PRODUCT DESCRIPTION
The FTC converter receives frequency input and converts to a proportional 4-20mA output. It has been configured to fit a compact and NPT "ELBY" explosion proof enclosure. The frequency range is field selectable to fit most applications. ZERO and SPAN adjustments make it easy to calibrate to almost any measurement range, with little interaction between the adjustments. The power supply input is designed to cover the entire range of commonly available DC power, with no selecting or adjusting.

SPECIFICATIONS
Supply Voltage Vs: 9 - 36 VDC @ ≤ 4mA
Output Signal: 4 - 20 mA
Input Protection: 100 VAC, reversed leads
Output Protection: Short to +VDC, Common or Signal Out continuous
Frequency Input Range: Fmin: 0 Hz yields 4 mA signal (two adjustable ranges, see P/N table below) [up to ~18 kHz @ 1% linearity with >50mV signal]

Input Sensitivity: Standard: 50 mVpp
High: 12 mVpp or 5 mVpp
Linearity: 0.5% Max., 0.15% typ.
Output Settling Time: Full scale change to 95% of final value 100msec to 350 msec.
Output Ripple and Noise: 2 mA max. p-p (1% of Full Scale)
0.02 mA typical (0.01% of Full Scale)
Temperature Coefficient: 0.13%/°C for 25° to 40°C
Temp. Range: -40° to +105°C (-40° to +225°F)
ZERO/SPAN Adjustment: <1% interaction

3 Wire Output Version: <20 mA Range
Min. Signal Current: 0.07 mA
(Max. Signal Current: 24.1 mA
(Full scale Min. Cal., Zero Cal. set to 4 mA)
Wiring Options: See page 2
Compliance: CE EN55011, EN50022-2

PART NUMBERS
Frequency to Current Converters:
P/N Input Fmax adjustment Fmax adjustment
Sensitivity LO Freq. Range HI Freq. Range
4027-00: 5 mVpp 75-1100 Hz 1100 Hz to 10 kHz
4027-10: 12 mVpp 75-1100 Hz 1100 Hz to 10 kHz
4027-11: 12 mVpp 50-550 Hz None
4027-12: 12 mVpp 75-2000 Hz 2000 Hz to 20 kHz
4027-50: 50 mVpp 75-1100 Hz 1100 Hz to 10 kHz
4027-Axx: Optional housing will fit GUAL-16 or similar

Other Junction Boxes & Adapters: Refer to Bulletin 4001
CURRENT MODE 1 (2 wire)

CURRENT MODE 2 (3 wire)

VOLTAGE MODE 1 (3 wire)
FOR USE WITH LONG WIRE RUNS
RESISTANT TO LINE LOSSES & EMI

R Load ≤ \( \frac{V_s \cdot .9}{.02A} \)
Vs : 12 V ≤ 150 Ω
24 V ≤ 750 Ω

DIGITAL PICKUP MODE (WITH NPN SIGNAL)
3 wire voltage or current mode
NOTE: USE ONLY WITH...
4027-00
4027-10
4027-50

FOR PNP OR OTHER SIGNAL TYPES,
PLEASE CONTACT SPECTEC

ATTENTION:
OPEN COLLECTOR OUTPUT SIGNAL TYPES
REQUIRE A 2.2 kΩ RESISTOR TO BE ADDED
BETWEEN TERMINALS 1 & 4