

## Submersible Pressure Transducer



measuring  
•  
monitoring  
•  
analyzing

KPW



- Advanced Semi-Conductor/Thin Film Sensing Technology
- Variety of Output Signals
- CE EMI Compliant
- High Level of Overpressure Protection
- Fast Response Time
- Stainless Steel Construction
- Submersible Cable Connection



KOBOLD companies worldwide:

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**Description**

KOBOLD KPW series transmitters provide superior performance at affordable prices. Utilizing the same pressure sensing technologies and advanced manufacturing techniques as the rest of our KP line, the KPW can achieve accuracies of ±0.125% at pressures to 1000 PSIG. All this is combined with our high shock resistance, excellent long term sensor stability, and CE compliant noise immunity. The KPW offers protection against common installation problems such as reverse polarity wiring and short circuiting.



**Applications:**

- Irrigation
- Tank Monitoring
- Water & Wastewater
- Well Head Measurement

**Technical Specifications**

**Pressure Ranges:** 0...50 inH<sub>2</sub>O to 0...1,000 PSIG

**Accuracy**

(Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)

**Standard:** ±0.25% of Full Scale BFSL

**Optional:** ±0.125% of Full Scale BFSL

**Stability:** <±0.2% of Full Scale for 1 year, Non-Accumulating

**Process Connection:** Nose Cone, G 1/2 Male

**Materials of Construction**

**Wetted Parts:**

**Measuring Element:**

**Nose Cone:** Polyamide (Standard), 316 Stainless Steel with Weighted Nosecone (Optional)

**Cable:** Polyurethane (PUR; Standard), PVC or FEP (Optional)

**Connection:** 316 Stainless Steel

**Housing:** 316 Stainless Steel

**Temperature Specs**

**Compensated:** 32...122 °F

**Drift:** ±0.01%/F for Zero and Span

**Media:** 14...122 °F

**Storage:** -22...175 °F

**Proof Pressure:** 2X Range

**Burst Pressure:** 4X Range

**Adjustability:** ±10% Full Scale for Zero and Span

**Response Time:** <1 ms (10-90% Full Scale)

**Service Life:** >100,000,000 Load Cycles

**Output:** 4-20 mA, 2-wire  
0-5 V<sub>DC</sub>, 3-wire  
1-5 V<sub>DC</sub>, 3-wire  
0.5-2.5 V<sub>DC</sub>, 3-wire

**Input Power\*:**

4-20 mA, 0-5 V<sub>DC</sub>

**output:** 10-30 V<sub>DC</sub>

**0-10 V<sub>DC</sub> output:** 14-30 V<sub>DC</sub>

**0.5-2.5 V<sub>DC</sub> output:** 5-30 V<sub>DC</sub>

**Load Limitations:**

**4-20 mA:** ≤(V<sub>power Supply</sub> -10)/0.020 Amp

**0-5V<sub>DC</sub>:** ≥5,000 Ω

**0-10 V<sub>DC</sub>:** ≥10,000 Ω

**Shock Sensitivity:** 100g according to IEC 60068-2-27

**Vibration Sensitivity:** 15g according to IEC 60068-2-6

**Protection**

**Environmental:** IP68

**Electrical:** Reverse Polarity and Short Circuit

**Electromagnetic Rating:** CE Compliant to EMC Norm

EN 61326:1997/A1:1998

RFI, EMI, and ESD Protection

**Weight:** 7 oz approximately with Standard Nosecone - Cable Extra

\*unregulated



**Order Details** (Example: **KPW-06015W 40 CC**)

Model	Range		Accuracy	Output Signal	Nose Cone	Cable Type	Cable Length <sup>4)</sup>
KPW-	..AIN.. = 0...50 inH <sub>2</sub> O	..025.. = 0...25 PSIG	..1.. = ±0.25% of Full Scale (Standard)	..1.. = 4-20 mA, 2-Wire (Standard)	..N = ABS Nose Cone (Standard)	... = No designator needed for standard PUR cable	.. (Specify Cable Length in Feet)
	..BIN.. = 0...100 inH <sub>2</sub> O	..030.. = 0...30 PSIG					
	..CIN.. = 0...150 inH <sub>2</sub> O	..060.. = 0...60 PSIG					
	..DIN.. = 0...200 inH <sub>2</sub> O	..100.. = 0...100 PSIG					
	..EIN.. = 0...400 inH <sub>2</sub> O	..150.. = 0...150 PSIG					
	..200.. = 0...200 PSIG	..2.. = 0-5 V <sub>DC</sub> , 3-Wire					
	..002.. = 0...2 PSIG	..300.. = 0...300 PSIG	..2.. <sup>2)</sup> = ±0.125% of Full Scale	..5.. = 0-10 V <sub>DC</sub> , 3-Wire	..W = 316 SS Nose Cone (Weighted)	..22 <sup>3)</sup> = Water Blocked PVC Cable	
	..003.. = 0...3 PSIG	..350.. <sup>1)</sup> = 0...350 PSIG					
	..005.. = 0...5 PSIG	..500.. <sup>1)</sup> = 0...500 PSIG					
	..010.. = 0...10 PSIG	..750.. <sup>1)</sup> = 0...750 PSIG					
	..015.. = 0...15 PSIG	..10X.. <sup>1)</sup> = 0...1000 PSIG					
	..020.. = 0...20 PSIG						
<b>Optional Accessories</b>							
..CC = Cable Clamp		..DC = Dessicant Cartridge			..FE = Filter Element		

<sup>1)</sup> Only available with 4-20mA output

<sup>2)</sup> Only available for ranges ≥ 5 psi

<sup>3)</sup> Only available for ranges ≥ 200 psi

<sup>4)</sup> Any length cable is possible. To create a part number for a cable length, insert the exact length of cable, in feet, as the part number. (i.e. 120 feet of cable would result in a part number like KPW-06015W 120)

**Accessories**

**Cable Clamp**



**Dessicant Cartridge**



**Filter Element**





**Electrical Connections**

**4-20 mA Output, 2 Wire**

	4...20 mA Output		
Connection Type	V+	V-	Case Ground
Polyurethane Cable (Standard)	Brown	Green	Gray
FEP Cable (Optional)	Brown	White	Blue
PVC Cable (Optional)	Red	Black	Bare

**Voltage Output, 3 Wire**

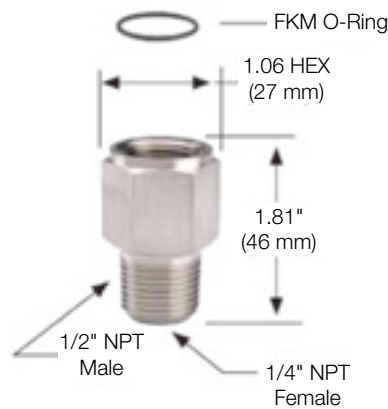
	0 - 5 V <sub>DC</sub> , 0 - 1 0 V <sub>DC</sub> , 0.5 - 2.5 V <sub>DC</sub> Output			
Connection Type	V+	Common	Output	Case Ground
Polyurethane Cable (Standard)	Brown	Green	White	Gray
FEP Cable (Optional)	Brown	Green	White	Gray

**Dimensions**

**Nosecone**



**NPT Adapter**



**Weighted Nosecone**

