

LINEAR HEAT DETECTORS



ISO9001



ANBESEC





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ABOUT COMPANY

Anbesec Technology Co., Ltd. was founded in 2015. Since its establishment, the company has been dedicated to the provision of one-stop fire protection systems and the contracting of fire protection projects. As the company grows, we have assembled a group of experienced experts in the industry to provide customers with professional engineering solutions and high-quality fire products and equipment.

The company's product lines include: civil fire alarm system, industrial fire alarm system, Industrial fire extinguishing system and fire protection equipment. Beijing Anbesec Technology Co., Ltd. as a branch of Hong Kong Anbesec Technology Co., Ltd., After efforts in recent years, we have obtained support from the most powerful production base in the industry and have reduced the cost of products greatly.

At present, our products have been recognized by many customers from Russia, Southeast Asia, and Europe.

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I DIGITAL TYPE LINEAR HEAT DETECTORS NMS1001 SERIES AND MS1001

NMS1001 SERIES

Compared with other kinds of detectors, NMS1001 Digital Linear Heat Detector provides a very-early alarm detecting function to the protected environment, The detector can be known as an intelligent switch" type detector. The polymers between the two conductors will break down at specific fixed temperature allowing the conductors contact, the short circuit will initiate the alarm. The detector has a continuous sensitivity. The sensitivity of linear heat detector will not be influenced by the environment temperature changing and the length of detection cable using. It does not need to be adjusted and compensation. The detector can transfer both alarm and fault signals to control panels normally with DC24V or without DC24V.

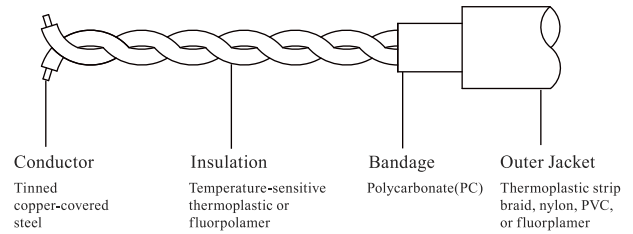
LINEAR HEAT DETECTION CABLE

1. Classification

Conventional Type	This type of Linear heat detection cable is the most widely indoor used with strong stability.
CR/OD Type	CR/OD Type not only has good UV resistance and good weather resistance, strongly recommended for outdoor using even under bad weather conditions, but also with high performance of acid resistant, alkali-resistant, salt spray resistant.
EP Type	Explosion Proof Type. Two main application environments: harsh EMI environment and explosive hazardous environment. The outer jacket of this type is protected by woven metal mesh with good performance of anti-EMI and eliminating the surface static of the Linear heat detection cable. We can use this type Linear heat detection cable in explosive hazardous environment with safety fence. During the installation, please make grounding connection of the woven metal mesh. Used in harsh EMI environment, single end grounding connection or double ends grounding connection should be specified after analysis of the interference sources.

2. Structure

Intertwisting two rigid metallic conductors which are covered by NTC heat sensitive material, with insulative bandage and outer jacket, here comes the Digital Type Linear Heat Detection Cable of P.T.S. And the different model numbers depend on the variety of materials of outer jacket to meet different special environments.

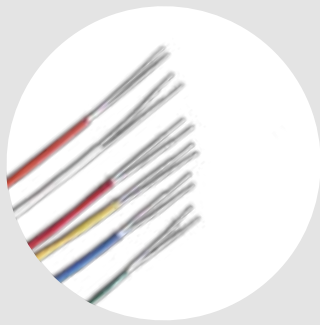


3. Features and benefits

- ◆ 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 to any kind fire alarm system
- ◆ Plenty levels of alarm temperatures: 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
- ◆ Alarm temperatures: 68°C, 88°C, 105°C, 138°C & 180°C



NMS1001-68°C



NMS1001-88°C



NMS1001-105°C



NMS1001-138°C



NMS1001-180°C



NMS1001-CR/OD 68°C 88°C 105°C 138°C 180°C



NMS1001-EP 68°C 88°C 105°C 138°C 180°C

CONTROL UNIT AND EOL BOX

NMS1001-I Control Unit

Control Unit NMS1001-I is used for NMS1001, NMS1001-CR/OD and NMS1001-EP digital type Linear Heat Detection Cable. NMS1001 is a digital type Linear Heat Detection Cable with comparatively 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: $\leq 20\text{mA}$
Fire Current: $\leq 30\text{mA}$
Fault Current: $\leq 25\text{mA}$
- ◆ Operating Environment: Temperature: $-45^{\circ}\text{C} - +60^{\circ}\text{C}$
Relative humidity: 95%
- ◆ IP Rating: IP66
- ◆ Dimensions: $90\text{mm} \times 85\text{mm} \times 52\text{mm}$ (L×W×H)



NMS1001-I

Cable connecting instruction

1) Connecting Drawing of NMS1001-I (Diagram 1)

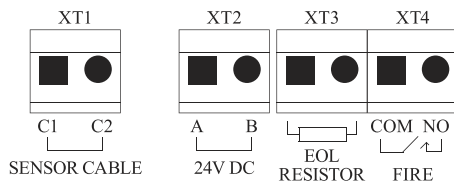


Diagram 1

- C1 C2: with sensor cable, non-polarized connection
- A,B: with DC24V power, non-polarized connection
- EOL RESISTOR: EOL RESISTOR (conforming to input module)
- COM NO: fire alarm output (resistance value in fire alarm $< 50\Omega$)

NMS1001-P Terminal Unit (EOL BOX)

EOL Box for NMS1001, NMS1001-CR/OD and NMS1001-EP digital Linear Heat Detection Cable.

1. Technical parameters

- ◆ Operating Voltage: No Electronics
- ◆ Operating Environment:
Temperature: $-45^{\circ}\text{C} - +60^{\circ}\text{C}$
Relative humidity: 95%
- ◆ IP Rating: IP66
- ◆ Dimensions: $90\text{mm} \times 85\text{mm} \times 52\text{mm}$ (L×W×H)



NMS1001-P

Cable connecting instruction

2) Connecting Drawing of NMS1001-P (Diagram 2)

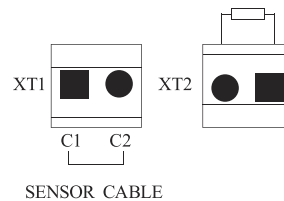


Diagram 2

- C1 C2: with sensor cable, non-polarized connection
- XT: connected with $4.7\text{k}\Omega$ terminal resistance

NMS1001-L Control Unit And Locator

Control Unit NMS1001-L is a controlling device to monitor the temperature change of sensor cable and connected to mainframe of intelligent fire alarming control panel.

NMS1001-L performs continuous monitoring over fire alarm and open circuit of monitored area as well as distance from fire alarm position. These alarming signals are shown on the LCD and indicators of NMS1001-L.

Since fire alarm has locking function, NMS1001-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 NMS1001-L is automatically cleared.

1. Features

- ◆ Plastic shell: chemical resistance, aging resistance and impact resistance;
- ◆ IP rating: IP66
- ◆ With LCD, Various alarming information could be shown
- ◆ The detector has high ability of interruption resistance adopting fine grounding measurement, isolation test and software interruption resistance technique. It is able to apply in places with high electromagnetic field interruption.

2. Technical parameters

- ◆ Detector Type: Linear heat detector NMS1001
- ◆ Operating Voltage: DC24V
- ◆ Allowed Voltage Range: 16VDC-28VDC
- ◆ Standby Current $\leq 60\text{mA}$
- ◆ Alarm Current $\leq 80\text{mA}$
- ◆ 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: $-10^{\circ}\text{C} - +50^{\circ}\text{C}$
Relative humidity $\leq 95\%$, 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



NMS1001-L
Control Unit

Cable connecting instruction

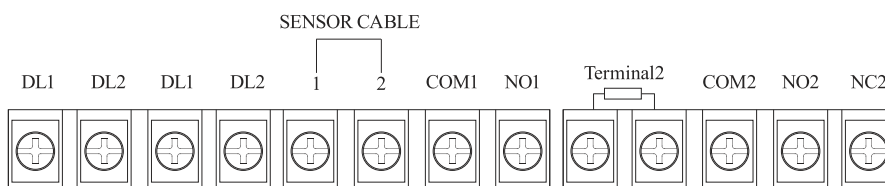


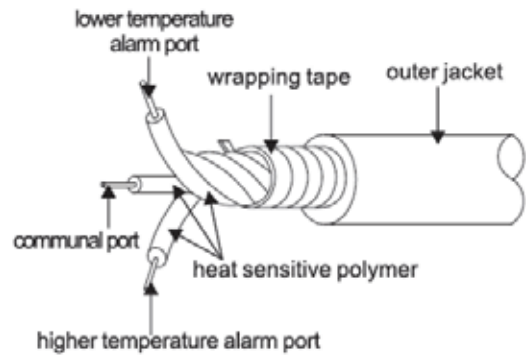
Diagram Wiring Introduction For Linear Detector Control Unit

MS1001 SERIES

Dual Temperature Linear heat detection cable is a type with higher-performance of dual temperature alarms. So called “Dual Temperature Alarm” means that the Detector has two alarm temperatures. 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 is capable of initiating separate pre-alarm and alarm signals once each of its rated activation temperatures is reached. At each of the rated temperatures, the heat sensitive polymer insulation yields to the pressure upon it, permitting the inner conductors to move into 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

Model No.	Alarm Temperature	Description
MS1001-68C/88C	68C/88C	Conventional Type
MS1001-88C/105C	88C/105C	
MS1001-105C/138C	105C/138C	
MS1001-68C/88C-CR/OD	68C/88C	CR/OD Chemical Resistance and Outdoor use Type
MS1001-88C/105C-CR/OD	88C/105C	
MS1001-105C/138C-CR/OD	105C/138C	
MS1001-68C/88C-EP	68C/88C	Explosion Proof Type
MS1001-88C/105C-EP	88C/105C	
MS1001-105C/138C-EP	105C/138C	

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

Linear Heat Detector, no matter digital type or analog type has false alarm rate due to improper use or other external factors, even the rate is extremely low, it may take our consumers in trouble in applications. We get the results shown as below after the research about causes of false alarm:

- ◆ Linear Heat Detector may cause false alarm due to unexpected connecting among the cores by external pinching.
- ◆ Linear Heat Detector may cause false alarm due to rodents' gnawing, which makes unexpected connecting among cores.
- ◆ Unnecessary mechanical stress applied to the wire during installation may cause "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".

We consider it as false alarm signal instead of fire alarm signal in the situation which is not in accordance with normal fire alarm procedure, as shown below:

- ◆ 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 has another feature of providing the consumer with convenience, the Detector can be connected to Fire Control System to initiate extinguishing systems directly, but the single alarm detector cannot theoretically, which only can confirm the fire alarm artificially or by auxiliary.

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.

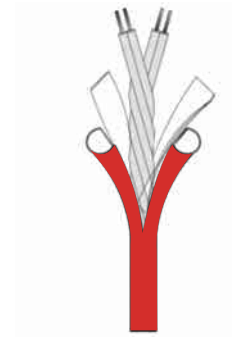
II ANALOG TYPE LINEAR HEAT DETECTOR NMS2001 SERIES

LINEAR HEAT DETECTION CABLE

Analog Linear Heat Detector -NMS2001 is a kind of four-core high-performance analog type linear heat detector, with high adaptability and high performance-price ratio, which could be widely applied in places of industry, commerce and superheat dangerous area.

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

NMS2001 Linear Heat Detection Cable is a kind of flexible cable, containing four strands red and white stranded conductors. Its out jacket is made of high temperature resistance PVC and can 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 satisfy the requirements on different environmental occasions. The schematic diagram of the structure of NMS2001 Linear heat detection cable is shown as follows:



NMS2001 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 NMS2001 linear detector Control Unit and are strand-connected at the terminal, which comes 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 through linear detector Control Unit of Linear Heat Detection Cable. When it reaches 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, which is that the system could detect the temperature fluctuation in certain point as well as certain area. After alarming, it could automatically restore to working condition.

Because the signal of Linear Heat Detection Cable is analog signal, the application length shall not be overlong. Normally we regulate that the length for one tape is 200 m. About the application issues, see detailed introduction in following part of the article.

2. Features

- ◆ High adaptability: it could be applied in narrow areas, harsh and hazardous environments;
- ◆ Great compatibility, NMS2001-I Linear Detector Control Unit has relay output, which could be connected to various fire alarm control panel mainframes;
- ◆ Chemical resistance and abrasion resistance: extrude and make jacket with high-strength, which could meet different needs;
- ◆ Restorability: the linear heat detection cable could automatically reset after alarming (under the situation of fire alarming temperature does not harm linear heat detection cable), saving much cost for maintenance and operation;
- ◆ Multiple monitoring functions: except for normal 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

No.	NMS2001
Outer jacket configuration	PVC High temperature resistance PVC
Standard length	200m
Outside diameter of cable:	3.5mm
Extendable	100N
Conductor material	Copper
Low temperature characteristics	-40 C
Ultimate temperature	190 C
Temperature Range	70C~140 C
Voltage resistance	The voltage resistance between core conductor and outer jacket is 10KV

CONTROL UNIT

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

NMS2001-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 NMS2001-I.

Since fire alarm has locking function, NMS2001-I must be disconnected to power and reset after alarming. While the fault function could automatically reset, it means that after clearing fault, fault signal of NMS2001-I is automatically cleared.

NMS2001-I requires DC 24V power supply. While installation, please watch refer to the power capacity and wire types.

1. Features

- ◆ Plastic shell: chemical resistance, aging resistance and impact resistance;
- ◆ IP rating: IP66
- ◆ Linear detector interface has liquid crystal display which could show various alarming information on LCD for the convenience of user's operation.
- ◆ Fire alarm simulation and fault simulation could be performed through linear detector interface. Systematical commissioning is east and convenient.
- ◆ The detector has high ability of interruption resistance adopting fine grounding measurement, isolation test and software interruption resistance technique. It is able to apply in places with high electromagnetic field interruption.

2. Technical parameters

- ◆ Detector Type: Linear heat detector
- ◆ Operating Voltage: DC24V
- ◆ Allowed Voltage Range: DC 20V-DC 28V
- ◆ Standby Current $\leq 60\text{mA}$
- ◆ Alarm Current $\leq 80\text{mA}$
- ◆ 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: $-10^{\circ}\text{C} - +50^{\circ}\text{C}$
Relative Humidity $\leq 95\%$, no condensation
- ◆ Outer Shell Protection class: IP66

(1) Wiring introduction

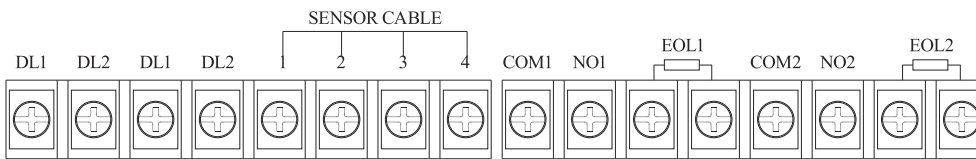


Diagram Wiring Introduction For Linear Detector Control Unit

Among which:

DL1 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:

Terminal label	Linear heat detection cable wiring
1	Red
2	Red
3	White
4	White

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 multiple output

EOL2: access point of terminal resistance (matched with input module and corresponds to COM2 NO2)



NMS2001-I
Control Unit

(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 processed for water-proof seal after connected.

III ACCESSORIES FOR LINEAR HEAT DETECTORS

1. Magnetic Fixture

- ◆ Product features
This fixture is easy to install. It's fixed with strong magnet, with no need of punching or welding supporting structure when being installed
- ◆ Application scope
It's widely used for the installation and fixation of cable line-type fire detectors of steel material structures like transformer, large oil tank, cable bridge etc
- ◆ Working temperature range -10C- +50C

Installation and use

Firstly, absorb the magnetic fixtures successively on the protected object, and then screw off (or loosen) the two bolts on the upper cover of the fixture, see Fig. 1. Then set the single cable line-type fire detector needing to be fixed and installed in (or pass through) the groove of the magnetic fixture. And finally reset the upper cover of the fixture and screw it up. The number of magnetic fixtures is up to the site situation.



2. Cable Tie

- ◆ Product features
Cable tie is used to fix linear heat detection cable on power cable when 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 of cable tunnel, cable duct, cable bridge etc
- ◆ Working temperature
The cable tie is of nylon material, which can be used under -40C- +85C

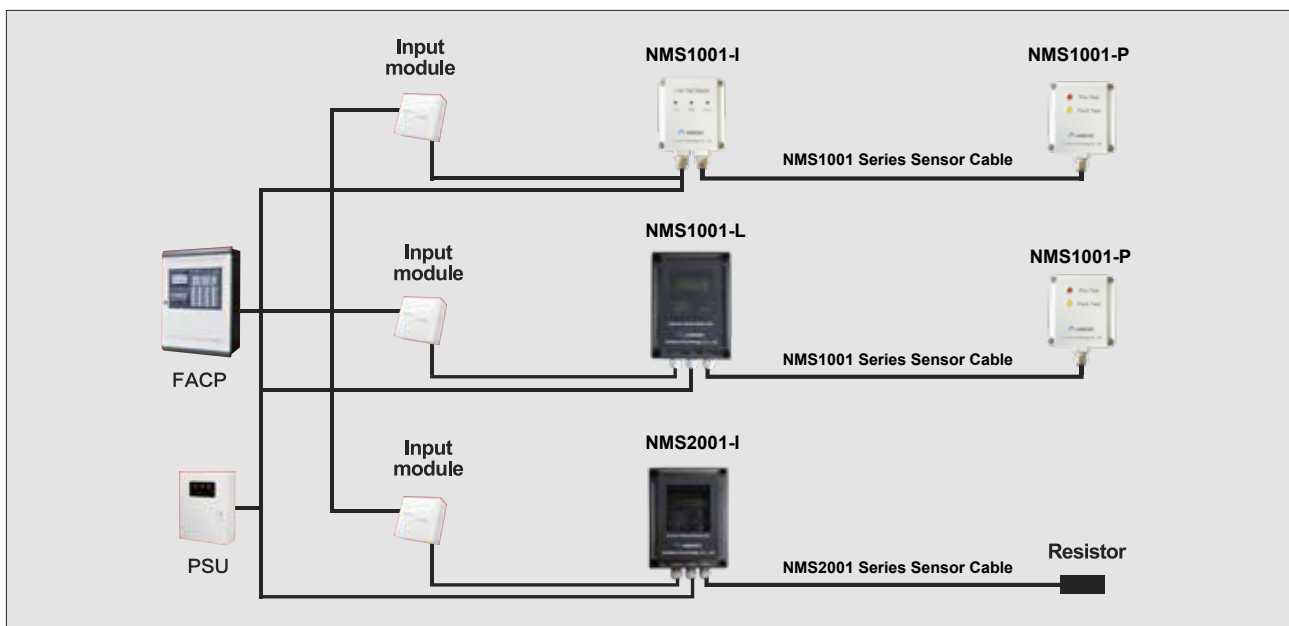


3. Intermediate Connecting Terminal

Intermediate connecting terminal is mainly used as intermediate wiring of temperature sensing cable and signal cable. It's applied when the temperature sensing cable needs intermediate connection for the sake of length. The intermediate connecting terminal is 2P.



System Connection Diagram



IV APPENDIX

Appendix I Typical Application Environments

Industry	Application
Electric power	Cable tunnel,Cable shaft, Cable sandwich, Cable tray
	Conveyor belt transmission system
	Transformer
	Controller,Communication room , Battery pack room
	Cooling tower
Petrochemical industry	Spherical tank , Floating roof tank,Vertical storage tank
	Cable tray, Oil tanker
	Offshore boring island
Metallurgical industry	Cable tunnel,cable shaft, Cable sandwich, Cable tray
	Conveyor belt transmission system
Ship and ship building plant	Ship hull steel
	Piple network
	Control room
Chemical plant	Reaction vessel , Storge tank
Airport	Passenger channel, Hangar, Warehouse,Baggage carousel
Rail transit	Metro, Urban rail lines , Tunnel

Appendix II Performance parameters of detecting temperatures

Model	NMS1001 68 NMS1001-CR/OD 68 NMS1001-EP 68	NMS1001 88 NMS1001-CR/OD 88 NMS1001-EP 88	NMS1001 105 NMS1001-CR/OD 105 NMS1001-EP 105	NMS1001 138 NMS1001-CR/OD 138 NMS1001-EP 138	NMS1001 180 NMS1001-CR/OD 180 NMS1001-EP 180
Levels	Ordinary	Intermediate	Intermediate	High	Extra High
Alarming Temperature	68C	88C	105C	138C	180C
Storage Temperature	UP TO 45C	UP TO 45C	UP TO 70C	UP TO 70C	UP TO 105
Working Temperature(Min)	-40C	-40C	-40C	-40C	-40C
Working Temperature(Max)	UP TO 45C	UP TO 60C	UP TO 75C	UP TO 93C	UP TO 121C
Acceptable Deviations	±3C	±5C	±5C	±5C	±8C
Responding time (s)	10(Max)	10(Max)	15(Max)	20(Max)	20(Max)

Appendix III Parameters of electrical & physical related performance

Model	NMS1001 68 NMS1001-CR/OD 68 NMS1001-EP 68	NMS1001 88 NMS1001-CR/OD 88 NMS1001-EP 88	NMS1001 105 NMS1001-CR/OD 105 NMS1001-EP 105	NMS1001 138 NMS1001-CR/OD 138 NMS1001-EP 138	NMS1001 180 NMS1001-CR/OD 180 NMS1001-EP 180
Material of core conductor	Steel	Steel	Steel	Steel	Steel
Diameter of core conductor	0.92mm	0.92mm	0.92mm	0.92mm	0.92mm
Resistance of cores conductor (Two-cores,25C)	0.64±0.06Ω/m	0.64±0.06Ω/m	0.64±0.06Ω/m	0.64±0.06Ω/m	0.64±0.06Ω/m
Distributed capacitance (25C)	65pF/m	65pF/m	85pF/m	85pF/m	85pF/m
Distributed inductance (25C)	7.6μh/m	7.6μh/m	7.6μh/m	7.6μh/m	7.6μh/m
Insulation resistance of cores	1000MΩ/500V	1000MΩ/500V	1000MΩ/500V	1000MΩ/500V	1000MΩ/500V
Insulation between cores and outer jacket	1000Mohms/2KV	1000Mohms/2KV	1000Mohms/2KV	1000Mohms/2KV	1000Mohms/2KV
Electrical performance	1A,110VDC Max	1A,110VDC Max	1A,110VDC Max	1A,110VDC Max	1A,110VDC Max

Appendix IV NMS1001-CR/OD-Parameters of chemical resistance

No influence to the outer jacket of NMS1001-CR/OD

	Chemical	Formula	Concentration	Max.Temp(°C)
Acids				
1	Acetic	C ₂ H ₄ O ₂	100%	140
2	Acrylic	C ₃ H ₄ O ₂	100%	100
3	Chromic	H ₂ CrO ₄	30%	100
4	Butyl Acrylate	C ₇ H ₁₀ O ₂	100%	50
5	Chloroacetic	CH ₂ ClCOOH	50%	100
6	Hydrochloric	HCl	37%	150
7	Hydrofluoric	HF	50%	150
8	Methanesulfonic	CH ₃ SO ₃ H	50%	66
9	Propionic	C ₃ H ₆ O ₂	100%	50
10	Butyric	C ₄ H ₈ O ₂	100%	50
11	Nitric	HNO ₃	65%	66
12	Sulphuric	H ₂ SO ₄	98%	23
13	Phosphoric	H ₃ PO ₄	85%	150
Bases				
1	Ammonia Solution	NH ₃ •H ₂ O	30%	140
2	Hydrogen Peroxide	H ₂ O ₂	60%	30
3	Lithium Hydroxide	LiOH	100%	100
4	Potassium Hydroxide	KOH	50%	121
5	Sodium Hydroxide	NaOH	50%	132
6	Sodium Carbonate	Na ₂ CO ₃	53.2%	140
7	Potassium Carbonate	K ₂ CO ₃	53.2%	100
8	Sodium Hypochlorite	NaClO	5%	121
Hydrocarbons				
1	Benzene	C ₆ H ₆	100%	66
2	Methylbenzene	C ₇ H ₈	100%	20
3	Dimethylbenzene	C ₈ H ₁₀	100%	50
4	N-hexane	C ₆ H ₁₄	100%	150
Alcohols				
1	Methanol	CH ₃ OH	100%	50
2	Ethanol	C ₂ H ₅ OH	100%	140
3	Propanol	C ₃ H ₇ OH	100%	50
4	Butanol	C ₄ H ₉ OH	100%	121
Ethers				
1	Ether	C ₄ H ₁₀ O	100%	50
2	Phenyl Methyl Ether	C ₇ H ₈ O	100%	50
Automotive Fluids				
1	Crude Oil		100%	150
2	Gear Oil		100%	150
3	Gasoline		100%	150
4	Diesel Fuels		100%	150
5	Mineral Oil		100%	150
Others				
1	Acetone	C ₃ H ₆ O	100%	140
2	Phenyl Methyl Ketone	C ₈ H ₈ O	100%	75
3	Cresol	C ₇ H ₈ O	100%	100
4	Dichlorobenzene	C ₆ H ₄ Cl ₂	100%	50
5	Dichloroethylene	C ₂ H ₂ Cl ₂	100%	50
6	Methanal Solution	CH ₂ O	37%	80
7	Ethyl Ethanoate	C ₄ H ₈ O ₂	100%	50
8	Tetrahydrofuran	C ₄ H ₈ O	100%	50
9	Dimethyl Formamide	C ₃ H ₇ NO	100%	50
10	Dimethyl sulphoxide (DMSO)	C ₂ H ₆ OS	100%	100
11	Aniline	C ₆ H ₇ N	100%	100