



# Hispec<sup>®</sup> HI5000

High Precision Pressure Transducer



Introducing the new HI5000 pressure transmitter for oil & gas DOWNHOLE tool applications.

With a max. length of 58mm, it is highly compact and with a tough, corrosion-resistant design, installation is easy in challenging environments.

The sensor is designed to withstand high shock and vibration inputs in high temperature applications which require accuracy, stability and long term performance of downhole pressure monitoring.





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## Technical Data

Type:	HI5000
Sensor Technology:	Silicon-on-Sapphire
Pressure Range:	See Table 1
Proof Pressure:	See Table 1
Burst Pressure:	See Table 1
Excitation:	3-10 VDC (5 VDC Nominal)
Input Resistance:	4000Ω ±1000Ω
Output Resistance:	4000Ω ±1000Ω
Output at zero pressure over the calibrated pressure range:	±8.0 mV/V
Full scale sensitivity (span) over the calibrated temperature range:	10-20 mV/V Nominal
Operating Temperature Range:	-40°C to +200°C
Calibrated Temperature Range:	+24°C to +180°C
Non-linearity & Hysteresis Combined:	±0.150 % of span maximum (Best Fit Straight Line method)
Total Error Band (Non-linearity, Hysteresis & Thermal Effects):	± 0.20% of span, serial number specific polynomial model P(T,mV) provided for all input pressures and temperatures over the calibration range
Pressure Media:	Any compatible with Titanium grade 5 and BT9 alloys
Weight:	20g maximum
Electrical Connection:	See Table 2
Insulation resistance:	All connections pins together to case: 100 MΩ minimum at 50 VDC
Platinum Resistance Temperature Detector (RTD):	0°C, 1000Ω ±0.06% to IEC 751 Class A, Alpha = 0.00385 nominal



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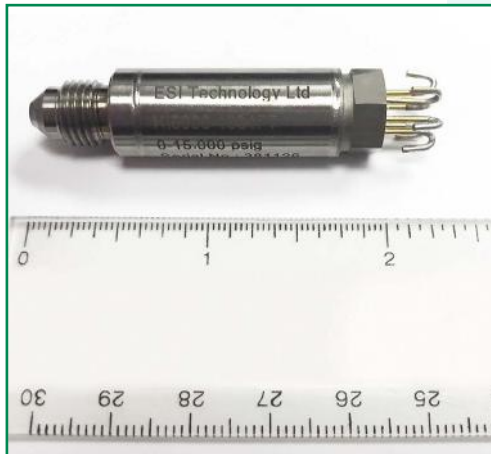
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Table 1

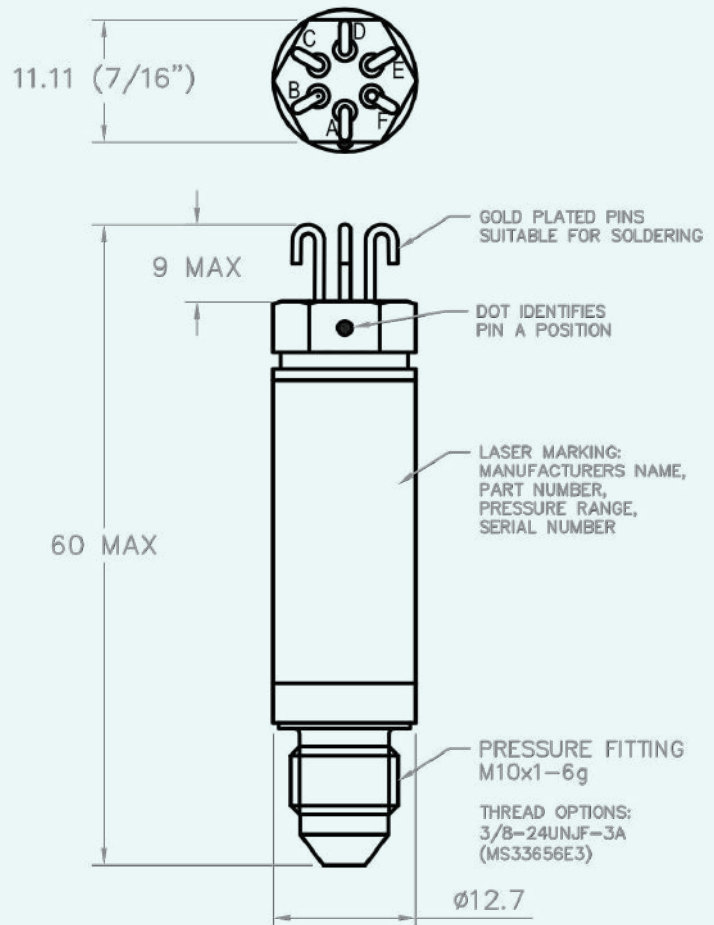
MODEL NUMBER	PRESSURE RANGE [BARSG]	PROOF PRESSURE	BURST PRESSURE
HI5000-0400	0-400	200%	300%
HI5000-0600	0-600	200%	300%
HI5000-1000	0-1000	150%	200%
HI5000-1500	0-1500	110%	150%

TABLE 2

PIN	Designation
A	+ Excitation
B	+ Signal
C	- Signal
D	- Excitation
E	RTD
F	RTD



## Dimensions (in mm)



**DISCLAIMER :** ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice. All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment with traceability to international standards.



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