

PCUA SERIES PIEZOELECTRIC

ANALOG OR SWITCHED OUTPUT ULTRASONIC **PROXIMITY SENSORS**



• 30" (760 mm) Max. Range

WEIGHT: 9.0 oz. (255 gr.)

• Metal Shell Versions Rated Intrinsically Safe by CSA for DIV 1, Class I, II, III Groups C. D. E. F. G

· Switched and Analog Versions Available

Ordinary Location Certified – All PCUA's

215 KHz Burst Frequency

NRTL/C

POWER REQUIREMENTS: 10 to 30 VDC @ 50 mA max. SENSING RANGE: 4 to 30" (100 to 760 mm). Adjustable BEAM ANGLE: 10° Cone (Typical) ERROR: ± 1.5% max. @ Fixed Temperature

OPER, TEMP, RANGE: 32 to 122F (0 to 50C) RESPONSE SPEED: 35 mS max. CABLE: PVC 3 Cond. 24 AWG with Shield

ANALOG UNITS

OUTPUT CIRCUIT CONFIGUATION ANALOG OUTPUT CURRENT (AI) SOURCING UNITS

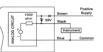


distance. Acceptable Load Resistance 0 to 300 ohms

Non-Linearity: ± 1.5% of measured distance max. @ fixed temperature.

Error Due to Temperature Change: .1%/ °F (.2%/ °C) of measured distance (typical).

OUTPUT CIRCUIT CONFIGUATION ANALOG OUTPUT VOLTAGE (AV) SOURCING UNITS



Type AV: 0 to 5 VDC voltage source, 5 VDC @ max. distance. Acceptable Load Resistance 50K Ω or Larger. Units have 1K ohm source impedance in series with instrument.

SWITCHED UNITS

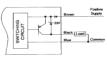
Hysteresis: 10% of set point typ. LED: Indicates target present

Output: (Black lead) is not short circuit protected and must not be incorrectly

connected. Switch Point Repeatability: + 1.5% of initial setting max @ fixed temperature

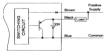
Error Due to Temperature Change: .1%/ °F (.2%/ °C) of initial setting (typical).

OUTPUT CIRCUIT CONFIGURATION DC SWITCHED OUTPUT SOURCING (PA. PB) UNITS



Type PA, PB: Emitter follower current source, 30 VDC @ 100 mA max. Will switch TTL level inputs.

OUTDUT CIDCUIT CONFIGURATION DC SWITCHED OUTPUT SINKING (NA. NB) UNITS



Type NA, NB: Emitter follower current sink, 30 VDC @ 100 mA max. Will not switch TTL level inputs.

MODEL NUMBER CONFIGURATION



M = Nickel Plated Brass 30 = 30° M30 x 1.5 6a Thread

P = Nylon 6.6 Glass Filled M30 x 1.5 8g Thread

Housing

Output Type

NA = Sink, NO NB = Sink, NC PA = Source, NO PB = Source, NC

AI = 4 - 20 mA, Source AV= 0 - 5 VDC, Source Switched Outputs Analog

Outputs



Series

PCUA30



