



KPSI 355

- ◆ SDI-12 Small Bore Submersible Level Transducer
- ◆ $\pm 0.05\%$ FS Total Error Band
- ◆ Economical Digital Transducer
- ◆ Optional Lifetime Lightning Protection
- ◆ Two year warranty

Features

- ◆ Removable cable option
- ◆ Custom Polyurethane or ETFE Cable Lengths
- ◆ Optional PVC jacketed steel armored cable
- ◆ Welded 316SS or Titanium
- ◆ Custom Level Ranges up to 230 ft. (70m) H₂O
- ◆ Multiple Nose Cap Options
- ◆ Shipped with Long-Life Vent Filter

Applications

- ◆ Groundwater Monitoring
- ◆ Down Hole
- ◆ Surface Water Monitoring
- ◆ Tailrace and Forebay Monitoring
- ◆ Oceanographic Research

The KPSI 355 submersible hydrostatic level transducer is specifically designed for small bore applications and to meet the rigorous environments encountered in ground water level measurements. Incorporating a highly stable media-isolated sensor, the KPSI 355 features SDI-12 serial-digital interface. SDI-12 is a standard for interfacing data recorders with microprocessor-based sensors, especially in the environmental monitoring field.

The KPSI 355 is an excellent choice for applications that require minimal current drain. It will accommodate cable lengths between sensors and recorder up to 1000 feet. Removable cable option allows easy substitution of transducers and cables. A new removable nose cap option extends product applications.

Specifications

PARAMETER	COMMENT	
LEVEL RANGES		
Full Scale Level Ranges <small>(intermediate level ranges are available)</small>	10 thru 230 ft. (3 thru 70m) H ₂ O	Vented Gage Reference
Proof Pressure	1.5 x FS	
Burst Pressure	2.0 x FS	
STATIC PERFORMANCE (Combined Errors Due to Nonlinearity, Hysteresis, Non-repeatability, and Thermal Effects over the Compensated Temperature Range)		
Level	$\pm 0.05\%$ FS TEB $\pm 0.10\%$ FS TEB	For level ranges > 10 ft. (3m) H ₂ O For level ranges \leq 10 ft. (3m) H ₂ O
Temperature	+0.5°C	
Excitation	± 0.5 VDC	8 to 28 volts
Resolution	+0.0001% FS	

MEASUREMENT RESOLUTION		
Level	±0.0001%FS	
Temperature	±0.001°C	
Excitation	±0.1 VDC	
ENVIRONMENTAL		
Wetted Materials	316 SS or Titanium; FKM; polyurethane or ETFE	
Compensated Temp Range	0 to 50°C	
Operating Temp Range	-20 to 60 °C	When attached to polyurethane cable
Protection Rating	IP 68, NEMA 6P	
ELECTRICAL		
Excitation	6-28V – VDC output	
Input Current	8 mA max 1.0 mA	Average current during data acquisition Quiescent
Interface	SDI-12, version 1.3 RS-485	SDI-12 protocol
CERTIFICATIONS		
	CE compliant	EN 61326-1:2013 and 61326-2-3:2013
PHYSICAL		
Approximate Weight	0.75 lbs. (340 g) transducer 0.05 lbs./ft. (79 g/m) cable	
Cable Jacket Material	Polyurethane ETFE Armored polyurethane (optional 859 accessory)	PVC Jacketed steel armored polyurethane Polyurethane
Cable Pull Strength	200 lbs. (90 kg)	
Cable Number of Conductors	4	
Cable Conductor Size	22 AWG	
Cable Seal	Molded Polyurethane FKM Gland	For polyurethane cable For ETFE cable
LIGHTNING PROTECTION (power supply needs to be limited to 150mA 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	
Shunts	20,000 Amperes	

Removable Cable and Nose Cap Options

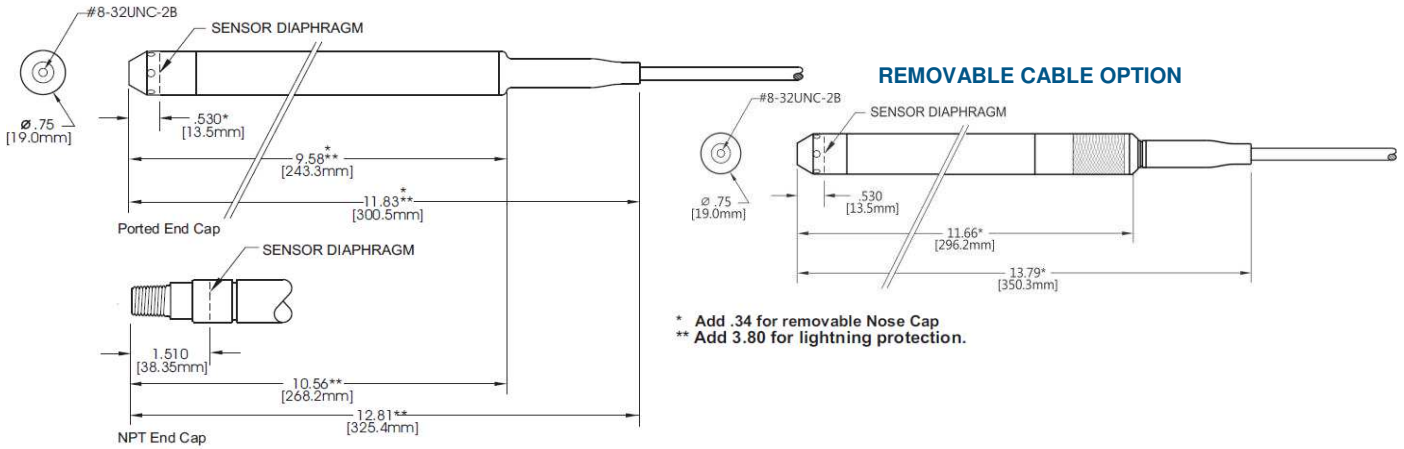


NOTE:

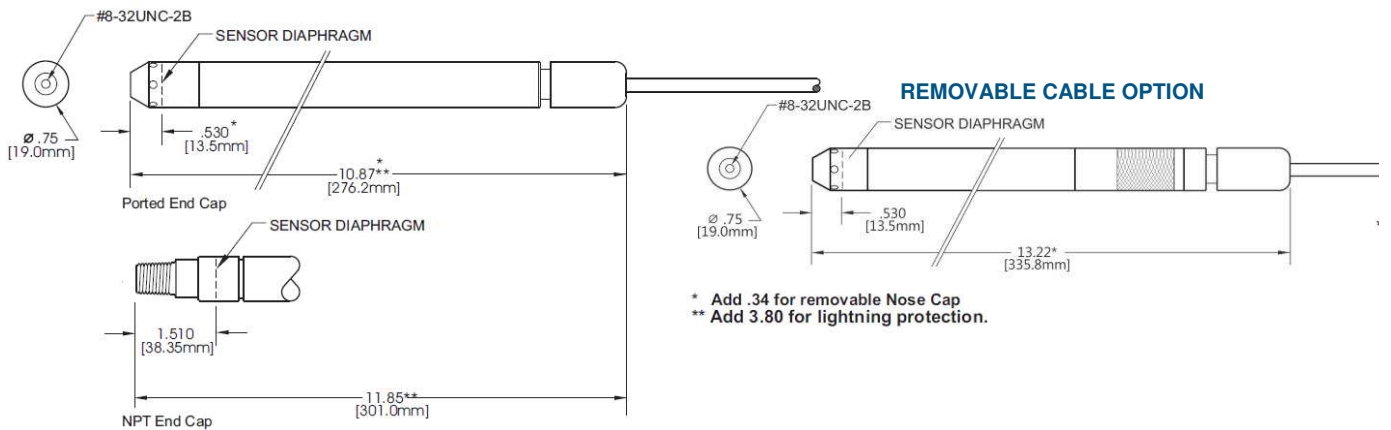
¼" MNPT FITTING IS NON-REMOVABLE (WELDED); ONLY AVAILABLE IN STAINLESS STEEL; AND FOR RANGES BELOW 100 PSI

Dimensions

Molded Cable Seal Configuration for Polyurethane Cable



Gland Cable Seal Configuration for ETFE Cable



Electrical Termination and Removable Cable Options

ELECTRICAL TERMINATION		
22AWG CONDUCTORS IN A SHIELDED CABLE WITH VENT TUBE		
SDI-12	RED BLACK WHITE	+ SUPPLY - SUPPLY SIGNAL
RS-485	RED BLACK WHITE GREEN	+ SUPPLY - SUPPLY RS485-A RS485-B
ALL	DRAIN WIRE	SHIELD

MODEL	REMOVABLE CABLE
8 5 9	
↓ ↓ ↓	
	MATERIAL
S	Stainless Steel
T	Titanium
↓	OUTPUT
C	SDI-12
D	RS 485 w/SDI-12 protocol
↓	ELECTRICAL CONNECTION
0	Molded cable seal
A	Gland cable seal
↓	CABLE TYPE
1	Polyurethane
2	ETFE (Connection A Only)
4	Armored (Connection O Only; 200 Feet Max)
↓	CABLE LENGTH
	# # # (in feet)
8 5 9	

