

FLOODLINE Ranger Hydrocarbon Fuel Detection Cable

Andel Ranger Hydrocarbon Fuel Detection Cable detects the presence of liquid hydrocarbon fuels at any point along its length, yet does not react to the presence of water. Installed with a Floodline Ranger Control Panel, the cable senses the liquid, triggers an alarm, and pinpoints the location of the leak within one meter. Andel Ranger Hydrocarbon Fuel Detection Cable detection cable provides distributed leak detection and location for a wide range of applications. The cable is available in a variety of lengths to provide as much coverage as needed.

These modular sensing cables may be connected in series to provide distributed monitoring for trenches, subfloors, and double-containment piping, or used individually for double-containment tanks, sumps, and small areas.

Radiation-crosslinking and conductive-polymer technology is used to make Ranger Hydrocarbon fuel detection cable mechanically strong and chemically resistant. The core of the cable is constructed of two sensing wires, an alarm signal wire, and a continuity wire. The core is encased in a conductive-polymer jacket and surrounded with a fluoropolymer braid. This rugged construction allows the cable to perform reliably in the most demanding environments.



Product characteristics

Cable diameter: 8 mm nominal.

Cable diameter with nominal connector: 13 mm nominal.

Cable weight: 7.3 kg/100 m nominal.

Fluoropolymer braid colour: red, white and black.

Operating temperature range : -20°C to 60°C

Pull force limit: Not to exceed 22.7 kg (50 lb)

Bend radius: 50 mm (minimum)

Pressure: Loads greater than 9 kg per linear inch at 20°C may immediately trigger an alarm.

Non-resettable: Must be replaced after exposure to hydrocarbon liquids.

Chemical resistance

Cable functions normally after exposure in accordance with ASTM D 543 at 23°C for seven days

Sulfuric acid (10%)
Hydrochloric acid (10%)
Nitric acid (10%)
Sodium hydroxide (10%)

Water Resistance

Sensing cable: Less than 10 µA leakage when immersed in salt water for 90 days.

Connector system: Less than 10 µA leakage when immersed in water at 10 psig for 24 hours.



Response time

Represented materials time detected

Gasoline

#1 diesel fuel

#2 diesel fuel

JP5 jet fuel

JP8 jet fuel

Jet-A jet fuel

Xylene

Typical response at 20°C

3minutes

30 minutes

60 minutes

30 minutes

20 minutes

20 minutes

10 minutes

Notes:

Response times are affected by operating temperature. Consult Andel for specific response times at other temperatures and in other liquids.



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