



The LP-500ST is a vibrating rod used for level measuring. This series of vibrating rod level switches are robust instruments designed for low and high level indication of granules and powders with a minimum of 3.12 lb/ft² (0.05 kg/dm³) density. The LP-500ST is a vibrating rod that senses material using a mechanical principle and is not affected by the dielectric constant of the material. This makes it an ideal sensor in plastics, dust, shavings, cement, lime, sand, grain, feed, sugar, and many others.

How It Works

The LP-500ST technology is based on a vibratory technology where the electronic circuit excites the vibration in the rod or probe. When the material reaches and covers the rod vibration stops, when the material leaves the rod it returns to vibrate freely. The electronics senses the change of vibration and gives output signal after a selected delay.

HOW TO ORDER

MODEL NO.	DESCRIPTION
ST1-0-A-0	LP-500ST standard, -22 to 230° F (-30 to 110° C), 1 1/2" NPT, aluminum, SPDT relay, 8 A, 250 VAC
ST1-1-A-0	LP-500ST, high temperature rated -22 to 320° F (-30 to 160° C), 1 1/2" NPT, aluminum, SPDT relay, 8 A, 250 VAC
ST1-1-A-1-XXX	LP-500ST, pipe extended, high temperature rated -22 to 320° F (-30 to 160° C), 1 1/2" NPT, aluminum, 1 to 9' extension, SPDT relay, 8 A, 250 VAC
ST1-0-A-2-XXX	LP-500ST cable probe, -22 to 203° F (-30 to 95° C), 1 1/2" NPT, aluminum, 3 to 65', SPDT relay, 8A 250 VAC

FEATURES

- Adjustable sensitivity
- Universal power supply
- Versatile for wide range of materials
- Variety of mounting configurations
- Simple to use and easy to install

SPECIFICATIONS

FUNCTIONAL

Power Requirements	20-255 V AC/DC
Power Consumption	≤ 2.5 VA / 2 W
Operating Temperature	See temperature table
Outputs - Main Relay	8A SPDT @ 250 VAC, AC 1

PERFORMANCE

Pressure Rating	362 psi (25 bar); cable extended 87.0 psi (6 bar)
Time Delay	Field adjustable; 2 or 5 seconds
Fail Safe	Field selectable, high/low level
Sensitivity	3.12 lbs/ft ³ (0.05 kg/dm ³)
Maximum Particle Size	10mm

PHYSICAL

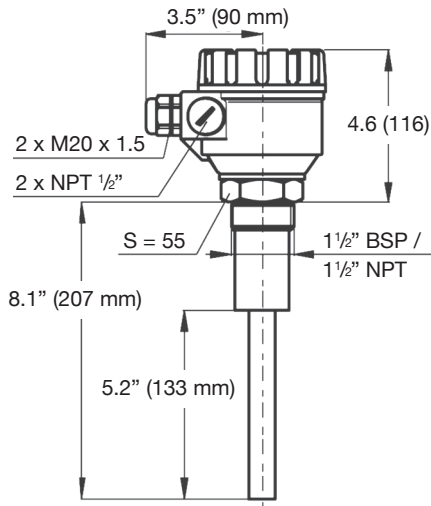
Enclosure Material, Rating	Powder coated aluminum, IP67, NEMA 6
Conduit Entry	(2) 1/2" NPT; (2) M20 x 1.5
Process Connections	1 1/2" NPT
Maximum Insertion Length (std. unit)	8.15 in (207 mm)
Shipping Weight (std. unit)	4.14 lb (1.88 kg)

TEMPERATURE

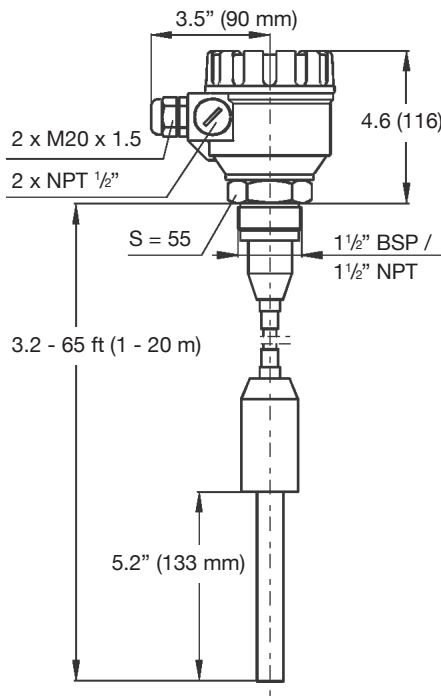
TEMPERATURE DATA	STANDARD AND PIPE EXTENDED VERSION					CABLE EXTENDED VERSION		
Medium Temperature Min: -22° F (-30° C) Max:	140° F (60° C)	158° F (70° C)	203° F (95° C)	230° F (110° C)	HIGH TEMP. 320° F (160° C)	140° F (60° C)	158° F (70° C)	203° F (95° C)
Ambient Temp. Range Min: -22° F (-30° C) Max:	140° F (60° C)	122° F (50° C)	140° F (60° C)	122° F (50° C)	95° F (35° C)	140° F (60° C)	122° F (50° C)	140° F (60° C)
Max Surface Temp. of Process Connection	185° F (85° C)	185° F (85° C)	203° F (95° C)	203° F (95° C)	275° F (135° C)	185° F (85° C)	185° F (85° C)	203° F (95° C)
Max Surface Temp.	185° F (85° C)	185° F (85° C)	203° F (95° C)	230° F (110° C)	320° F (160° C)	185° F (85° C)	185° F (85° C)	203° F (95° C)
Temperature Class	T194° F (T90° C)		T212° F (T100° C)	T239° F (T115° C)	T338° F (T170° C)	T194° F (T90° C)		T212° F (T100° C)

DIMENSIONS DRAWING IN INCHES (MM)

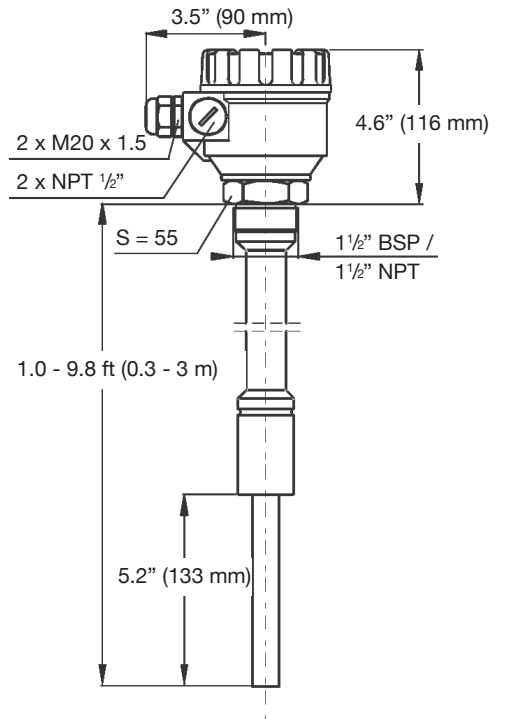
STANDARD



CABLE EXTENSION



PIPE EXTENSION



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 MEASUREMENT

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