

KPSI 500|501 ^{SDI 12} submersible level transducer



FEATURES

- $\pm 0.05\%$ FS TOTAL ERROR BAND OVER COMPLETE OPERATING RANGE
- 1" BORE DIAMETER
- CUSTOM LEVEL RANGES UP TO 230FT (70M) H₂O
- CUSTOM POLYURETHANE OR ETFE CABLE LENGTHS
- SDI-12 OUTPUT
- WELDED 316SS OR TITANIUM
- OPTIONAL LIFETIME LIGHTNING PROTECTION
- TWO YEAR WARRANTY
- SHIPPED WITH LONG LIFE VENT FILTER

APPLICATIONS

- SURFACE WATER MONITORING
- TAILRACE AND FOREBAY MONITORING
- OCEANOGRAPHIC RESEARCH
- GROUNDWATER MONITORING
- DOWN HOLE

KPSI 500|501 specifications information

FULL SCALE LEVEL RANGES

Intermediate Level Ranges Are Available
Vented gage reference

500.....	10 thru 230 ft (3 thru 70 m) H ₂ O
501.....	10 thru 50 ft (3 thru 15 m) H ₂ O
Proof Pressure.....	1.5 X FS
Burst Pressure.....	2.0 X FS

STATIC PERFORMANCE

Combined Errors Due To Nonlinearity, Hysteresis, Nonrepeatability, And Thermal Effects Over The COMPENSATED TEMPERATURE RANGE

Measurement Accuracy Level	
500 $\pm 0.05\%$ FS TEB, level ranges >10 ft (3m) H ₂ O	
$\pm 0.10\%$ FS TEB, level ranges =10 ft (3m) H ₂ O	
501 ± 0.01 ft H ₂ O, reading ≤ 10 ft (3m) H ₂ O	
$\pm 0.10\%$ reading, reading >10 ft (3m) H ₂ O	

Temperature.....	$\pm 0.5^{\circ}\text{C}$
Excitation.....	± 0.5 VDC, 8 to 28 volts

MEASUREMENT RESOLUTION

Level.....	$\pm 0.0001\%$ FS
Temperature.....	$\pm 0.001^{\circ}\text{C}$
Excitation.....	± 0.1 VDC

ENVIRONMENTAL

Wetted Materials.....316 SS or titanium; Delrin®; polyurethane or Viton®. Delrin® and Viton® are registered trademarks of DuPont.
Compensated Temp Range.....0 to 50°C
Operating Temp Range.....-20 to 60° when attached to polyurethane cable

Protection RatingIP 68, NEMA 6P

ELECTRICAL

Excitation.....6-28 VDC
Input Current.....8 mA, average current during data acquisition; 11 mA, peak current during data acquisition for addressed sensor ($\sim 40\text{mS}$ duration); 0.5 mA, quiescent
Interface.....SDI-12, version 1.3 SDI-12 protocol; RS-485

CERTIFICATIONS

CE compliant to EN 61326-1:2001 and EN 61326-2-3:2006

PHYSICAL

Approximate Weight.....0.75 lbs (340 g) transducer, 0.05 lbs/ft (79 g/m) cable
Cable Jacket Material.....Polyurethane (standard), Tefzel®, Teflon® and Kevlar® are registered trademarks of DuPont. ETFE (optional), ETFE is a fluoropolymer (Teflon® derivative) material, Tefzel® or equivalent
Cable Pull Strength.....200 lbs (90 kg)
Cable Number of Conductors.....4
Cable Conductor Size.....22 AWG
Cable Seal.....Molded Polyurethane for polyurethane cable, Viton® Gland for ETFE cable

LIGHTNING PROTECTION (OPTIONAL)

Power Supply Needs To Be Limited To 150 Ma To Avoid Lock Up Of The Gas Tube After A Suppression Event
Life Expectancy.....> 1,000 operations
Peak Clamping Voltage.....36 volts
Response Time.....<10 nsecs

