

PCUA SERIES PIEZOELECTRIC ANALOG OR SWITCHED OUTPUT ULTRASONIC SENSORS



- 30" (760 mm) Max. Range
- Metal Shell Versions Rated Intrinsically Safe by CSA for DIV 1, Class I, II, III Groups C, D, E, F, G

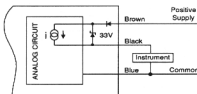
- Switched and Analog Versions Available
- Ordinary Location Certified – All PCUA's
- 215 KHz Burst Frequency

POWER REQUIREMENTS: 10 to 30 VDC @ 50 mA max.
RANGE: 4 to 30" (100 to 760 mm), Adjustable
BEAM ANGLE: 10° Cone (Typical)
WEIGHT: 9.0 oz. (255 gr.)

OPER. TEMP. RANGE: 32 to 122F (0 to 50C)
RESPONSE SPEED: 35 mS max.
ERROR: $\pm 1.5\%$ max. @ Fixed Temperature
CABLE: PVC 3 Cond. 24 AWG with Shield

ANALOG UNITS

OUTPUT CIRCUIT CONFIGURATION
ANALOG OUTPUT CURRENT (AI) SOURCING UNITS

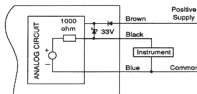


Type AI: 4 to 20 mA current source, 20 mA @ max. distance. Acceptable Load Resistance 0 to 300 ohms.

Non-Linearity: $\pm 1.5\%$ of measured distance max. @ fixed temperature.

Error Due to Temperature Change:
 $.1\% / ^\circ F$ ($.2\% / ^\circ C$) of measured distance (typical).

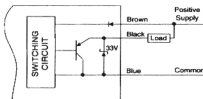
OUTPUT CIRCUIT CONFIGURATION
ANALOG OUTPUT VOLTAGE (AV) SOURCING UNITS



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

OUTPUT CIRCUIT 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.

Hysteresis: 10% of set point typ.

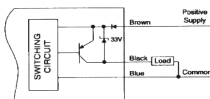
LED: Indicates target present.

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

Switch Point Repeatability:
 $\pm 1.5\%$ of initial setting max. @ fixed temperature.

Error Due to Temperature Change:
 $.1\% / ^\circ F$ ($.2\% / ^\circ C$) 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.

MODEL NUMBER CONFIGURATION

Series
①
PCUA30

Housing
②
M = Nickel Plated Brass
M30 x 1.5 6g Thread

Max. Sensing Range
③
30 = 30"

Output Type
④

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



ISO
9001

