

# 300S SERIES

## Continuous Submersible Level Transmitter



- Works on Foam | Vapor | Turbulence
- Excellent Chemical Resistance
- 316L SS
- Teflon® Jacketed Cable
- High Accuracy

316 SS

FFKM

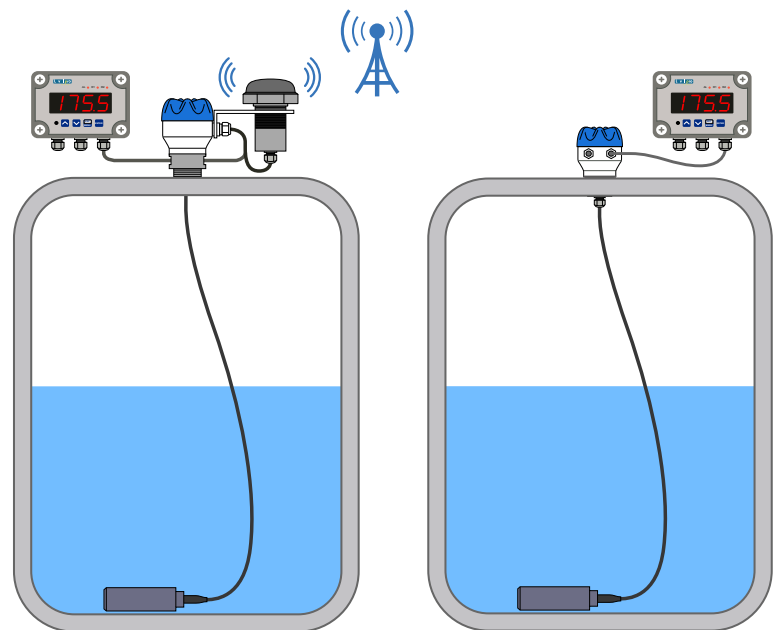
PTFE

RoHS  
Compliant CE

**SERIES : 316SS**  
**BODY : 316L SS**  
**O-Ring SEALS : FFKM**



The 300S Series Transmitter is designed for Continuous Level Measurement of Aggressive Liquid Media



### Pressure Measurement

- ▶ Tanks | Sumps > 100 ft Range

### Output Signal

- ▶ 4-20mA | 0.5-4.5 | 0.5-4.5  
Ratiometric | RS485

### Features

- ▶ Acids | Bases
- ▶ 316L SS Sensing Diaphragm
- ▶ High Accuracy
- ▶ Non Clogging Design
- ▶ PTFE Teflon® Jacketed Cable or PUR Cable
- ▶ Excellent for Foam | Vapor | Condensate
- ▶ Heavy Duty Rugged Design
- ▶ No Moving Parts
- ▶ Automatic Temperature Compensation

### Applications



- Foam | Vapor | Turbulence | Condensate
- Waste Water Treatment
- Leachate Collection
- Waste Sumps or Pits
- Chemical Dosing
- Inventory Management



- Acids + Bases
  - Bulk Chemicals
  - Chemical Day Tanks
  - Plating Tanks
  - PH Control Tanks
  - Storage Tank Monitoring
- ▶ **The Solution to Tough Applications where Ultrasonic Sensors Simply DO NOT WORK!**
- ▶ **No Lost Signals**

### Input Pressure Range

Level M/H <sub>2</sub> O		2	5	10	X	* Consult Factory for Levels > 10M
Overpressure	psi	210	290	210		
Burst Pressure >	psi	290	580	290		

### Output Signal

Unit Dependant	4-20mA   0.5-4.5VDC Ratiometric   0.5-4.5VDC   RS 485 HART
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### Power Supply

DC Power Only	4-20mA } 24 VDC    0.5-4.5VDC Ratiometric    0.5-4.5VDC } 5VDC    RS 485 HART } 24VDC
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### Performance

Accuracy <sup>1</sup>	Standard Nominal Pressure > 5.8 psi $\leq \pm 0.5\%$ FSO IEC 60770 2:
Permissible load	Current 2-wire   $R_{max} = [(V_S - V_{S\ min}) / 0.02\ A] \Omega$ Voltage 3-wire   $R_{min} = 10\ k\Omega$
Influence effects	Supply   0.05 % FSO / 10 V   Load   0.05 % FSO / $k\Omega$
Long term stability	$< \pm 0.1\%$ FSO / year
Response time	< 10 msec

<sup>1</sup>Test standard: GB/T28474 | IEC60770 | Linear output, Zero(0) based-calibration span | Limit Point Adjustment | Non-Linearity | Hysteresis | Repeatability. The overall performance of the 300S including but not limited to environmental temperature, comprehensive error and reference accuracy

### Thermal Effects | Offset and Span

Thermal Error	$< \pm 0.2\%$ FSO/K in Compensated Range   -13° F - 178° F   -25°C - 85°C
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### Permissible Temperatures

Permissible Temperatures	Media   -40°F to 178°F   -40 - 85°C    Storage   -40°F to 178°F   -40°C - 85°C
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### Electrical Protection

Short-Circuit Protection	Permanent
Reverse Polarity Protection	No Damage to Sensor } No Function
Electromagnetic Compatibility	Emmison Immunity According to EN 61326
Power Supply	24VDC   5VDC

### Electrical Connection

Jacketed Cable	PTFE Teflon®   -40 - 200°F <small>cable capacitance: signal line/shield also signal line/signal line: 160 pF/m cable inductance: signal line/shield also signal line/signal line: 1 <math>\mu</math>H/m 3 or 4 Wire Cable with Integrated Air Tube for Atmospheric Pressure Reference</small>
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### Materials | Wetted

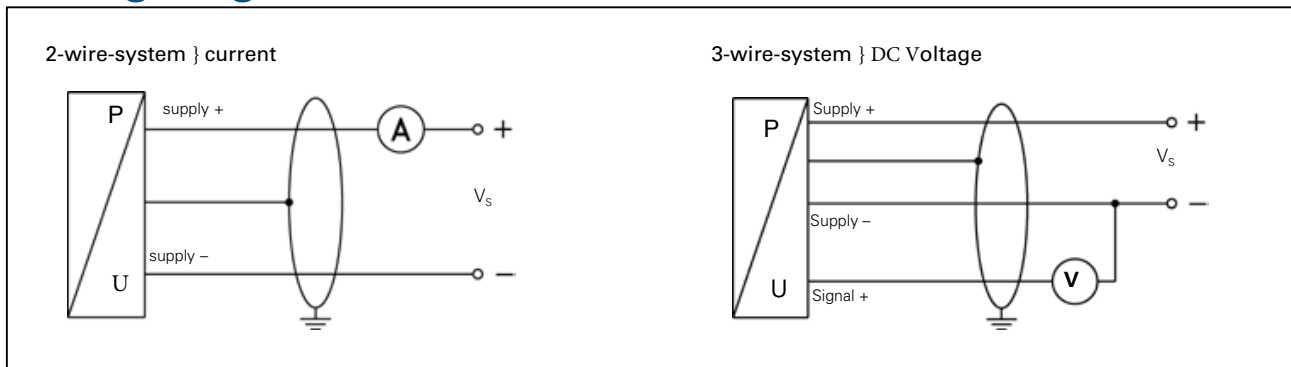
Housing	316L
Diaphragm Seal	Welded 316L
Diaphragm	316L

### Miscellaneous

Current Consumption	Max. 25mA
Weight	Approx. 280g   Cable Not Included
Ingress Protection	IP68
CE-Conformity	EMC Directivel 2004/30EU   Pressure Equipment Directive   2014/68   EU
ATEX Directive**	* Option - PTB97 ATEX 1068 U
Operational Life	> 100 million load cycles @ 77°F   25°C
Current Consumption	Signal Output Current   max 25mA    Signal Output Voltage   max 7mA

### Wiring Diagram

Per IEC 61298-3|GB/T1827.3 | 20g | Maximum Vibration Value < 3mm | 5-2000HZ



### Ordering Code 300S Series

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<b>Pressure</b>													
M/H <sub>2</sub> O	3	0	0	S									
<b>Level</b>	<b>M/H<sub>2</sub>O</b>												
	2.0	1	0	0	2								
	5.0	1	0	0	5								
	10.0	1	0	1	0								
	X	1	X	X	X								
<b>Output Signal</b>													
	4-20mA					A							
	0.5-4.5VDC Ratiometric						R						
	0.5-4.5VDC							V					
	RS485 HART								RS				
<b>Cable Length*</b>													
	3												
	6.0												
	11.0												
	X												

