



# Sensaras

## PLS262 Series



Made in the U.S.A.

### Invasive Point Level System

### Dual Gap Sensor

#### Description

The Ultrasonic Point Level System 262 Series is an ideal solution for controlling the level of liquid between two points in storage vessels and tanks. 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. With a control Auto Fill or Empty relay, 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 0.5 second delay is added from WET to DRY to avoid false trip due to wave action.

#### Operation

The 262 Series unit consists of two piezoelectric elements mounted in the housing of each 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 ½" 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. Latching circuitry is added for Auto Fill or Empty function.



How to Order	PLS162-	-	-	-	-	-	-	-	-	-
Input:	24VDC -	0								
	90 to 240VAC -	1								
Output:	2 X 10A SPDT-	--	4							
	Auto Fill Control -	--	5							
	Auto Empty Control -	--	6							
Mounting:	Integral -	--	--	1						
	Remote -	--	--	2						
Cable (remote):	in feet -	--	--	--	01					
Actuation point "A":	(1.0"std) -	--	--	--	--	01				
Actuation point "B":	(03.5"std)-	--	--	--	--	--	3.5			
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

#### Applications

High Level / Overflow Alarm  
Low Level / Pump Protection  
Condensate Pots  
Sump Water / Oil Detection  
Lubricant Circulation Equipment  
Fill Machine Level Control  
Pump Leak Detection

#### 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  
Other remote mounted enclosures available  
**CONSULT FACTORY FOR CUSTOMIZATION**



## Specifications / Features

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

Probe material: 316SS Standard.  
Optional material available.

Actuation point: 1.0" Standard.  
Minimum distance between points 2.5".

Sensor Temperature: -20° to 150°C  
Sensor Pressure: 1000 PSIG 316LSS.  
Liquid viscosity : From 1 to 50,000 cps

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

Input options: 24VDC or 90 to 240VAC,  
Output Options: 2 X 10A SPDT,  
Auto Fill/ Empty Control

Push Button Demand Self-Test  
Field Select Fail-Safe Option  
LED Output Indicator

Electronic mounting : Integral or Remote  
Enclosure: Nema 4 / 7

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

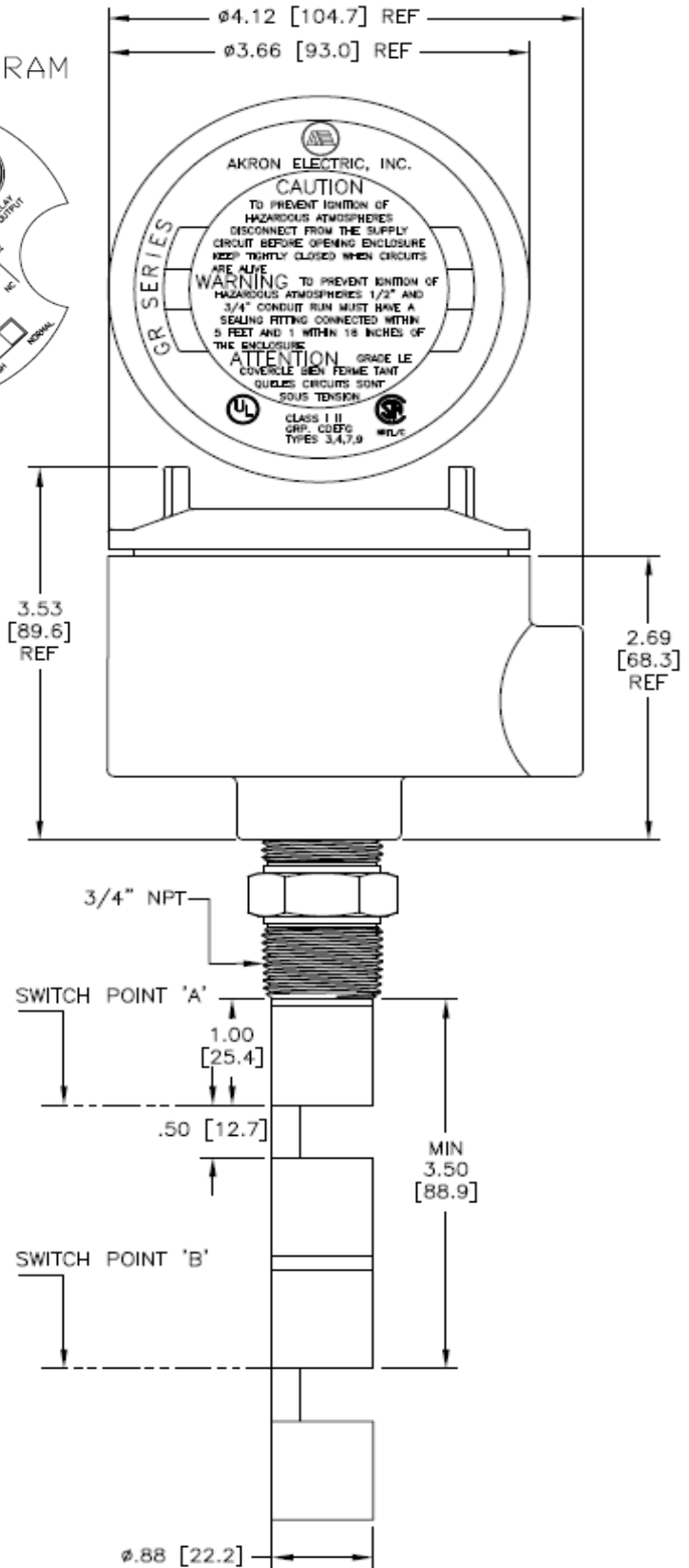
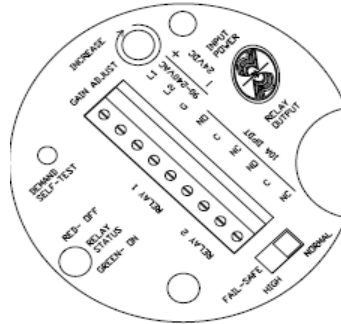
### Warranty

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.

### WIRING DIAGRAM



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.

