



Invasive Point Level System

Low Level Sensor



The Ultrasonic Point Level System 161 Series is an ideal solution for detecting liquid in storage vessels, tanks and pipes. With integrated electronics it is designed for almost any liquid level application. The probe is constructed in 316LSS material. The electronic module is captured in a plastic cassette and is mounted in a NEMA 4/ 7 explosion proof housing. No calibration for the system is required. An LED indicator on the electronic module offers a visual status of the system. Field selectable Fail safe allows for the relays to be energized on power up or in normal condition to de-energized when liquid is present. A Demand Push button self-test feature on the electronic module assures the user the system is functioning correctly. A half second delay is added from WET to DRY to avoid false trip due to wave action.

The 161 Series unit consists of two piezoelectric elements mounted in the housing of the sensor. These elements convert mechanical energy in the form of high frequency sound to electrical energy and vice versa. The elements are mounted parallel and opposite each other across the 5/16" gap in the probe. A high frequency sent from the electronics to the transmitting element, this vibrates the element at 2 to 4 MHz. Neither Air nor gases will carry sound at this high frequency and will not travel across the sensor gap. When the gap is filled with liquid, the sound will travel across the gap to vibrate the receiving element. The vibration generates an electrical signal that is amplified and read by the detector circuit in the electronics as a "wet" signal. The signal is converted to a relay output or a shift in milliamp output

How to Order		PLS161-	-	-	-	-	-	-	-	-	-	-
Input:	24VDC	- 0					-					
	90 to 240VAC	- 1					-					
	9-30VDC	- 2					-					
Output:	10 ADPDT-	-- 0					-					
	Loop Power (4-20mA)	-- 1					-					
Mounting:	Integral	-- -- 1					-					
	Remote	-- -- 2					-					
Cable (remote):	in feet	-- -- -- 01					-					
Actuation point inches (1.25"std)		-- -- -- -- 00					-					
Process connection	3/4"NPT	-- -- -- -- -- 03					-					
	Flange ANSI 150#	-- -- -- -- -- A					-					
	Flange ANSI 300#	-- -- -- -- -- B					-					
	Flange Sanitary	-- -- -- -- -- C					-					
	Flange size 1"	-- -- -- -- -- 1					-					
	1.5"	-- -- -- -- -- 0					-					
	2"	-- -- -- -- -- 2					-					
Sensor Material		- - - - - S					-					

<i>Applications</i>	<i>Industries served</i>
<i>High Level / Overflow Alarm</i>	<i>Upstream Oil & Gas</i>
<i>Low Level / Pump Protection</i>	<i>Midstream Oil & Gas</i>
<i>Condensate Pots</i>	<i>Water & Waste- Water</i>
<i>Sump Water / Oil Detection</i>	<i>Chemical & Petrochemical</i>
<i>Lubricant Circulation Equipment</i>	<i>Pulp & Paper</i>
<i>Fill Machine Level Control</i>	<i>Food & Beverage</i>
<i>Pump Leak Detection</i>	<i>Military, Subsea / Surface</i>
	<i>Maritime Shipping</i>
	<i>Inland Barges, ERC Cargo</i>

Sensor material 316LSS is standard, other materials available
Other flange and pressure ratings available
Other remote mounted enclosures available
CONSULT FACTORY FOR CUSTOMIZATION

