PERTRONIC INDUSTRIES PTY LTD

DATASHEET

Pertronic-Anbesec Linear Heat Detection Cable

LHDCATIC-68C-200, LHDCATIC-88C-200, LHDSIC-68C-200, LHDSIC-88C-200
LHDCATIC-68C-400, LHDCATIC-88C-400, LHDSIC-68C-500, LHDSIC-88C-500

Overview

Pertronic-Anbesec linear heat detection (LHD) cable is a heat sensing device with a fixed temperature alarm threshold.

The cable consists of two twisted steel wires separated by heat sensitive insulation. The insulation melts at a pre-determined temperature, allowing the wires to contact each other and create a short circuit. When correctly connected to a Pertronic fire panel, the LHD cable triggers an alarm signal when the insulation melts.

LHD cable sensitivity is not affected by installation temperature or the length of cable heated by a fire.

Pertronic-Anbesec
Linear Heat Detection Cable

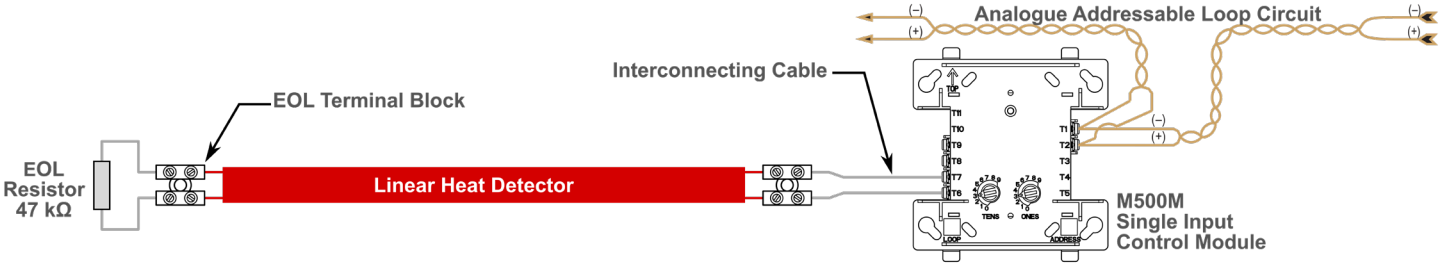
Features

- Available with integral catenary wire
- Compatible with Pertronic fire panels
- No adjustments required
- Supplied on 200, 400 and 500 metre drums
- UL listed under “UL 521 Heat Detectors for Fire Protective Signaling Systems”

General Specification

Alarm Temperature		68 °C & 88 °C
Maximum Operating Voltage		110 V dc
Maximum Operating Current		1 A (see note 1, page 2)
Maximum Length (with M500M module)		1000 m
Conductor Diameter		0.92 mm
Conductor Resistance		320 Ω/km per conductor
Insulation Resistance (between cores)		1000 MΩ, 500 V
Insulation Resistance (cores to outer)		1000 MΩ, 2 kV
Minimum Bend Radius		150 mm
Minimum Working Temperature		-40 °C
Relative Humidity		≤ 98 % non-condensing
Environmental Protection	**Cable**	IP66
	System	Depends on termination

Typical Connections in a Pertronic Australia F220 Fire Alarm System



Above: Typical connections for a Pertronic-Anbesec linear heat detector in a Pertronic F220 fire alarm system. A short-circuit anywhere on the LHD or interconnecting cable will be reported by the M500M module as alarm signal. An open circuit will be reported to the fire panel as a fault. The interconnecting cable should be as short as practicable.
Provide extra LHD cable at the EOL terminal block to allow for testing, according to requirements of relevant authorities.

LHD Cable Specification

Manufacturer’s Code	**Standard Catenary**	NMS1001-68C NMS1001-68C-G	NMS1001-88C NMS1001-88C-G
Outer Jacket Colour		Blue	Red
Alarm Temperature		68 °C	88 °C
Storage Temperature		Up to 45 °C	Up to 45 °C
Working Temperature		-40 °C to 45 °C	-40 °C to 60 °C
Capacitance (25 °C)		65 pF/m	65 pF/m
Inductance (25 °C)		7.6 µH/m	7.6 µH/m

Ordering Information

Product Code	Description
LHDSIC-68C-200	Linear Heat Detection Standard Indoor PVC Sheath Cable, NMS1001-68C, in 200m drums
LHDSIC-88C-200	Linear Heat Detection Standard Indoor PVC Sheath Cable, NMS1001-88C, in 200m drums
LHDCATIC-68C-200	Linear Heat Detection Catenary Indoor PVC Sheath Cable, NMS1001-68C-G, in 200m drums
LHDCATIC-88C-200	Linear Heat Detection Catenary Indoor PVC Sheath Cable, NMS1001-88C-G, in 200m drums
LHDCATIC-68C-400	Linear Heat Detection Catenary Indoor PVC Sheath Cable, NMS1001-68C-G, in 400m drums
LHDCATIC-88C-400	Linear Heat Detection Catenary Indoor PVC Sheath Cable, NMS1001-88C-G, in 400m drums
LHDSIC-68C-500	Linear Heat Detection Standard Indoor PVC Sheath Cable, NMS1001-68C, in 500m drums
LHDSIC-88C-500	Linear Heat Detection Standard Indoor PVC Sheath Cable, NMS1001-88C, in 500m drums

NOTES:

1. Operating current is limited by the fire panel or input/output control module.
2. Anbesec Linear Heat Detection (LHD) Cable is not ActivFire listed. However, it is UL listed under UL 521
3. This information does not apply to NZS 4512 versions of Pertronic fire alarm systems. For information about using LHD cable in NZS 4512 systems, please refer to the Pertronic New Zealand website, https://pertronic.co.nz