



SENSORS  
**MODEL 5050LL-PTK**  
Pressure Transducer

### General Description

HydroLynx pressure transducers are specifically designed to meet the rigorous environments encountered in level measurement applications. These transducers provide repeatable, precision depth measurements under the most adverse conditions.

All transducers incorporate isolated diaphragm sensors which are specifically designed for use with hostile fluids and gases. These sensors utilize a silicon pressure cell that has been fitted into a stainless steel housing with an integral, compliant stainless steel barrier diaphragm. This sensor assembly is housed in a rugged 316 SS case which provides for a variety of pressure inputs as well as electrical output connections.

Model 5050LL-PTK pressure transducers feature high performance and internal signal conditioning. They are available in both 4 to 20 mA and 0 to 5 Vdc output versions.



### Specifications

Performance	
<b>Pressure range</b>	0 - 5 through 0 - 300 PSIG
<b>Static accuracy*</b>	
± 0.10% FSO BFSL (specify)	
± 0.25% FSO BFSL (specify)	
± 0.50% FSO BFSL (specify)	
± 1.0% FSO BFSL (specify)	
<b>Thermal Error**</b>	0.05% FSO/°C worst case
<b>Proof Pressure</b>	1.5 x rated pressure
<b>Burst Pressure</b>	2.0 x rated pressure
<b>Resolution</b>	Infinite
<b>*Static accuracy includes the combined errors due to nonlinearity, hysteresis and nonrepeatability on a Best Fit Straight Line basis, at 25°C per ISA S51.1.</b>	
<b>**Thermal error is the maximum allowable deviation from the Best Fit Straight Line due to a change in temperature, per ISA S51.1</b>	
Environmental	
<b>Comp. temp. range***</b>	0 to 50 °C
<b>Operating temp. range</b>	-10 to 60 °C
<b>*** Tighter tolerances on thermal error and/or a wider compensated temperature range are available on request. Consult the sales office.</b>	
Electrical	
<b>Excitation</b>	9 to 30 Vdc
<b>Input current</b>	20 mA maximum
<b>Output</b>	0-5 Vdc (3 wire) or 4-20 mA (2 wire)
<b>Zero offset, max</b>	
<b>0-5 Vdc</b>	60 mV
<b>4-20 mA</b>	0.12 mA
<b>Output impedance</b>	<10 ohms
<b>Insulation resistance</b>	100 W at 50 Vdc
<b>Circuit protection</b>	Polarity, surge & shorted output

<b>Physical</b>	
<b>Dimensions</b>	1 in. dia. x 4.02 in. long
<b>Weight</b>	7 oz (not incl. cable)
<b>Cable</b>	Polyurethane jacketed shielded cable with polyethylene vent tube
<b>and Kevlar tension members - 200 lbs. pull strength. Tefzel jacket optional.</b>	
<b>Wetted materials</b>	316 SS, Fluorocarbon
<b>Mounting provisions</b>	Suspended by cable.
<b>For turbulent conditions, specify optional mounting bracket.</b>	

## Ordering Information

<b>5050LL-PTK</b>	Pressure Transducer 0 to 5 Vdc Specify PSI Range for Measured Range Min / Max — Includes: 0-1 PSI 1.7 ft./3.4 ft.; 0-5 PSI 8.5 ft./17 ft.; 0-15 PSI 17 ft./34 ft.; 0-30 PSI 34 ft./68 ft.
<b>5050LL-PTK-420</b>	Pressure Transducer 4 to 20 mA
<b>5050LL-PTK-C</b>	Additional Cable, per foot
<b>5050LL-PTK-M</b>	Mounting Bracket for Standpipe Installation
<b>5050LL-PTK-F</b>	¼ in. NPT Pressure Fitting