

CLARK

Series U00X Ultrasonic Level Switch

316 Stainless Steel Construction, Actuation Lengths 1 to 100 Inches

DESCRIPTION

The U00X Series Solid-State Level Switches are reliable, low-cost liquid level controls for use in installations where mechanical float-type switches are impractical. U00X models are compatible with many liquids, regardless of the fluid's density or conductivity. The units require no calibration, withstand pressures up to 2,000 PSIG and their compact, 7/8" diameter probes install in any orientation. U00X models are constructed from durable and easy-to-clean 316 stainless steel with probe lengths available up to 100". Optional materials include CPVC, PVDF and Hastelloy C.

An ultrasonic transmitter and receiver detect the presence of fluid between two piezoelectric crystals sealed within the sensing gap. As the gap fills with liquid, an ultrasonic wave signal passes between the crystals and either results in an output shift from 8 mA to 16 mA (U002), or activates a relay (U003 & U004).

FEATURES

-NO MOVING PARTS: PULSED 2 MHZ ULTRASONIC SIGNAL

-HORIZONTAL OR VERTICAL MOUNTING

-NO CALIBRATION REQUIRED

SPECIFICATIONS

MEASUREMENT PRINCIPLE: Ultrasonic Sound Waves Converted to Output Signal
 MEASURED VARIABLE: Wet or Dry Gap Actuation
 INDICATION LENGTH: 2 1/8" to 100" (5.39 cm to 254 cm)
 POWER: U002: 12 to 35 VDC
 U003: 12 to 35 VDC
 U004: 12 to 16 VDC
 SIGNAL: U002 Current Shift: Dry Gap: 8 mA (\pm 1 mA)
 Wet Gap: 16 mA (\pm 1 mA)
 U003 Relay Output: SPDT: 1 Amp at 30 VDC; 0.5 Amp at 150/125 VAC/DC
 U004 Relay Output: SPDT: 1 Amp at 30 VDC; 0.5 Amp at 150/125 VAC/DC
 "Fail-Safe" Operation on Power Loss to Normal
 Dry Wired Position of SPDT Switch

CABLING: 12" (305 mm) Flying Leads of 18 AWG Wire
 OPERATING TEMPERATURE: -40° to +185° F (-40° to +85° C)
 AMBIENT TEMPERATURE: -40° to +185° F (-40° to +85° C)
 PRESSURE: 316 Stainless Steel: 2,000 PSIG (138 bar)
 INGRESS PROTECTION: NEMA 4X
 ENCLOSURE (OPTIONAL): Die-Cast Aluminum
 MOUNT, EXT. TUBE & SENSOR TIP: 316 Stainless Steel Standard, Other Materials Available
 EXPLOSION -PROOF MODELS: Call for available models U002E, U003E & U004E, FM Approved Class 1, Div 1, Groups C & D; Class II/III Groups E, F & G

ORDERING INFORMATION

MODEL NUMBER : A-B-CDE

ORDER EXAMPLE: U003-55-316SS-3/4

A Model	B Insertion Length ("LO") Inches	C Stem & Probe Material	D Junction Box	E Process Connection
U002 U003 U004	Specify Between 2 1/8" to 100"	316SS= 316 Stainless Steel	- = None (Standard) JB= Die-Cast Aluminum Enclosure	3/4= 3/4" NPT (Standard) Call for other: Up to 4" NPT Up to 4" Sanitary Flange Up to 4" 150 and 300 ANSI Flanges



APPLICATIONS

Water & Wastewater Light Slurries Food/Dairy Oils	Pump Control & Protection Fill-Line Monitoring Level Monitoring Leak Detection
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DIMENSIONS INCHES (MM)

