Sound Steadfast Solutions

Made in the U.S.A.

Invasive Point Level System

Low Cost Fork Sensor



Description

The Ultrasonic Point Level System 160 Series is an ideal solution for detecting liquid in compact spaces. With integrated electronics it is a direct replacement for Float Switches, Capacitance and Optical Detectors. The PLS 160 detects liquid regardless of any change in density, color, dielectric constant, or viscosity. The PLS 1600 does not require calibration or periodic maintenance. The sensor is constructed in 316 SS and is available in lengths of up to 99". Sensaras can provide the PLS 160 in a variety of engineered plastics to obtain the ideal corrosion resistance in process vessels.

Operation

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.





A cost effective reliable solution!

How to Order	PLS160-									_
Input:	9-30VDC -	2	Т	Т	П	П	-	П	Т	Т
Output: NPN & PN	P or Loop Pwr-		2				-			
	1A SPDT -		3				-			
Mounting: Integral (no	enclosure) -			0			-			
Cable (remote):	in feet -				01		-			
Actuation point inches	(1.25"std) -					03	-			
Process connection	3/4"NPT -						-	3		
Flan	ge ANSI 150# -						-	Α		
Flan	ge ANSI 300# -						-	В		- [
Flan	ge Sanitary -						-	C		
Flan	ge ANSI 600# -						-	D		- [
	Flange size 1" -						-		1	- [
	1.5"-						-		0	
	2"-						-		2	
Sensor M	aterial 316LSS-						-			S

Industries served						
Upstream Oil & Gas						
Midstream Oil & Gas						
Water & Waste- Water						
Chemical & Petrochemical						
Pulp & Paper						
Food & Beverage						
Military, Subsea / Surface						
Maritime Shipping						
Inland Barges, ERC Cargo						

Sensor material 316LSS is standard, other materials available
Other flange and pressure ratings available
CONSULT C A BRIGGS CO FOR CUSTOMIZATION

Specifications / Features

Dimensions

Repeatability: 2mm or better. Delay (on): 0.5 seconds Standard.

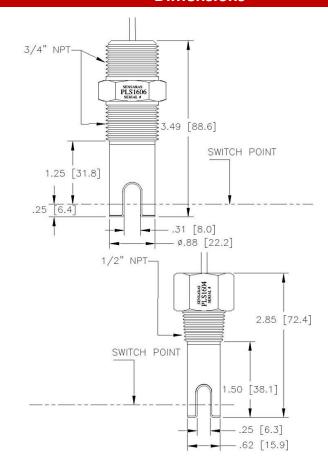
Probe material: 316SS Standard.
Optional material available.

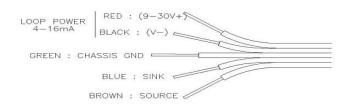
Actuation point: 1.25" Standard. Up to 99" available.

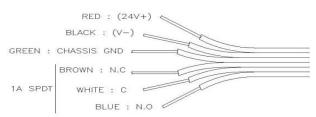
Sensor Temperature: -0° to 100°C Sensor Pressure: 500 PSIG 316LSS. Liquid viscosity: From 1 to 50,000 cps

Process connection: 1/2" & 3/4" NPT Standard Flanges mounting available.

Electronic mounting: Integral







Warranty

Sensaras' level sensors are warranted against inherent defects for a period of two years from the date of shipment.

Performance Guarantee

Should the unit not perform as we claim within 45 days of delivery and was properly installed consistent with our stated requirements and specifications Sensaras will gladly accept a return of the unit for a full credit.

CSA Approval (pending) Explosion Proof Class I Group CD Class II Group EFG Class III Type 4. EP. IP 65.

Disclaimer: Due to technical progress all Data Sheets are subject to change without notice. Sensaras believes all information in this Data Sheet is correct but is not responsible for any inaccuracies. Sensaras is not liable for any damages. It is the customer's responsibility to install, operate and maintain products properly.