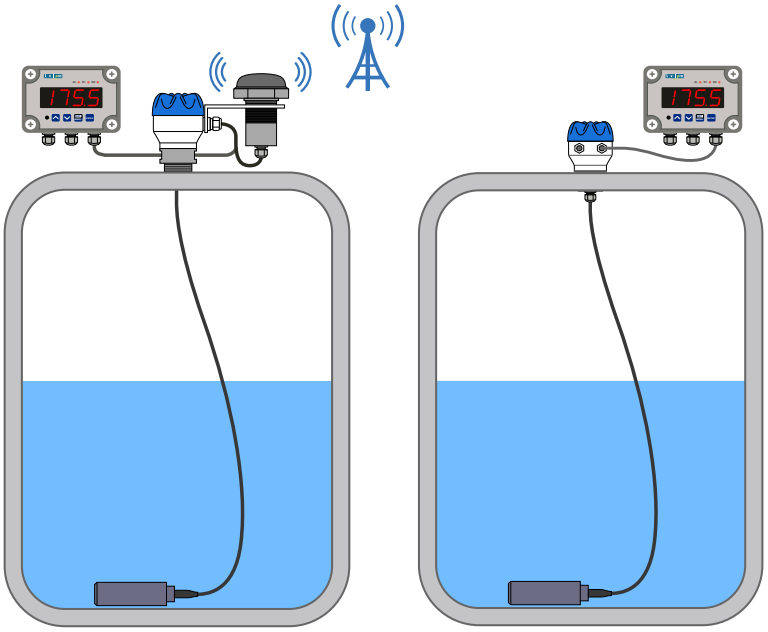
300S SERIES
Continuous Submersible
Level & Temperature Transmitter

- Works on Foam | Vapor | Turbulence
- Excellent Chemical Resistance
- Level + Temperature
- Teflon® Jacketed Cable
- High Accuracy

316 SS | FFKM | PTFE

RoHS Compliant CE

SERIES: 316 SS
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 | RS-485

Features

- Measures Level & Temperature*
- 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

* Model 300ST

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**

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Input Pressure Range

Level M/H_2O		2	5	10	X	* Consult Factory for Levels > 10M
Overpressure	psi	210	290	210		
Burst Pressure >	psi	290	580	290		
Temperature	F	32° - 212° Note: Compensated Temperature Range is -13° F- 178° F				

Output Signal

Unit Dependant	4-20mA | 0.5-4.5VDC Ratiometric | 0.5-4.5VDC | RS-485 HART

Power Supply

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

Performance

Accuracy[1]	Standard Nominal Pressure > 5.8 psi ≤ ± 0.5 % FSO IEC 60770 2:
Permissible Load	Current 2-wire I $R_{max} = [(V_S - V_{S\ min}) / 0.02\ A]\ \Omega$ Voltage 3-wire I $R_{min} = 10\ k\Omega$
Influence Effects	Supply I 0.05 % FSO / 10 V I Load I 0.05 % FSO / kΩ
Long Term Stability	<± 0.1% FSO / year
Response Time	<10 msec

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

Thermal Effects I Offset and Span

Thermal Error	<± 0.2% FSO/K in Compensated Range | -13° F - 178° F | -25°C - 85°C

Permissible Temperatures

Permissible Temperatures	Media | -40°F to 178°F | -40 - 85°C || Storage | -40°F to 178°F | -40°C - 85°C|

Electrical Protection

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

Electrical Connection

Jacketed Cable	PTFE Teflon® I -40 - 200°F

cable capacitance: signal line/shield also signal line/signal line: 160 pF/m cable inductance:signal line/shield also signal line/signal line: 1 μH/m
3 or 4 Wire Cable with Integrated Air Tube for Atmospheric Pressure Reference

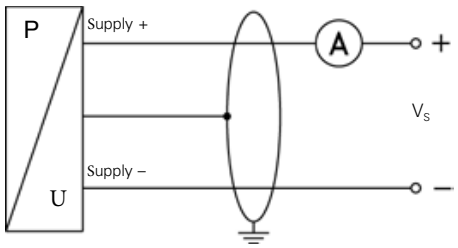
Materials I Wetted

Housing	316L SS
Diaphragm Seal	Welded 316L SS
Diaphragm	316L SS

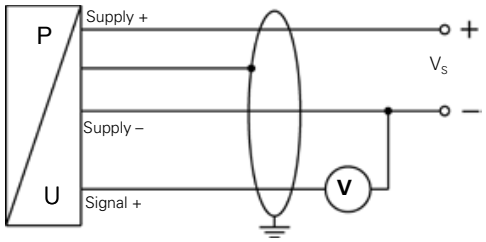
Miscellaneous

Current Consumption	Max.25mA
Weight	Approx. 280g I Cable Not Included
Ingress Protection	IP68
CE-Conformity	EMC Directivel 2004l30EU I Pressure Equipment Directive I 2014l68 I EU
ATEX Directive**	* Option - PTB97 ATEX 1068 U
Operational Life	> 100 Million Load Cycles @ 77°F I 25°
Current Consumption	Signal Output Current I max 25mA II Signal Output Voltage I max 7mA

2 -Wire System } Current



3-Wire-System } DC Voltage



Ordering Code 300S Series

DC Power Only

Pressure															
M/H20	3	0	0	S											
Pressure & Temperature															
	3	0	0	ST											
Level	**M/H20**														
	2.0				1	0	0	2							
	5.0				1	0	0	5							
	10.0				1	0	1	0							
	X				1	X	X	X							
Output Signal															
	4-20mA								A						
	0.5-4.5VDC Ratiometric									R					
	0.5-4.5VDC										V				
	RS-485 HART											RS			
Cable Length*															
	3														
	6.0														
	11.0														
	X														