# **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 Instruments, Inc.

#### Submersible Pressure Transducer Model KPW



## **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  $\pm 0.125\%$  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 & Watewater
- 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, hysterisis, non-repeatability,  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

zero point and full scale errors)

Non-Accumulating

Process Connection: Nose Cone, G ½ Male

Materials of Construction

Wetted Parts:

Cable:

Measuring Element:

Nose Cone: Polyamide (Standard),

316 Stainless Steel with Weighted

Nosecone (Optional)
Polyurethane (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:** 10-30 V<sub>DC</sub> (4-20 mA, 0-5 V<sub>DC</sub>)

14-30 V<sub>DC</sub> (0-10 V<sub>DC</sub>) 5-30 V<sub>DC</sub> (0.5-2.5 V<sub>DC</sub>)

Load Limitations:

**4-20 mA:** ≤(Vpower Supply -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

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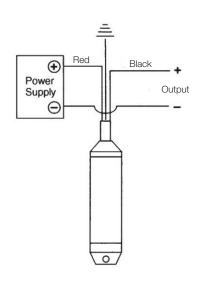
## Order Details (Example: KPW-06015W 40 CC)

Model	Ra	nge	Accuracy	Output Signal	Nose Cone	Cable Length*	
KPW-	AIN = 050 inH <sub>2</sub> OBIN = 0100 inH <sub>2</sub> OCIN = 0150 inH <sub>2</sub> ODIN = 0200 inH <sub>2</sub> OEIN = 0400 inH <sub>2</sub> O002 = 02 PSIG003 = 03 PSIG005 = 05 PSIG010 = 010 PSIG015 = 015 PSIG	025 = 025 PSIG 030 = 030 PSIG 060 = 060 PSIG 100 = 0100 PSIG 150 = 0150 PSIG 200 = 0200 PSIG 300 = 0300 PSIG 350 = 0350 PSIG 500 = 0500 PSIG 750 = 0750 PSIG 10X = 01000 PSIG	1 = ±0.25% of Full Scale (Standard) 2 = ±0.125% of Full Scale	1 = 4-20 mA, 2-Wire (Standard) 2 = 0-5 V <sub>DC</sub> , 3-Wire 5 = 0-10 V <sub>DC</sub> , 3-Wire 6 = 0.5-2.5 V <sub>DC</sub> , 3-Wire	N = ABS Nose Cone (Standard) W = 316 SS Nose Cone (Weighted) T = G ½ B x ½" NPT Male with ½" NPT Female Adapter	(Specify Cable Length in Feet)	
Optional Accessories							
CC = Cable Clamp			DC = Dessicant Cartridge		FE =	Filter Element	

<sup>\*</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)

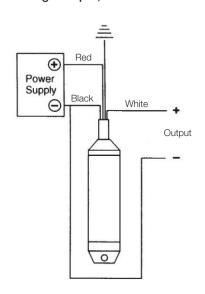
## **Wiring Diagrams and Electrical Connections**

## 4-20 mA Output, 2 Wire



	420 mA Output	Voltage Output
Supply: +	Red	Red
Common: -		Black
Output: +	Black	White
Case Ground	Shield	Shield

## Voltage Output, 3 Wire





## **Dimensions**



## **NPT** Adapter



## Weighted Nosecone

