



Technical SpecificationsPositive pulse telemetry

Performance benefits

Proven reliability with over 2900 hrs MTBF Collar sizes 3.5" - 9.0" O.D. Operates downhole to 150°C and 15,000 psi Wireline retrieveable and reseatable Gamma enabled Low power consumption resulting in over 500 hrs of single battery life Increased performance in LCM environments

Configuration

Pressure Drop 100 psi @ 1.52m³/min 3.5 in. O.D. collar 0.57 - 2.27m³/min 6.75 in. O.D. collar 1.50 - 4.45m³/min 9.0 in. O.D. collar 1.50 - 4.45m³/min 9.0 in. O.D. collar 1.50 - 4.45m³/min 9.0 in. O.D. collar 1.50 - 4.45m³/min 1.50 min 1.52m³/min 1.	o o i i i garatio i i	
Data Transmission Positive - Pulse Retrieveability Yes Temperature -20°C to +150°C Electrical Power/ Operating Time Lithium battery / 400 to 500 hrs per battery pack (standard tensor style battery) Maximum LCM Material 40 - 50 ppb concentration, medium nut plug, pre - mixed Shock / Vibration 1000g / 0.5 millisecond / 5 - 30 Hz Inclination Accuracy ± 0.1 Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ± 0.15 0-360° Pressure 20,000 psi	Flow Ranges	0.38 - 1.14m³/min, 4.75 in. O.D. collar 0.57 - 2.27m³/min, 6.75 in. O.D. collar
Retrieveability Yes Temperature -20°C to +150°C Electrical Power/ Operating Time Lithium battery / 400 to 500 hrs per battery pack (standard tensor style battery) Maximum LCM Material 40 - 50 ppb concentration, medium nut plug, pre - mixed Shock / Vibration 1000g / 0.5 millisecond / 5 - 30 Hz Inclination Accuracy ± 0.1 Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ± 0.15 0-360° Pressure 20,000 psi	Pressure Drop	100 psi @ 1.52m³/min
Temperature -20°C to +150°C Electrical Power/ Operating Time Lithium battery / 400 to 500 hrs per battery pack (standard tensor style battery) Maximum LCM Material 40 - 50 ppb concentration, medium nut plug, pre - mixed Shock / Vibration 1000g / 0.5 millisecond / 5 - 30 Hz Inclination Accuracy ± 0.1 Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ± 0.15 0-360° Pressure 20,000 psi	Data Transmission	Positive - Pulse
Electrical Power/ Operating Time Lithium battery / 400 to 500 hrs per battery pack (standard tensor style battery) Maximum LCM Material 40 - 50 ppb concentration, medium nut plug, pre - mixed Shock / Vibration 1000g / 0.5 millisecond / 5 - 30 Hz Inclination Accuracy ± 0.1 Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ± 0.15 0-360° Pressure 20,000 psi	Retrieveability	Yes
Operating Time per battery pack (standard tensor style battery) Maximum LCM Material 40 - 50 ppb concentration, medium nut plug, pre - mixed Shock / Vibration 1000g / 0.5 millisecond / 5 - 30 Hz Inclination Accuracy ± 0.1 Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ±0.15 0-360° Pressure 20,000 psi	Temperature	-20°C to +150°C
Shock / Vibration 1000g / 0.5 millisecond / 5 - 30 Hz Inclination Accuracy ± 0.1 Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ±0.15 0-360° Pressure 20,000 psi		
Inclination Accuracy	Maximum LCM Material	40 - 50 ppb concentration, medium nut plug, pre - mixed
Toolface Accuracy ± 0.5 0 -360° Azimuth Accuracy ±0.15 0-360° Pressure 20,000 psi	Shock / Vibration	1000g / 0.5 millisecond / 5 - 30 Hz
Azimuth Accuracy ±0.15 0-360° Pressure 20,000 psi	Inclination Accuracy	± 0.1
Pressure 20,000 psi	Toolface Accuracy	$\pm 0.5 0.360^{\circ}$
20,000 psi	Azimuth Accuracy	±0.15 0-360 ⁰
Gamma Yes	Pressure	20,000 psi
•	Gamma	Yes

^{*}Testing conducted by Drill-Tek using standardized testing procedures, field results may vary. See www.drilltekmwd.com for more information.