER

This is a loop powered instrument that converts the pulsed output from your flowmeter into an analogue 4-20mA signal.

Materials of Construction

Protection: IP65
Materials: Aluminium with rubber gasket
Mounting: On to the flowmeter by mounting bracket or surface mount via screw holes in the base corners
Temp. range: 0 - 45 deg C

Specification

Power input: 2 Wire 12 -28V DC loop powered
Connections: PCB mounted screw terminals via weatherproof cable glands

Input Signals

Frequency range 0 to 3 kHz.
1. Preamplifier
    Sensitivity: Low Level < 8mA / High Level > 11mA
    Input Max: 3.0V 100mA
2. Proximity sensor: Namur DIN 19234
    Sensitivity: Low Level < 1mA / High Level > 3mA
3. Pickoff Coil: Input Min: 15mV RMS / Input max: 5V RMS
4. Switch Closure: Energising Voltage: 5V / Energising Current: 10mA DC
5. Voltage Pulse:
    Sensitivity: Low Level < 1V / High Level > 2.5V
    Input Max: 40V

Output

Max. load: 4-20mA into 250 Ohms @ 12 V dc or 4-20mA into 1K Ohms @ 28 V dc
Linearity: 0.2 % of span
D to A converter: 15 bit
Update time: 4 Hz (standard unit) / 32 Hz (optional)

Application

This unit will convert a pulsed flow meter signal into a loop powered 4-20 mA signal for instruments such as PLC's, computers, flow controllers, chart recorders or local displays.

Installation

The robust aluminium enclosure allows the instrument to be installed almost anywhere. It can be mounted in a panel, on to a wall or on to the flowmeter.

Instrument Function

It will accept pulsed signals from any flow meter. It provides you with an analogue output of 4 - 20 mA. It improves the accuracy by correcting for the non-linear performance of flow meters.

Setup

The instrument is pre-set for your flow meter using up to 8 linearisation points from the calibration certificate.