

Acculevel Submersible Transducer



SPECIFICATIONS

Subject to change without notice

Accuracy, TEB	±0.25 standard or optional ±0.1% FS TEB
Custom Pressure Ranges	Yes
Available Pressure Range	0-3 thru 0-900 ft. WC
Compensated Temperature Range	-10 to +80°C
Field Rangeability	Yes
Pressure Output	0-5 VDC, 0-10 VDC, 4-20mA, RS485
Temperature Output	RS485
Wetted Materials	Standard 316L SS (opt. Hastelloy C-276), polyamide, fluorocarbon
Cable	Hytrek-jacketed, vented and shielded
Load Resistance (Ω)	mA: <(Supply - 8V) / 0.02A VDC: >4KΩ
Level Range (User Specified)	Infinite between 0-3 thru 0-900 ft. WC

WIRING CONFIGURATION

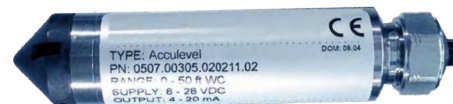
Configuration	White	Red	Black	Blue	Yellow
2 Wire (mA)	OUT/GND	N/A	+Vcc	RS485A	RS485B
3 Wire (VDC)	GND	+OUT	+Vcc	RS485A	RS485B

POWER

SUPPLY ^{4,5}	VDC	8-28 VDC	13-28 VDC		
OUTPUT	2 wire analog	4-20 mA			
	3 wire analog	0-5 VDC	0-10 VDC		
	4 wire digital	RS485			

ORDERING

Part #	Sensor	Choose PSI & Cable Length			
		PSI	CABLE	PSI	CABLE
56-115-PSI-Cable-1	Acculevel w/ 0-5V output	5	25	30	100
		5	50	30	150
		5	100	30	200
56-115-PSI-Cable-2	Acculevel w/4-20mA & RS485 output	15	50	50	100
		15	100	50	150
		15	150	50	200
		15	200		



Overview

High Accuracy Submersible Level Transmitter

Acculevel's standard features exceed those of comparably priced transmitters including ±0.25% FS standard (±0.1% optional) Total Error Band. The ability of the Acculevel to provide this level of performance over a wide range of conditions, makes it ideally suited to environmental monitoring applications such as surface water, streams and reservoirs.

Features

- ▶ 16-bit internal digital error correction
- ▶ Cost-effective low Total Error Band
- ▶ 316L SS flush-diaphragm sensor standard
Optional Hastelloy C-276 for severe applications
- ▶ User-rangeable analog output insures compatibility as requirements change
- ▶ RS485 modified-MODBUS compatible. Up to 128 transmitters on a single bus.
- ▶ Dual (analog & RS485) outputs standard. Simplifies interface to control & data collection / telemetry systems.
- ▶ Assembled & tested in USA for uncompromised quality
- ▶ Advanced media-isolated piezoresistive pressure sensor with advanced error correction techniques

NOTES

1. **Option:** custom calibration for fluids other than water, provided the specific gravity is given.
2. Level range may be specified in units of lb/in²(psi), inches WC or feet WC. International Standard conversion of 2.3067 feet WC/psi.
3. TEB: Total Error Band; Includes combined effects of non-linearity, hysteresis, non-repeatability, & thermal dependencies over the compensated temperature range, expressed as a percentage of the Basic Range. All intermediate ranges are realized by deranging from standard Basic Ranges of 30, 100, 300 and 900 ft WC.
4. At the transmitter; allow for -.65V per 1000 ft. voltage drop thru the cable.
5. Lower supply operation possible with RS485 output only. Consult factory
6. Max. continuous length: 1000 ft.
7. The drain / shield is connected to the transmitter housing. For best protection against galvanic corrosion, do not ground.