

Fiber

Application

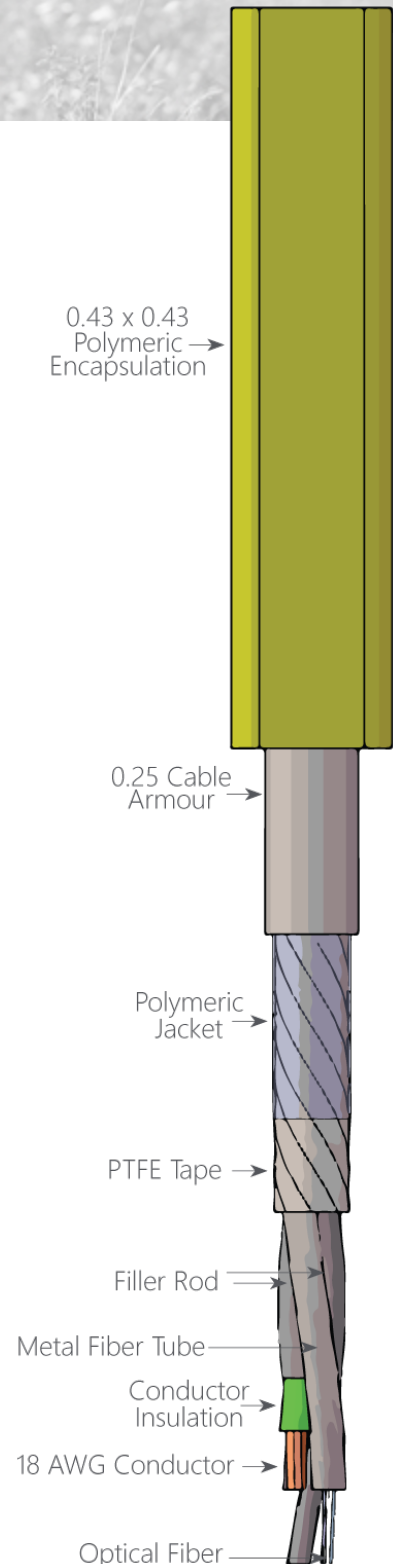
DataCan's Distributed Temperature Sensor (DTS) and Distributed Acoustic Sensor (DAS) suites are industry leaders in reliability and performance. With both DTS and DAS, an optical fibers serve as both the sensing element and the transmission element. The measurement system is comprised of one or more optical fibers and an optional electrical conductor combined together in a single ruggedized cable which is clamped to the tubing over the length of the well. Distributed sensing nature of the fiber gives you the ability to continuously obtain measurements in real time along the entire length of your wellbore.

Features

- Complexity and expense is reduced through the use of a single cable to run electrical and fiber-optic sensors.
- DTS, DAS and Electrical gauges can be deployed simultaneously.
- Electrical temperature probes can be deployed along with DTS to provide fully redundant temperature measurements.
- Electrical pressure probes can be deployed along with DTS to provide a complete temperature and pressure profile of the well.
- Measurement speed and spatial resolution can be tuned to the application. 0.5m spatial resolution, 0.01°C temperature resolution and a range of 30 km are achievable.

Encapsulation		
Wire Size	Encapsulation Size	Material
1/4" OD	11mm x 11mm	Polypropylene - Standard
		Santoprene
		Rislan - Diesel Protection
	0.375" Round	Polypropylene - Standard
		Rislan - Diesel Protection

Armor			
Wire Size	Type	Wall Thickness	Pressure
1/4" OD	316SS	0.028"	17,500 psi
		0.035"	25,000 psi
		0.049"	32,500 psi
	Inconel 825	0.028"	20,000 psi
		0.035"	27,500 psi
		0.049"	35,000 psi



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Insulation		
Wire Size	Type	Maximum Temperature
1/4" OD	Halar E	100°C
	Halar P	150°C
	Teflon	200°C

Conductor	
Wire Size	Gauge
1/4" OD	18 AWG
	16 AWG

Accessories	
Accessory Type	Part No.
Tubewire_0.25" OD_DTS Fiber_150°C_11x11mm Poly	107554
Tubewire_0.25" OD_DTS Fiber/Conductor_150°C_11x11mm Poly	107555
Tubewire_0.25" OD_DTS Fiber_300°C_11x11mm Poly	107556
Tubewire_0.25" OD_DTS Fiber/Conductor_300°C_11x11mm Poly	107557