

Perforating Gamma Pressure Temperature Tool

Titan Division | Instruments



Features

- Compatible with all types of detonators, igniters and firing modules
- Easily matched with Hunting's EBFire® and ControlFire® perforating switches
- Hardened CCL's constructed with strong Alnico 5 magnets
- Ruggedized CCL for repetitive perforating operations
- Available for various perforating polarity configurations, NF and DF
- Larger and more sensitive scintillation detectors
- Optional integrated shock sub for additional protection
- Patented shock protection technology
- Sizes from 1-11/16 in. (42.9 mm) to 2-3/4 in. (70 mm) OD with optional configurations

Benefits

- All sensors captured simultaneously in one well trip
- Wellbore pressure measurement immediately before and after perforation
- Output compatibility with standard surface equipment
- Reliable operation in extreme shock environments
- Higher logging speed
- Reduced maintenance cost due to high mean time between failures
- Improved tool reliability in underbalance and overbalance completion conditions
- Easier stratigraphic correlation for depth control

Built using Hunting's proprietary and patented shock mounting technology, Hunting's Perforating Gamma Pressure Temperature tools are a rugged and reliable means of correlation depth control for completion operations.

Able to withstand extreme shock and impacts encountered in today's balanced, underbalanced and overbalanced completions, the tool's design applications include gamma, temperature and pressure surveys; stratigraphic depth correlation; conducting select fire or addressable perforating gun operations, and setting plugs and packers.

High-resolution temperature-compensated pressure is continuously transmitted to the surface using digital telemetry. Data acquisition services are available for SDS Warrior and other standard surface systems. Pulse telemetry tools are also available on request.

For operational safety, all Hunting Perforating Gamma Ray tools operate at +50 VDC and are available in both negative fire and dual fire configurations.

Hunting scintillation perforating detector reliability exceeds that found in older Geiger-Muller detector technology.

**Perforating GR/Compensated Pressure/CCL/Shock Specifications – Dual Fire Scintillation Detector****Negative Fire Scintillation Detector**

Part Number	1-11/16 in. (43 mm)		2-3/4 in. (70 mm)	1-11/16 in. (43 mm)	2-3/4 in. (70 mm)
	Stand-alone*	w/Integrated Shock Sub	w/Integrated Shock Sub	Stand-alone*	Stand-alone*
Standard	8136-1685FSF070-06-06	N/A	N/A	8136-16857SF070-06-06	N/A
High Temperature	8136-168BFSF070-06-06	8136-168BFSF070-06-0C	8136-275BFSF100-04-0C ¹	8136-168B7SF070-06-06	8136-275B7SF100-04-01
Measurements					
Offset from Bottom					
Compensated Temperature Probe (in.)[cm]	78.68 [199.85]	93.81 [238.28]	87.08 [221.18]	78.68 [199.85]	68.37 [173.66]
Center of Pressure Port (in.)[cm]	78.68 [199.85]	93.81 [238.28]	87.08 [221.18]	78.68 [199.85]	68.37 [173.66]
Center of Crystal (in.)[cm]	20.86 [52.98]	36 [91.45]	39.43 [100.15]	20.86 [52.98]	20.72 [52.64]
Center of CCL (in.)[cm]	88.42 [224.59]	103.54 [262.99]	100.67 [255.70]	88.42 [224.59]	81.96 [208.18]
Compensating Temperature Range (°F)[°C]	0 - 500 [0 - 260]	0 - 500 [0 - 260]	0 - 500 [0 - 260]	0 - 500 [0 - 260]	0 - 500 [0 - 260]
Pressure Range (psi)[MPa]	500 - 20K [3.45 - 138]	500 - 20K [3.45 - 138]	500 - 20K [3.45 - 138]	500 - 20K [3.45 - 138]	500 - 20K [3.45 - 138]
Accuracy	0.5% of Full Scale	0.5% of Full Scale	0.5% of Full Scale	0.5% of Full Scale	0.5% of Full Scale
Gamma Detector Size OD - Length (in.)[cm]	.84 [2.1] X 4 [10.1]	.84 [2.1] X 4 [10.1]	1 [2.5] X 4 [10.1]	.84 [2.1] X 4 [10.1]	1 [2.5] X 4 [10.1]
Rec. Logging Speed (ft/min)[m/min]	30 - 40 [9.1 - 12.1]	30 - 40 [9.1 - 12.1]	30 - 40 [9.1 - 12.1]	30 - 40 [9.1 - 12.1]	30 - 40 [9.1 - 12.1]
Environmental					
Temperature Rating					
Standard (°F)[°C]	350 [177]	350 [177]	350 [177]	350 [177]	350 [177]
High Temperature (°F)[°C]	500 [260]	500 [260]	500 [260]	500 [260]	500 [260]
Pressure Rating (psi)[MPa]	18,000 [124]	18,000 [124]	20,000 [138]	18,000 [124]	20,000 [138]
Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Mechanical					
Outside Diameter (in.)[mm]	1.69 [42.9]	1.69 [42.9]	2.75 [69.9]	1.69 [42.9]	2.75 [69.9]
Length (in.)[cm]	101.87 [258.87]	101.87 [258.87]	116.57 [296.10]	101.87 [258.75]	120.64 [306.42]
Weight (lb)[kg]	40 [18.14]	40 [18.14]	105 [47.62]	40 [18.14]	100 [45.36]
Max. Tension (lbf)[kN]	46,000 [204]	46,000 [204]	115,000 [512K]	46,000 [204]	115,000 [512K]
Top/Bottom Connection	1-3/16 in. GO Box	1-3/16 in. GO Box	1-3/16 in. GO Box	1-3/16 in. GO Box	1-3/16 in. GO Box
	1-3/16 in. GO Box	1-3/16 in. GO Box	GO Quick Change Box	1-3/16 in. GO Box	GO Quick Change Box
Electrical					
Operating Voltage & Current	+50 VDC @ 50±5 mA	+50 VDC @ 50±5 mA	+50 VDC @ 50±5 mA	+50 VDC @ 50±5 mA	+50 VDC @ 50±5 mA
Shooting Polarity	Positive and Negative	Positive and Negative	Positive and Negative	Negative	Negative

* Recommended Shock Sub
1-11/16 in. PN = 3100-168-S200
2-3/4 in. PN = 3100-275-S000

About Hunting's Titan Division

For successful cased hole logging and perforating services, tool reliability, availability, and time line of delivery are essential. Hunting supplies customers worldwide with the right tools to get the job done. Our product lines include state of the art, high quality wireline and tubing conveyed perforating (TCP) gun systems, hardware and accessories, shaped charges, and electronic logging tools.