

PRODUCT DESCRIPTION

The 4028 FTV converter is designed to receive frequency input from any passive magnetic, variable reluctance sensor (VRS) and converts the signal to a proportional 0-10V or 0-5V output. The frequency range is field adjustable to fit most applications. ZERO and SPAN adjustments make it easy to calibrate to almost any measurement range, with little interaction between the entire range of commonly available DC power, with no selecting or adjusting. The 4028 is designed to fit in a compact ELBY50 or ELBY75 explosion proof junction box.

SPECIFICATIONS

Supply Voltage (Vs): For 0-10V Output (4028-01 & -05):
 11 - 36 VDC @ ≤ 5 mA
 For 0-5V Output (4028-02 & -06):
 8 - 36 VDC @ ≤ 5 mA

Output Voltage (Vo): For 0-10V Output (4028-01 & -05):
 (Zero Cal. set to 0V)
 Vo min: < 30 mV
 Vo max: 12 V max
 For 0-5V Output (4028-02 & -06):
 Vo min: < 20 mV
 Vo max: 6 V max

Input Protection: 100 VAC, reversed leads

Output Protection: Short to + VDC, Common or Signal Out continuous

Frequency Input Range:
 F Lo switch position:
 Fmin: 0 Hz
 Fmax: 75 to ~1100 Hz (adjustable)
 F Hi switch position:
 Fmin: 0 Hz
 Fmax: ~1100 Hz to 10 kHz (adjustable)
 [up to ~18 kHz @ 1% linearity with > 50mV signal]

Input Sensitivity: Standard: 50 mVpp
 High: 12 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 & Noise: 15 mVpp typ., (0.15% of Full Scale)
 150 mVpp typ., (1.5% of Full Scale)

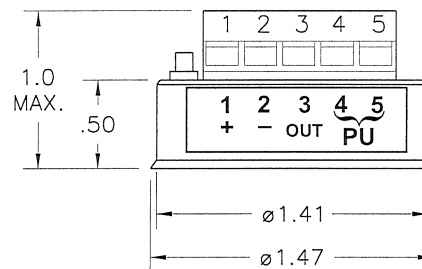
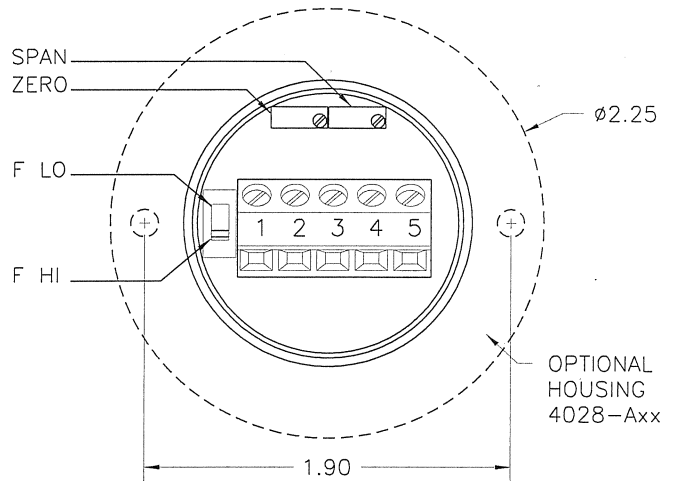
Temperature Coefficient: 0.13%/°C for 25° to 40°C

Temp. Range: -40° to 105° C (-40° to 225° F)

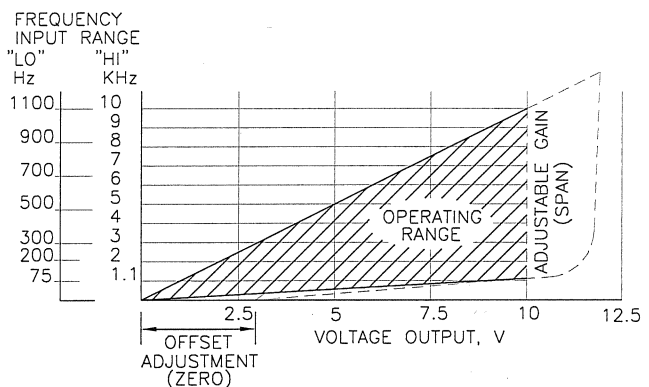
ZERO/SPAN Adjustment: < 1% interaction

Wiring Options: See page 2

Compliance: CE: EN55011, EN50022-2
 4028-05/-06 Only



- TERMINAL CONNECTIONS:**
1. INPUT VDC
 2. COMMON
 3. SIGNAL OUT
 4. MAG. PICKUP
 5. MAG. PICKUP



PART NUMBERS

Frequency to Voltage Converters:

P/N	Input Sensitivity	Output Voltage
4028-01:	12 mV	0 - 10V
4028-02:	12 mV	0 - 5V
4028-05:	50 mV	0 - 10V
4028-06:	50 mV	0 - 5V

4028-Axx: Optional housing will fit GUAL-16 or similar

Frequency to Current Converters: Refer to 4027 or 4026

Explosion Proof Junction Box:

90012-001 ELBY (1/2-14 NPT)

Other Junction Boxes & Adapters:

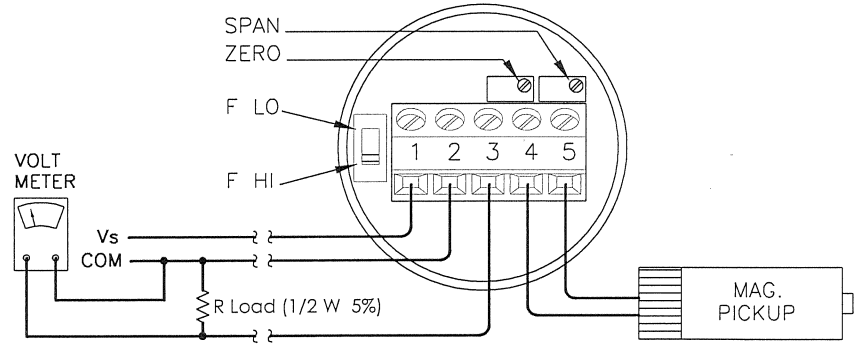
Refer to Bulletin 4001

4028 FTV CONVERTER: WIRING OPTIONS

VOLTAGE MEASUREMENT

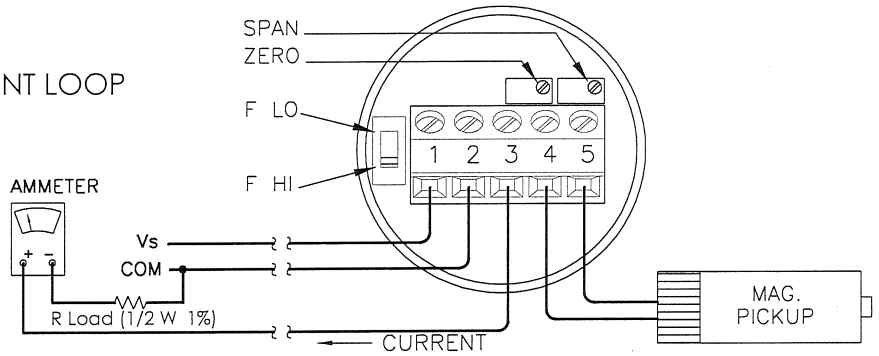
$$R_{Load} \geq \frac{V_s - 2}{.05A}$$

$V_s \therefore 12V \geq 200 \Omega$
 $24V \geq 440 \Omega$



CURRENT MEASUREMENT GROUND REFERENCED CURRENT LOOP 4 - 20 mA

$R_{Load}: V_{out} = 0-5V, 250 \Omega$
 $V_{out} = 0-10V, 500 \Omega$



VOLTAGE OR CURRENT MEASUREMENT DIGITAL PICKUP INPUT

