

Platinum Resistance Thermometer _ Fast Response

PRT

Production Logging Tools



DESCRIPTION

The Platinum Resistance Thermometer is used to give a high precision reading of wellbore temperature. It outputs temperature data as a digital word allowing for very high resolution. Because of the small size of the tip it also has a very rapid response time which minimises the effects of differing line speeds. It can be run alone, or as part of a string of Production Logging tools.

OPERATING PRINCIPLE

The change of resistance of a length of platinum wire with changing well temperature is used to drive a voltage controller oscillator. The frequency output from the VCO is digitised and encoded on the line. The high thermal conductivity copper tip is isolated with a low thermal conductivity body which allows for high resolution measurement even with high differential temperatures between the well fluid and the tool body.

APPLICATIONS

- Production and Injection Log Interpretation
- Location of Fluid Movement Behind the Pipe or Casing
- Location of Fluid Entry, Gas Leaks and Injection Zones
- Cement Top Determination

INTERFACING & TOOL COMBINATIONS

- Simultaneous Operation with other Production Logging Tools
- 1 3/16 UN 12 tpi Sondex GO or other Heads

OPTIONS

- Special Heads to Customer Specification
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SPECIFICATIONS

	Memory	Wireline
Supply Voltage	+12v DC	+60v DC
Current	15mA	24mA
Measuring Range	50-350 degree F (10-177 degree C)	
Max Pressure	15,000psi (12,000 for 1.5")	
Max. Temperature	350 deg F (177deg C)	
Length	12.5" (318mm)	
Weight	10.0lbs (4.5kg) 1 11/16" model	
Measure point	1.75" (44mm)	
Diameters available	1 11/16" (43mm) & 1.5" (38mm)	
Response Time	<0.5 seconds	
Resolution	0.006deg. F (0.003 deg. C)	
Accuracy	0.9deg F (0.5 deg. C)	
Linearity	0.5 deg F (0.15deg C)	
Materials	Corrosion Resistant Troughout	