

**CE**

MEAS KPSI 300DS

- Deep submersible level transducer
- Small bore, 0.75" diameter
- $\pm 0.50\%$ FSO static accuracy
- Two year warranty

Features

- Custom polyurethane or ETFE cable lengths
- Welded 316SS body construction
- Custom level ranges to 3,000 psi
- 6921 ft. (2109 m) H₂O
- Multiple analog outputs
- Ported nose cap

Applications

- Down hole
- Level control
- Pump control

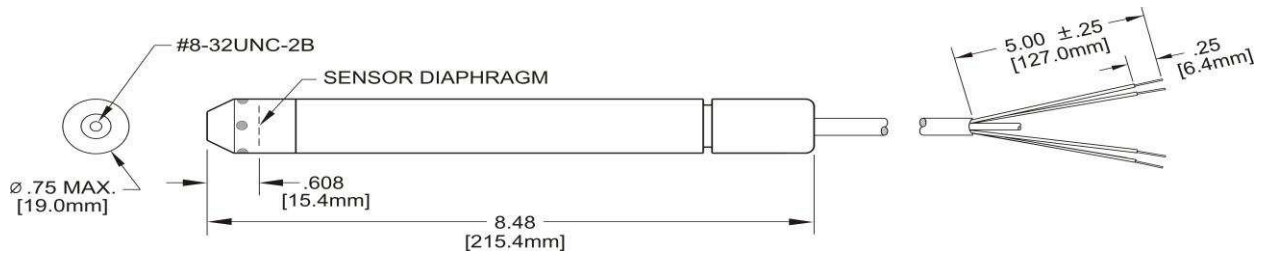
The KPSI 300DS submersible hydrostatic level transducer is specifically designed for small bore applications and to meet the rigorous environments encountered in deep water level measurements. This transducer provides repeatable, precision depth measurement under most adverse conditions.

Every KPSI Transducers utilize a highly accurate pressure sensor assembly specifically designed for hostile fluids and gases. The assembly is integrated with supporting electronics in a durable waterproof housing constructed of 316 stainless steel. The attached electrical cable is custom manufactured and includes para-aramid synthetic fiber members to prevent errors due to cable elongation, and a unique water block feature that self-seals in the event of accidental cuts to the cable.

Specifications

PARAMETER	COMMENT	
LEVEL RANGES		
Full scale level ranges (Intermediate level ranges are available)	700 thru 6921 ft. H ₂ O (210 thru 2109 m H ₂ O)	Sealed gage reference
Proof pressure	1.5 x FS	
Burst pressure	2.0 x FS	
STATIC PERFORMANCE		
Static accuracy (Combined effects of non-linearity, hysteresis and repeatability, best fit straight line method)	±0.50% FSO	
Resolution	+0.0001% FS	
ENVIRONMENTAL		
Wetted materials	316 SS; POM; FKM; Polyurethane or ETFE	
Compensated temp range	0 to 50°C	
Thermal error (Maximum allowable deviation from the Best Fit Straight Line due to a change in temperature)	±0.05% FSO/°C	Worse case over compensated temperature range
Operating temp range	-20 to 60 °C	When attached to polyurethane cable
Protection rating	IP68, NEMA 6P	
ELECTRICAL		
Excitation	9-28 V – VDC output, 9-28 V – mA output	0-5 V, 0-2.5 V, 0-4 V, 4-20
Input current	20 mA max., 3.5 mA max.	For mA output, For VDC output
Output	4-20 mA, 0-5 VDC, 0-2.5 VDC, 0-4 VDC, 0-10 VDC, 1.5-7.5 VDC	
Zero offset	±0.12 mA for mA output < 0.25 VDC for VDC output	
Output impedance	See loop diagram for mA output 20 ohm for VDC output	
Insulation resistance	100 mega ohm at 50 VDC	
Circuit protection	Polarity, surge/shorted output	
CERTIFICATIONS		
	CE compliant	EN 61326-1:2001 and 61326-2-3:2006
PHYSICAL		
Approximate weight	0.63 lbs. (285 g) transducer 0.05 lbs./ft. (79 g/m) cable	
Cable jacket material	Polyurethane (Standard), ETFE (Optional)	
Cable pull strength	200 lbs. (90 kg)	Polyurethane
Cable number of conductors	4	
Cable conductor size	22 AWG	
Cable seal	Molded polyurethane FKM Gland	For polyurethane cable For ETFE cable

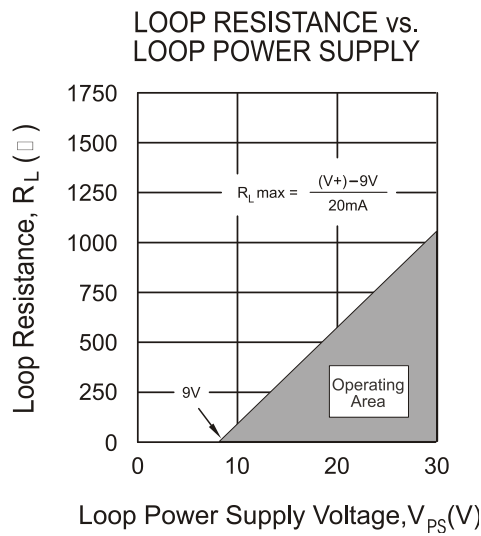
Dimensions



Gland Cable Seal

Electrical Termination / Loop Resistance

ELECTRICAL TERMINATION		
22 AWG CONDUCTORS IN A SHIELDED CABLE WITH VENT TUBE		
4-20 mA	RED	+ EXCITATION
	BLACK	- EXCITATION
0-5 VDC	RED	+ EXCITATION
	BLACK	- EXCITATION
	WHITE	+ SIGNAL
ALL	DRAIN WIRE	SHIELD



Ordering Information

MODEL		SUBMERSIBLE LEVEL TRANSDUCER																												
3	D S	±0.5% FSO Static Accuracy																												
↓	↓ ↓	MATERIAL																												
	S	Stainless Steel																												
	↓	REFERENCE FORMAT																												
	3	Sealed gage																												
	↓	OUTPUT																												
	3	0-5 VDC																												
	F	0-2.5 V																												
	G	0-4 V																												
	H	0-10 V																												
	J	1.5-7.5 V																												
	4	4-20 mA																												
	↓	PRESSURE CONNECTION																												
	B	Ported nose cap																												
	↓	ELECTRICAL CONNECTION																												
	A	Gland cable seal																												
		Lightning Protection																												
	A	None																												
		LEVEL RANGE (at MAX output)^{1 2}																												
		#	#	#	. # # #																									
		↓	↓	↓	↓ ↓ ↓ ↓																									
					LEVEL RANGE (at MIN output)¹																									
		#	#	#	. # # #																									
		↓	↓	↓	↓ ↓ ↓ ↓																									
					No Moisture Protection																									
		CABLE TYPE																												
		1	Polyurethane																											
		2	ETFE																											
		↓	CABLE LENGTH																											
		#	#	#	#	(in feet)																								
		↓	↓	↓	↓																									
						LABEL³																								
			A	psi																										
			B	ft H ₂ O																										
			C	m H ₂ O																										
			↓																											
3	D S	S	3	B	A	A														A										

Notes:
 1 The part number requires two level range limits, corresponding to the maximum and minimum analog outputs of the transducer, to be specified in **pounds per square inch (psi)** to three decimal places. The lower level range is typically 000.000 unless otherwise required. For reverse output requirements, enter the lower level range for the maximum output signal and the upper range for the minimum output. Use the following conversion factors: **Ft. H₂O / 2.3073 = psi // m H₂O / 0.703265 = psi**
Examples: 10 ft. H₂O / 2.3073 = 4.334 psi (Enter 004.334 in the part number), 10 m H₂O / 0.703265 = 14.219 psi (Enter 014.219 in the part number)
 For sealed gage reference add local atmosphere when converting to psi. Contact PSI for assistance.
Example: 10 ft. H₂O / 2.3073 +14.7 = 19.034 psi (Enter 019.034 in the part number)
 2 Units of measure on standard MEAS label. Contact Measurement Specialties if private labeling is required.

NORTH AMERICA

Measurement Specialties, Inc.,
 a TE Connectivity Company
 100 Lucas Way
 Hampton, VA 23666
 Tel : 1-757-766-1500
 Fax : 1-757-766-4297
 Toll Free: 1-800-745-8008
 Email: WL.sales@meas-spec.com

EUROPE

Measurement Specialties (Europe), Ltd.,
 a TE Connectivity Company
 26 Rue des Dames
 78340 Les Clayes-sous-Bois, France
 Tel : +33 (0) 130 79 33 00
 Fax : +33 (0) 134 81 03 59
 Email: pfg.cs.emea@meas-spec.com

ASIA

Measurement Specialties (China), Ltd.,
 a TE Connectivity Company
 No. 26 Langshan Road
 Shenzhen High-Tech Park (North)
 Nanshan District, Shenzhen 518057 China
 Tel : +86 755 3330 5088
 Fax : +86 755 3330 5099
 Email: pfg.cs.asia@meas-spec.com

te.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.
 KPSI, Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.
 The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.