LINEAR HEAT DETECTORS
Product Catalogue
Digital Type Linear Heat Detectors MS1000 Series And MS1001

MS1000 Series

Unlike other types of linear heat detectors, the MSL000 Digital Linear Heat Detector provides a very-early alarm detecting function for the protected environment. The detector is also known as an intelligent “switch” type detector. The polymers between the two conductors will break down at a specific fixed temperature allowing the conductors to make contact creating a short circuit, which in turn initiates the alarm. The detector has a continuous sensitivity which means that changes in environmental temperature won’t influence the linear heat detector. The system does not need to be adjusted or compensated for the length of detection cable in use. The detector can transfer both alarm and fault signals to control panels normally with or without DC24V.

Digital Type Linear Heat Detectors MS1000 Series & MS1001

1. Classification

<table>
<thead>
<tr>
<th>POS.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Type</td>
<td>This type of Linear heat detection cable is the most widely used and is the most reliable.</td>
</tr>
<tr>
<td>CR/OD Type</td>
<td>CR/OD Type is highly resistant to UV and weather, meaning that it would be best suited for outdoor use. This type of linear heat detection cable is also acid resistant, alkali resistant, and salt spray resistant making it perfect for all environmental conditions.</td>
</tr>
<tr>
<td>EP Type</td>
<td>Explosion Proof Type has two main environmental applications: Harsh EMI environments and explosion prone environments. The outer jacket of this type is protected by woven metal mesh which prevents EMI and eliminates surface static of the linear heat detection cable. This type of linear heat detection cable can be used in explosive hazardous environments with safety fences. An earth connection needs to be made for the woven metal mesh during installation. Should it be used in a harsh EMI environment, a single end earth connection or double end earth connection needs to be specified once analysis of interference sources is performed.</td>
</tr>
</tbody>
</table>
2. Structure

The Digital Type Linear Heat Detection Cable from P.T.S. has two intertwined rigid metallic conductors which are covered by NTC heat sensitive material, with an insulative bandage and outer jacket. There are a variety of different outer jackets to meet the requirements of specific environments being protected.

3. Features and benefits

- Industrial safety design
- Electrical interface with low power consumption design
- Real-time monitoring
- Working with DC24V supply or without DC24V supply
- Fast response time
- No alarm temperature compensation needed
- Compatible with any kind fire alarm system
- A wide range of alarm temperature levels: from 68°C to 180°C

4. Technical parameter

- Operating Voltage: DC 24V
- Allowed Voltage Range: 16VDC-28VDC
- Standby Current: ≤20mA
- Alarm Current: ≤30mA
- Fault Current: ≤25mA
- Maximum Relative Humidity for Long Term Use: 90%-98%
- IP Rating: IP66
Control Unit And EOL Box

**MS1000-I Control Unit**

Control Unit MS1000-I is used for MS1000, MS1000-CR/OD and MS1000-EP digital type Linear Heat Detection Cable. MS1000 is a digital type Linear Heat Detection Cable with a relatively simple output signal, the Control Unit and EOL box are easy to install and operate.

1. Technical parameters

   - Operating Voltage: 24VDC
   - Allowed Voltage Range: 16VDC-28VDC
   - Operating Current: Standby Current: ≤20mA
     Fire Current: ≤30mA
     Fault Current: ≤25mA
   - Operating Environment: Temperature: -45°C- +60°C
   - Relative humidity: 95%
   - IP Rating: IP66
   - Dimensions: 90mm x 85mm x 52mm (LxWxH)

2. Cable connecting instruction

   Connecting drawing of MS1000-I (Diagram 1)

   - Cl C2: with sensor cable, non-polarised connection
   - A,B: with DC24V power, non-polarised connection
   - EOL RESISTOR: EOL RESISTOR (conforming to input module)
   - COM NO: fire alarm output (resistance value in fire alarm<50Ω)
MS1000-P Terminal Unit (EOL Box)

EOL Box for MSLO00, MSLO00-CR/OD and MSLO00-EP digital Linear Heat Detection Cable.

1. Technical parameters

- Operating Voltage: No Electronics
- Operating Environment:
  Temperature: -45°C - +60°C
  Relative humidity: 95%
- IP Rating: IP66
- Dimensions: 90mmx85mmx52mm (LxWxH)

2. Cable connecting instruction

Connecting Drawing of MSLO00-P (Diagram 2)

- C1 C2: with sensor cable, non-polarised connection
- XT: connected with 4.7kΩ terminal resistance
MS1000-L Control Unit And Locator

Control Unit MS1000-L is used to monitor the temperature change of the sensor cable and is connected to the fire alarm control panel.

MS1000-L performs continuous monitoring over the fire alarm and open circuit of the monitored area, as well as a distance from the fire alarm position from fire alarm position. These alarm signals are shown on the LCD and indicators of MS1000-L.

Since fire alarm has locking function, MS1000-L must be disconnected to power and reset after ALARM. While fault function could automatically reset, it means that after the clearing fault, the fault signal of MS1000-L is automatically cleared.

1. Features

- Plastic shell: chemical resistance, aging resistance and impact resistance;
- IP rating: IP66
- The LCD displays information relating to the alarm.
- The detector has high resistance to interruption which allows it to be used in places with high EMI.

2. Technical parameters

- Detector Type: Linear heat detector MS 1000
- Operating Voltage: DC24V
- Allowed Voltage Range: 16VDC-28VDC
- Standby Current ≤60mA
- Alarm Current ≤80mA
- Alarming Reset: Disconnection reset
- Status Indication:
  - Stable power supply: Green indicator flashes (frequency at about 1Hz)
  - Normal operation: Green indicator constantly lights.
  - Fixed temperature fire alarm: Red indicator constantly lights
  - Fault: Yellow indicator constantly lights
- Operating Environment: Temperature: -10°C - 50°C
  Relative humidity ≤95%, no condensation
- Positioning Accuracy: 10m or no longer than 5% of full length (under 25°C environment)
- Application Length: No longer than 1,000m
- Outer Shell Protection Class: IP66
MS1001 Series

Dual Temperature Linear heat detection cable is a type with higher-performance of dual temperature alarms. It is called “Dual Temperature Alarm” due to the fact that it allows for a double-knock alarm temperature system to be implemented. Level I is pre-alarm (lower rated temperature), Level II is confirmed fire alarm (higher rated temperature).

Dual Temperature Linear heat detection cable is comprised of three steel conductors each individually insulated with a unique heat sensitive polymer. The insulated conductors are twisted together to impose a spring pressure between them, then wrapped with a protective tape and furnish with an outer jacket, as shown below:

The Detection Cable can initiate separate pre-alarm and confirmed alarm signals once each of its rated activation temperatures are reached. Once the rated temperature is reached, the heat sensitive polymer insulation yields to the pressure upon it, permitting the inner conductors to make contact with each other thereby initiating the appropriate pre-alarm or alarm signal. This action takes place at the first heated point anywhere along the Detector’s length. It does not require that a specific length be heated in order to initiate an alarm nor is system calibration necessary to compensate for changes in the installed ambient temperature. Compensating adjustments are not required.
### Dual Temperature Linear Heat Detection Cable

1. Model No. description

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>ALARM TEMPERATURE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS1001-68°C/88°C</td>
<td>68°C/88°C</td>
<td>Conventional Type</td>
</tr>
<tr>
<td>MS1001-88°C/105°C</td>
<td>88°C/105°C</td>
<td></td>
</tr>
<tr>
<td>MS1001-105°C/138°C</td>
<td>105°C/138°C</td>
<td></td>
</tr>
<tr>
<td>MS1001-68°C/88°C-CR/OD</td>
<td>68°C/88°C</td>
<td>CR/OD Chemical Resistance and Outdoor use Type</td>
</tr>
<tr>
<td>MS1001-88°C/105°C-CR/OD</td>
<td>88°C/105°C</td>
<td></td>
</tr>
<tr>
<td>MS1001-105°C/138°C-CR/OD</td>
<td>105°C/138°C</td>
<td></td>
</tr>
<tr>
<td>MS1001-68°C/88°C-EP</td>
<td>68°C/88°C</td>
<td>Explosion Proof Type</td>
</tr>
<tr>
<td>MS1001-88°C/105°C-EP</td>
<td>88°C/105°C</td>
<td></td>
</tr>
<tr>
<td>MS1001-105°C/138°C-EP</td>
<td>105°C/138°C</td>
<td></td>
</tr>
</tbody>
</table>
2. Features

- Dual temperature alarm, Level I is pre-alarm, Level II is fire alarm;
- Confirmed temperature initiation for sprinkler release and extinguishing system;
- Lower false alarm rate than single alarm temperature detector;
- Withstands a wide range of environmental conditions;
- Compatible with other initiation devices on the same circuit;
- Easy to install and maintain.

3. Instruction about the advantages of Dual Temperature Linear Heat Detector MS1001

Both analog and digital linear heat detection can trigger a false alarm, even if the heat rating isn’t reached, which may cause issues with the installed system. After extensive research the following results were found:

- Linear Heat Detector may trigger a false alarm due to the cores making contact because of external pinching of the cable.
- Linear Heat Detector may trigger a false alarm due to rodents’ gnawing, which could lead to the cores making contact.
- Unnecessary mechanical stress applied to the wire during installation may trigger a “false alarms” later on.

Dual Temperature Linear Heat Detector is theoretically designed to avoid false alarm or reduce the false alarm rate. As instructed above, MS1001 has two alarm levels: Level I pre-alarm (lower rated temperature) and Level II fire alarm (higher rated temperature), in normal fire alarm signaling procedure, the pre-alarm comes first, then the fire alarm initiates consequentially, the time interval between two alarms can be nearly “0”. It is considered a false alarm in the following situations:

- Level II (higher rated temperature) alarms first;
- Level II fails to alarm long time after Level I (lower rated temperature).

Thus, the detector can both reduce the false alarm rate and initiate pre-alarm and alarm signal. Moreover, Dual Temperature Linear Heat Detector can be connected directly to the Fire Control System which allows it to initiate the extinguishing system, however, the single alarm detector cannot theoretically, which can only confirm the firm alarm artificially or through auxiliary means.

4. Matters needing attention

Dual Temperature Linear Heat Detector is a line coverage and heat sensitive detector. The Detector must be installed in continuous runs without taps or branches, at the ceiling level or on the side walls to protect areas within buildings (area protection). Please refer to other details about installation and applications of the Detector.
Analog Type Linear Heat Detector
MS2000 Series

Linear Heat Detection Cable

Analog Linear Heat Detector MS2000 is a kind of four-core high-performance analog type linear heat detector, with high adaptability and high performance to price ratio, which could be widely applied in places of industry, commerce and high temperature rated areas.

1. Structure and principle of the linear heat detection cable:

MS2000 Linear Heat Detection Cable is a flexible cable, containing four intertwined red and white stranded conductors. The outert jacket is made of high temperature resistant PVC which helps to reinforce the durability and reliability of the cable. If necessary, chemical resistance material and flame resistance outdoor material could be selected for the jacket to meet the requirements of different environmental occasions. The schematic diagram of the structure of MS2000 Linear heat detection cable is shown as follows:

MS2000 Linear heat detection cable has high resistance and the insulating layers of its four core conductors are made of a kind of special NTC (negative temperature coefficient) material and its electrical control unit could reflect the fluctuation of system temperature by monitoring the fluctuation of material resistance.

While wiring, the two red wires and two white wires are respectively connected to MS2000 linear detector Control Unit and are strand-connected at the terminal, to form a detecting loop.

The system detects the resistance fluctuation of Linear Heat Detection Cable resulted from the fluctuation of circuit temperature i.e. when temperature rises, resistance drops. This fluctuation is monitored to form Control Unit of the Linear Heat Detection Cable. When it reaches the preset alarm threshold value, output alarming signal. This feature allows the system to have the ability to detect fire in point or in line of whole circuit, meaning the system could detect the temperature fluctuation in certain points, as well as, certain areas. After initiating the alarm, it can automatically be restored to working condition.

Because the signal of Linear Heat Detection Cable is an analog signal, the application length is regulated to 200m which prevents the signal from being distorted. For application issues, see detailed introduction in following part of the article.
2. Features

- Highly versatile: it could be applied in narrow areas, or harsh and hazardous environments;
- Great compatibility: MS2000-I Linear Detector Control Unit has relay output, which could be connected to various fire alarm control panel;
- Chemical resistant and abrasion resistant: the outer jackets are made from tough material allowing it to meet different needs;
- Restorability: the linear heat detection cable could automatically reset after alarming (during instances where temperature hasn’t damaged the linear heat detection cable), saving much cost for maintenance and operation;
- Multiple monitoring functions: except for normal confirmed fire alarm, fault of open circuit or short circuit;
- Interruption resistance: four-core stranded structure has strong ability to resist electromagnetic field interruption;
- Easy installation and simple maintenance.

3. Technical parameters

<table>
<thead>
<tr>
<th>NO.</th>
<th>MS2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer jacket configuration</td>
<td>PVC</td>
</tr>
<tr>
<td></td>
<td>High temperature resistance PVC</td>
</tr>
<tr>
<td>Standard length</td>
<td>200m</td>
</tr>
<tr>
<td>Outside diameter of cable</td>
<td>3.5mm</td>
</tr>
<tr>
<td>Extendable</td>
<td>100N</td>
</tr>
<tr>
<td>Conductor material</td>
<td>Copper</td>
</tr>
<tr>
<td>Low temperature characteristics</td>
<td>-40°C</td>
</tr>
<tr>
<td>Ultimate temperature</td>
<td>190°C</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>70°C - 140°C</td>
</tr>
<tr>
<td>Voltage resistance</td>
<td>The voltage resistance between core conductor and outer jacket is 10kV</td>
</tr>
</tbody>
</table>
Control Unit

The Linear Heat Detector Control Unit is used for monitoring temperature fluctuation of linear heat detection cable and is connected to the fire alarm control panel.

MS2000-I performs continuous monitoring over fire alarm, open circuit/short circuit in monitored area. These alarming signals are shown on the LCD screen indicators of MS2000-I.

Since the fire alarm has a locking function, MS2000-I must be disconnected from power and reset after the alarm is triggered. The fault function is automatically reset after clearing the fault which, in turn clears the fault signal of MS2000-I.

MS2000-I requires DC 24V power supply. During installation, refer to the technical parameters and wire types.

1. Features

• Plastic shell: chemical resistance, aging resistance and impact resistance;
• IP rating: IP66
• The linear detector interface has a LCD screen which displays information relating to the alarm for user convenience.
• The fire alarm simulation and fault simulation could be performed through the linear detector interface. This allows for an easy and convenient systematical commissioning.
• The detector is resistant to interference from external devices in the area, which makes it perfect for areas with high EMI.

2. Technical parameters

• Detector Type: Linear heat detector
• Operating Voltage: DC24V
• Allowed Voltage Range: DC 20V-DC 28V
• Standby Current ≤60mA
• Alarm Current ≤80mA
• Alarming Reset: Disconnection reset
• Status Indication:
  - Stable power supply: green indicator flashes (frequency at about 1Hz)
  - Normal Operation: Green indicator constantly lights.
  - Fixed Temperature Fire Alarm: Red indicator constantly lights Fault: Yellow indicator constantly lights
• Operating Environment:
  - Temperature: - 10°C - +50°C
  - Relative Humidity ≤95%, no condensation
• Outer Shell Protection class: IP66
1. Wiring introduction

Among which:

DLI and DL2: connect to DC 24V power without polar connection.
1, 2, 3, and 4: connected to linear heat detection cable. Wiring method is as follows:

<table>
<thead>
<tr>
<th>TERMINAL LABEL</th>
<th>LINEAR HEAT DETECTION CABLE WIRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Red</td>
</tr>
<tr>
<td>2</td>
<td>Red</td>
</tr>
<tr>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>4</td>
<td>White</td>
</tr>
</tbody>
</table>

- COM1 NO1: pre-alarm/fault/normal compound output of terminal contacting point.
- EOL1: access point 1 of terminal resistance (matched with input module and corresponds with COM1 NO1).
- COM2 NO2: fire alarm/ fault/normal relay contact with multiple output.
- EOL2: access point of terminal resistance (matched with input module and corresponds to COM2NO2).

2. Wiring method for linear heat detection cable end

Two red wires at the end of linear heat detection cable are connected. Two white wires are coated with a water-proof seal once connected.
1. Magnetic Fixture

- **Product features**
  This fixture is easy to install. It is fixed with a strong magnet, which removes the needs for punching or welding a supporting structure when being installed.

- **Application scope**
  It’s widely used for the installation and fixation of cable line-type fire detectors onto steel material structures such as transformers, large oil tanks, cable bridges etc.

- **Working temperature range** -10°C- +50°C

2. Cable Tie

- **Product features**
  A cable tie is used to fix the linear heat detection cable to the power cable while the LHD is used to protect the power cable.

- **Applied scope**
  It’s widely used for the installation and fixation of cable line-type fire detectors in a cable tunnel, cable duct, cable bridge etc.

- **Working temperature**
  The cable tie consists of a nylon material, which is resistant to temperatures of -40°C-+85°C

**Installation and use**

Firstly, ensure the magnetic fixture is fitted securely to the protected object, and then screw off (or loosen) the two bolts on the upper cover of the fixture, see Fig. 1. Place the single cable line-type fire detector being installed in (or pass through) the groove of the magnetic fixture. And finally reset the upper cover of the fixture and securing it with the screws provided. The number of magnetic fixtures needed will depend on the individual requirements of the site being protected.
System Connection Diagram

[Diagram showing connections between FACP, PSU, Input module, MS1000-I, MS1000-L, MS2000-I, MS1000-P, and Resistor, with MS1000 Series Sensor Cable and M2000 Series Sensor Cable connections.]
# Appendix I: Typical Application Environments

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric power</td>
<td>Cable tunnel, Cable shaft, Cable sandwich, Cable tray</td>
</tr>
<tr>
<td></td>
<td>Conveyor belt transmission system</td>
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<tr>
<td></td>
<td>Transformer</td>
</tr>
<tr>
<td></td>
<td>Controller, Communication room, Battery pack room</td>
</tr>
<tr>
<td></td>
<td>Cooling tower</td>
</tr>
<tr>
<td>Petrochemical industry</td>
<td>Spherical tank, Floating roof tank, Vertical storage tank</td>
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<tr>
<td></td>
<td>Cable tray, Oil tanker</td>
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<tr>
<td></td>
<td>Offshore boring island</td>
</tr>
<tr>
<td>Metallurgical industry</td>
<td>Cable tunnel, cable shaft, Cable sandwich, Cable tray</td>
</tr>
<tr>
<td></td>
<td>Conveyor belt transmission system</td>
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<tr>
<td>Ship and ship building plant</td>
<td>Ship hull steel</td>
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<tr>
<td></td>
<td>Piple network</td>
</tr>
<tr>
<td></td>
<td>Control room</td>
</tr>
<tr>
<td>Chemical plant</td>
<td>Reaction vessel, Storage tank</td>
</tr>
<tr>
<td>Airport</td>
<td>Passenger channel, Hangar, Warehouse, Baggage carousel</td>
</tr>
<tr>
<td>Rail transit</td>
<td>Metro, Urban rail lines, Tunnel</td>
</tr>
</tbody>
</table>
## Appendix II Performance parameters of detecting temperatures

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MSI000 68</td>
</tr>
<tr>
<td></td>
<td>MSI000-CR/OD 68</td>
</tr>
<tr>
<td></td>
<td>MSI000-EP 68</td>
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<tr>
<td></td>
<td>MSI000 88</td>
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<td>MSI000-EP 105</td>
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<td>MSI000 138</td>
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<td>MSI000-CR/OD 180</td>
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<td>Levels</td>
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<td>88°C</td>
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<td>105°C</td>
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<td>138°C</td>
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<td>Storage Temperature</td>
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<td>UP TO 70°C</td>
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<td>UP TO 105°C</td>
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<td>Working Temperature (Min)</td>
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<td>-40°C</td>
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<td>Working Temperature (Max)</td>
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<td>UP TO 93°C</td>
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<td>UP TO 121°C</td>
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<td>Acceptable Deviations</td>
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<td></td>
<td>±5°C</td>
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<td></td>
<td>±8°C</td>
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<td>Responding time (s)</td>
<td>10 (Max)</td>
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<td>20 (Max)</td>
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<td>20 (Max)</td>
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### Appendix III Parameters of electrical & physical related performance

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material of core conductor</td>
<td>Steel</td>
</tr>
<tr>
<td>Diameter of core conductor</td>
<td>0.92mm</td>
</tr>
<tr>
<td>Resistance of cores conductor (Two-cores,25°C)</td>
<td>0.64±0.06Ω/m</td>
</tr>
<tr>
<td>Distributed capacitance (25°C)</td>
<td>65pF/m</td>
</tr>
<tr>
<td>Distributed inductance (25°C)</td>
<td>7.6μh/m</td>
</tr>
<tr>
<td>Insulation resistance of cores</td>
<td>1000MΩ/500V</td>
</tr>
<tr>
<td>Insulation between cores and outer jacket</td>
<td>1000Mohms/2KV</td>
</tr>
<tr>
<td>Electrical performance</td>
<td>1A,110VDC Max</td>
</tr>
</tbody>
</table>

**MSlO00** 68
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-CR/OD** 68
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-EP** 68
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00** 88
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-CR/OD** 88
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-EP** 88
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00** 105
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-CR/OD** 105
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-EP** 105
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00** 138
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-CR/OD** 138
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00-EP** 138
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max

**MSlO00** 180
- Material of core conductor: Steel
- Diameter of core conductor: 0.92mm
- Resistance of cores conductor (Two-cores,25°C): 0.64±0.06Ω/m
- Distributed capacitance (25°C): 65pF/m
- Distributed inductance (25°C): 7.6μh/m
- Insulation resistance of cores: 1000MΩ/500V
- Insulation between cores and outer jacket: 1000Mohms/2KV
- Electrical performance: 1A,110VDC Max
Linear Detection is associated with the Brigit Group of Companies with over 20 years experience within the Fire Protection Industry.