



PRODUCT DESCRIPTION

The PA 20 D/A converter is designed to convert a frequency based signal to a linear voltage or current. Input and output configurations are field selectable to fit most applications. See Page 2 for available output signals and wiring options.

ZERO and SPAN adjustments make it easy to calibrate to almost any measurement range, with little interaction between the adjustments. The converter will accept frequency input from any mag pickup or digital source.

SPECIFICATIONS

- Vs, Supply Voltage:** 11 to 38 VDC
(9 VDC Min. for FTV 0-5 Vout option)
- Input Protection:** 50 VAC, reversed leads
- Output Protection:** Short to + VDC, Common or Signal out Continuous
- Frequency Input Range:** F LO: 75 Hz to 1100 Hz
F HI: 1100 Hz to 10 kHz
- Input Sensitivity:** Mag: See Variants
Digital: CMOS/TTL (28Vpp Max)
- Output Setting Time:** Full scale change to 95% of final value 180mS.
- Output Ripple & Noise:** 5 mVp-p, <2 mVrms, 5% of FS
- Temperature Coefficient:** 0.13% / °C, On 10 V range(25°- 40°C)
- Operating Temp. Range:** -40 to 70°C (-40 to 160° F)
- ZERO/SPAN Adjustment Interaction:** < 1%
- Terminal Connections & Wiring Options:** See Page Two
- CE-Compliance:** EN55011, EN50082-2

PART NUMBERS

DROP-IN TYPE for use with Y3 Enclosure

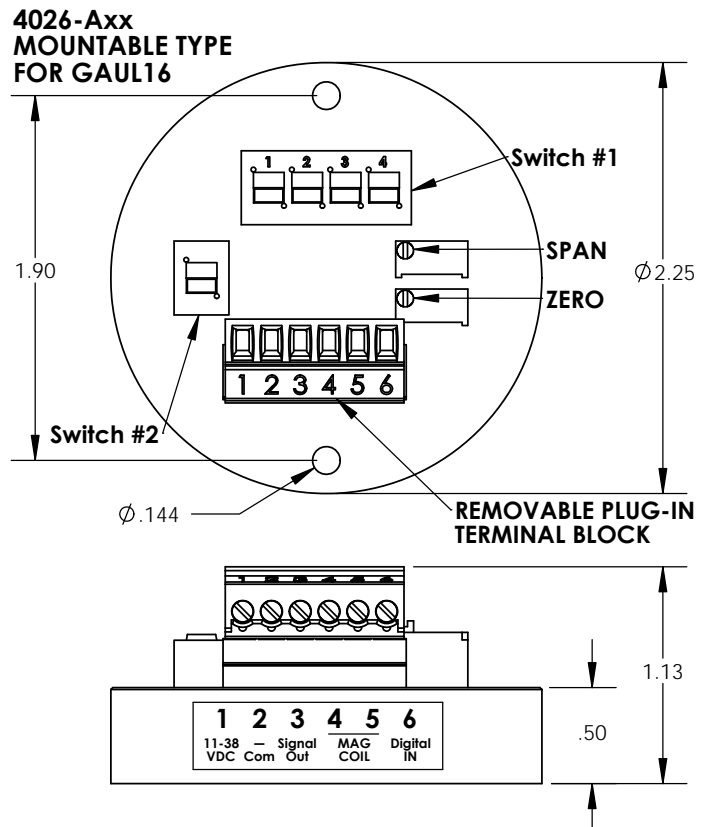
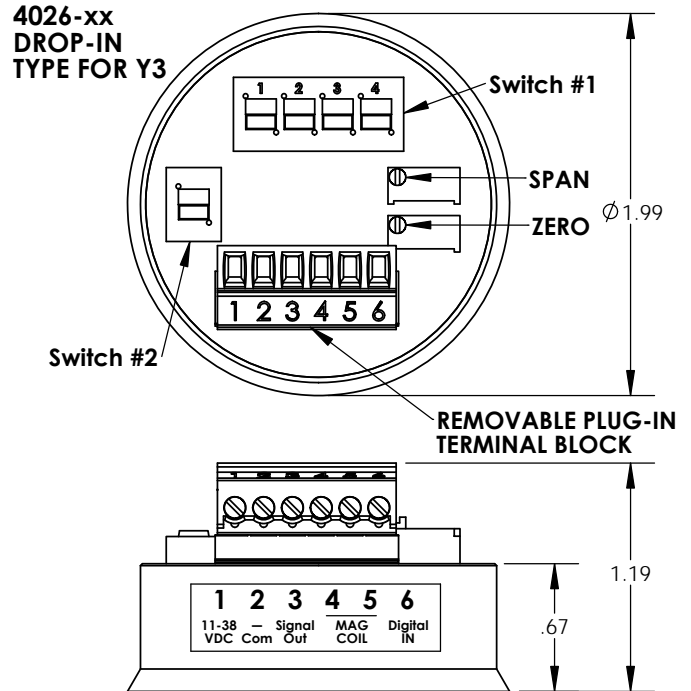
- 4026-05:** 5 mVpp [Mag] & Digital Input
- 4026-12:** 12 mVpp [Mag] & Digital Input
- 4026-30:** 30 mVpp [Mag] & Digital Input
- 4026-50:** 50 mVpp [Mag] & Digital Input
- 4026-100:** 100 mVpp [Mag] & Digital Input

MOUNTABLE TYPE for use with GAUL16 Encl. and Panel Mount

- 4026-Axx:** Same options as above (Add 'A' to part number)

- Explosion Proof** 90010-003: Y3, CL1, DIV1, Enclosure
- Junction Boxes:** 90012-003: ELBY 100, CL1, DIV1, Enclosure
90013-016: GAUL16, CL1, DIV1, Enclosure
For Enclosure & Adapters see spec. 4001

VOLTAGE MEASUREMENT SPECIFICATIONS		
RANGE	0 - 5 V	0 - 10 V
Vout min, (Freq. input = 0 Hz) at full scale max freq. cal.	5.1 mV	10.5 mV
Vout min at full scale min freq. cal.	21 mV	43 mV
Vout max at Vsupply = 12VDC/24VDC	6.8 V	11.3V / 13.7V
Minimum Load Resistance	50 Ω, 1/2W	100 Ω, 1 W
CURRENT MEASUREMENT SPECIFICATIONS		
(3 Wire Output Version) RANGE	4-20 mA	10-50 mA
Minimum Signal Current (sinking)	0.07 mA	0.19 mA
Maximum Signal Current (sinking) (Full Scale Min. Cal., Zero Cal. set to 4 mA/10 mA)	24.1 mA	61.2 mA
Load Resistance = $\frac{V_s - V_{out}}{I_{out}}$ Full Scale Output	if $V_s = 24 V$ if $V_s = 12 V$	<300Ω <900Ω
		<120Ω <360Ω



Switch #1					Switch #2
	Position #1	Position #2	Position #3	Position #4	Position #1
*	CURRENT MODE	10-50 mA	0-5 V	F High	Digital
*	VOLTAGE MODE	4-20 mA	0-10 V	F Low	Mag. Coil

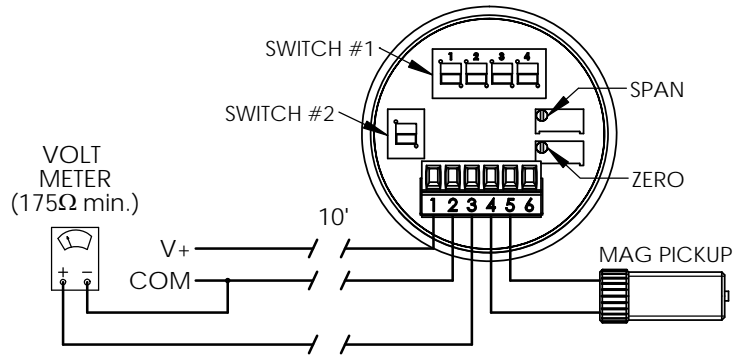
* NOTE: Black Box indicates position switch high side in relation to the images above.

4026 FTC/FTV CONVERTER: TERMINAL CONNECTIONS & WIRING OPTIONS

A) VOLTAGE MEASUREMENT 1 (3 wire)

SWITCH POSITIONS:
 PROGRAM: VOLTAGE MODE
 RANGE: 0-5 V or 0-10 V

WIRE POSITIONS:
 1 - V+
 2 - COM
 3 - METER POS.
 4 - MAG.
 5 - MAG.
 6 - NC

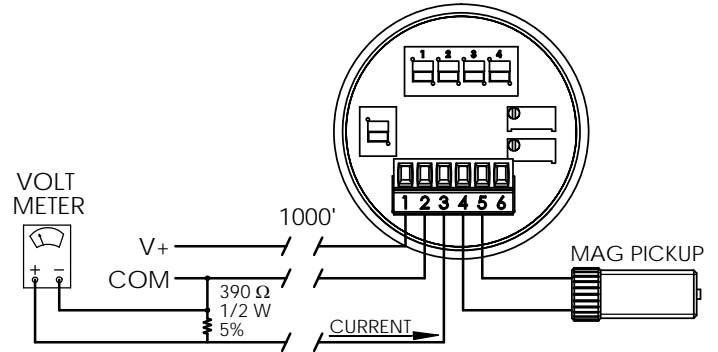


B) VOLTAGE MEASUREMENT 2 (3 wire)

FOR USE WITH LONG WIRES RUNS
 RESISTANT TO LINE LOSSES & EMI

SWITCH POSITIONS:
 PROGRAM: CURRENT MODE
 RANGE: 20 mA for 0-5 V
 50 mA for 0-10 V

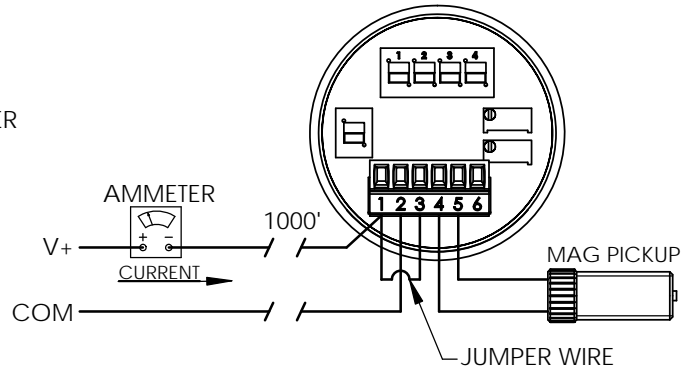
WIRE POSITIONS:
 1 - V+
 2 - COM
 3 - METER POS.
 4 - MAG.
 5 - MAG.
 6 - NC



C) CURRENT MEASUREMENT 1 (2 wire)

SWITCH POSITIONS:
 PROGRAM: CURRENT MODE
 RANGE: 4-20 mA
 or 10-50 mA

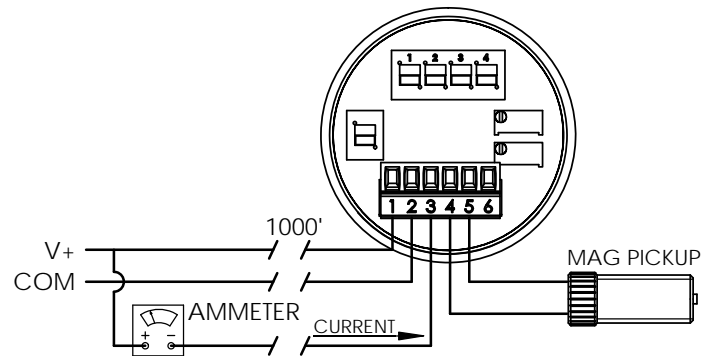
WIRE POSITIONS:
 1 - METER NEG. & JUMPER
 2 - COM
 3 - JUMPER FROM #1
 4 - MAG.
 5 - MAG.
 6 - NC



D) CURRENT MEASUREMENT 2 (3 wire)

SWITCH POSITIONS:
 PROGRAM: CURRENT MODE
 RANGE: 4-20 mA or 0-20 mA*,
 10-50 mA or 0-50 mA*
 *Set By ZERO Adj.

WIRE POSITIONS:
 1 - V+ & METER POS.
 2 - COM
 3 - METER NEG.
 4 - MAG.
 5 - MAG.
 6 - NC



E) CURRENT MEASUREMENT W/ DIGITAL INPUT

SWITCH POSITIONS:
 PROGRAM: CURRENT MODE
 RANGE: 4-20 mA or 0-20 mA*,
 10-50 mA or 0-50 mA*
 *Set By ZERO Adj.
 SIGNAL IN: DIGITAL

WIRE POSITIONS:
 1 - V+, METER POS., & PICKUP POS.
 2 - COM & PICKUP COM
 3 - METER NEG.
 4 - NC
 5 - NC
 6 - PICKUP SIGNAL

