

LSP Series

Smart Submersible Level Sensors

Description

The Pyxis LSP Series are pressure based submersible level sensors offered in 316L (LSP-100 / LSP-101), PVC (LSP-200 / LSP-201) and PVDF (LSP-300 / LSP-301) formats for a variety of liquid level applications. All LSP-Series sensors provide continuous level measurement up to 393-inch (32.8-ft. or 10-meter) with a 4-20 mA analog and Bluetooth digital output. They can be configured via the Pyxis **uPyxis®** app via mobile device or PC in less than 1 minute and do not require liquid in the tank for configuration.

The LSP-100/200/300 devices offer a local display and can record up to 6 months of inventory data for wireless transfer via the app to email. The sensors can be powered by **4 AA Li/SOCI2 batteries** or a 24 VDC external power supply. This battery-powered and Bluetooth-enabled level sensor is ideally suited for applications where signal/power wiring may be difficult or unavailable to install. A 1.3-inch OLED display and four push-buttons are also included on the sensor for display and setup.

The LSP-101/201/301 devices use 24VDC power supply only eliminating the battery compartment and local display/data storage, providing a 4-20mA output signal to any receiving device. This platform offers a lower cost alternative with superior accuracy and the convenience of rapid Bluetooth configuration.

All LSP-Series submersible liquid level sensors are well suited for water, waste water, oil, and chemical tank applications. LSP Series may be installed in top of tank format or with the LSP Series Wall Mounting Bracket for easier access and visibility.


LSP-101

LSP-100

Typical Applications and Wiring








The Pyxis LSP Series Level Sensors are ideal for use in water level, chemical level, process liquid level or other applications requiring accurate and continuous liquid level measurement or control. Select your device based on its compatibility with liquid being measured. All LSP Series sensors can also be powered by a 24VDC power supply and output the result with the 4-20mA output. ***NOTE*** When LSP-100/200/300 versions are 24VDC powered, the AA-batteries should be removed from the compartment





Wire Color	Designation
Red	24 V +
Black	24 V Power ground
Brown	4-20 mA +
Green	4-20 mA -, internally connected to the power ground
Clear	Shield, earth ground

Specifications

Item	LSP-100	LSP-200	LSP-300	LSP-101	LSP-201	LSP-301
P/N	54005	54009	54010	54012	54013	54014
Power Supply	4 AA Li/SOCl ₂ or 24 VDC, 2W			24 VDC, 2W		
Output	Bluetooth 5.0, 32 ft. (10 Meters) Line of Sight and 4-20 mA Output					
Data Storage	6 months (60 min/log)			None		
Submersion Cable Length	32.8 ft. (10 m)					
Range	0 – 393 inchH ₂ O (0 – 10 mH ₂ O)					
Resolution	0.02 inch (0.5 mm)					
Accuracy	±0.2% of the range					
Stability	±0.2% URL / year					
Measurement Interval	Configurable			Continuous		
Installation	1-inch NPT					
Weight	3.1 pound (1400 g)					
Enclosure Material	Polycarbonate (PC)					
Transducer Material	LSP-100/101 = 316L Stainless Steel Transducer LSP-200/201 = PVC Transducer LSP-300/301 = PVDF Transducer					
Cable Material	PTFE					
Temperature	Working: 14 - 140°F (-10 - 60 °C) / Storage: -4 - 158°F (-20 - 70 °C)					
Enclosure Rating	IP66					
Transducer Rating	IP68					
Regulation	CE					

Ordering Information

 PYXIS LEVEL SENSOR PRODUCT LINE - SELECT*A*GUIDE						
Functional Capability	LSP-101	LSP-201	LSP-301	LSP-100	LSP-200	LSP-300
Part #	54012	54013	54014	54005	54009	54010
Pressure Based Level Sensor w/Local Display (0-32 Feet Capable)				X	X	X
Pressure Based Level Sensor (0-32 Feet Capable)	X	X	X			
Bluetooth Configuration via uPyxis APP	X	X	X	X	X	X
Bluetooth 6-Months Data Download via uPyxis APP				X	X	X
4-AA Battery Powered Capable				X	X	X
4-20mA Output	X	X	X	X	X	X
24VDC Powered	X	X	X	X	X	X
316L Stainless Steel Pressure Transducer	X			X		
PVC Pressure Transducer		X			X	
PVDF Pressure Transducer			X			X
<p><i>*NOTE*</i> - LSP-X01 Series are 24VDC Power Supply only LSP-X00 Series Series Can Use AA Battery or 24VDC Power Supply LSP-X00 Series Sensors offer Bluetooth Connectivity for Configuration & Data Download via uPyxis APP LSP-X01 offers Bluetooth Connectivity for Configuration Only via uPyxis APP All LSP Series offer 4-20mA Output Only</p>						

 PYXIS LEVEL SENSOR ACCESSORIES 		
Accessory Name / Description	Part #	Photo
10' LS/LSP Series Waterproof Cable - 7Pin Adapter w/Flying Leads	50774	
MA-L25 25' Waterproof Extension Cable (4-20mA/RS485)	50775	
MA-L50 50' Waterproof Extension Cable (4-20mA/RS485)	50776	
MA-L100 100' Waterproof Extension Cable (4-20mA/RS485)	50777	
LSP-X00 Series Li/SOCI2 Battery Kit (4 each)	50731	
LSP-Series Wall Mounting Bracket	50770	