



FLAMEPROOF INSTRUMENTS



nippon's FLAMEPROOF INSTRUMENTS

DIGITAL TEMPERATURE INDICATORS IN MINATURE FLAMEPROOF HOUSING

Nippon 1010F is LITTLE but versatile 3 1/2 digit digital temperature indicator in flameproof housing. The instrument is suitable for hazardous area of class IIA and IIB as per IS2148/1981.

Nippon 1010F is having wide application in Chemical, Petrochemical, Pharmaceuticals, Fertilizer and Oil Plants were accurate temperature indication is required in highly inflammable atmosphere.





Very SMALL, but STRONGEST in Temperature BATTLE

- Highly accurate and reliable
- Glass Epoxy single board design
- R.T.D.'s 4 to 20mA, 0-1 VDC and thermocouple inputs
- Attractive and little housing.

Specifications

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Enclosure Certification	Enclosure is certified by C.M.R.S., Dhanbad.				
Gas Group	IIA & IIB as per IS 2148/1981.				
Degree Protection	IP 55 as per IS 2147/1962.				
Material of Construction	Die cast AL - alloy LM6.				
Cable Entries	Maximum 2 Nos., 3/4" ET Standard and 1/2" B.S.P./N.P.T. Optional.				
Display Window	Made from toughened type 'A' clear glass as per IS 2206.				
Mounting	Wall/Structure, 2 holes.				
Dimension	200(H) X 140(W) X 90(H) dimensions in mm.				
Weight	LM6-2kg.				
Finish	Light grey epoxy shad No. 631 as per IS-5.				
Rating	10 Amp, 500 Volts.				
Earthing	1 terminal outside				
Inputs	R.T.D.'s like Pt-100, Pt-50, 4-20 mA, 0-1 VDC & all types of thermocouples.				
Range, Accuracy Resolution	Refer Table - A				
Display	31/2 digits bright seven segment L.E.D's (ht 12.5 mm)				
Sensor Open	Display Indicates "1"				
Cold Junction Compensation	Automatic.				
Supply Voltage	Standard : 230 VAC ± 10%, 50 Hz, Optional : 110 VAC / 24 VDC.				

Model No.	Sensor	Ra	nge	Calibration Accuracy	Resolution °C/°F
nippon 1010AF	Pt-100	-100.0 to 199.9 °C	-148.0 to 199.9 °F	0.25%	0.1
nippon 1010F	Pt-100	-100 to 600 °C	-148 to 1112 °F	0.25%	1
nippon 1010F	Iron/Constantan (J)	-100 to 600 °C	-150 to 1112 °F	1%	1
nippon 1010F	Chromel/Alumel (K)	-80 to 1200 °C	-12 to 1999 °F	0.7%	1



nippon's 1016F



6-Point Indicator in FLP Housing

Nippon 1016F is 6 channel temperature indicator (6 different channels are connected to 1 instrument). 6-way heavy duty switch is provided for selection of channels.

Nippon 1016F is designed for $3\frac{1}{2}$ digit indicator. It has 7 cable entries. The dimensions are 360(H)x180(W)x150(D), mm.

Nippon 1016F offers excellent space and cost saving.

Note: Contact factory for 4 1/2 digit display.

nippon's 2020F



1-Set Point Indicator / Controller in FLP Housing

Nippon 2020F is 1-set point indicator/controller in FLP housing. Press to set push button and potentionmeter is used for setting the parameters. Heavy duty relay output is used for controls. The toughened glass window of 96Hx96W gives clear indication of process & relay status.

Nippon 2020F can be designed for heater and cooler logic as per the process need.

mppon's 2022F

2-Set Point Indicator / Controller in FLP Housing



Nippon 2022F is 2-set point indicator/controller in FLP housing. 2022F has 2 sets of press to set pushbuttons and potentiometers

Nippon 2022F can be designed for Heater / Heater, Heater / Alarm, or Alarm / Alarm logic. Other details same as Nippon 2020F and Nippon 1010F.

nippon's 1010F-1



Indicator with 1 inch display in FLP Housing

Nippon 1010F-1 is indicator with 1 inch (25mm) display in FLP housing. The large size display helps to monitor process from longer distance.

Other specifications same as Nippon 1010F.

mppon's UNIV1010F



Nippon introduces state of art, truly universal, powerful indicator with inhouse design. The UNIV1010F series is developed with state of art microcontroller. The robust hardware and software makes the indicator very useful in noisy industrial environment.

The UNIV1010F finds applications in measurement of process parameters like Temperature, Pressure, PH, Volume, Force, Torque, Rate, Speed, Voltage and Current Signals

nippon's PID2020F



PID instruments are housed in flameproof enclosures for hazardous applications.

PID2020F series of instruments finds application in Chemical, Petrochemical, Pharmaceutical, Fertilizer and oil plants. The PID2020F is widely used in hazardous area of class IIA, IIB and IIC as per IS2148/1981.

The enclosures are light weight made of LM-6 with toughened glass.



nippon's 1010-6F

6 - Channel Indicators



Nippon 1010-6F accepts 6 R.T.D. Inputs. Indicator displays six inputs

simultaneously. The display is 3-1/2 digit seven segment display, 12.5 mm height.

The product is modular and sturdy. The flameproof enclosure is IP55 as per IS2148/1981.

Nippon1010-6F is compact and cost effective design.

Note: Contact factory for 4 1/2 digit display.

nippon's 1012FP

Dual Indicator in Pipe Mounting Flp Housing



Nippon1012FP is dual channel indicator in pipe mounting flameproof enclosure.

The instrument can input two process variables. Nippon1012FP has two independent $3\frac{1}{2}$ digit indicators which displays the process variables.

The flameproof enclosure is pipe mounting with attachment for horizontal or vertical Pipes.

Enclosure is suitable for gas group I, IIA, IIB.

nippon's 1010LF



Loop Power Indicator

Nippon100L series is state of art Loop Power Indicators cum Controllers.

The series is designed with robust microcontroller. Nippon100L series is software linearised offering excellent accuracy on 4-1/2digit LCD. The range and decimal

Points are truly configurable.

mppon's AUTOMATION



Nippon provides total automation in FLP housing. The enclosure and size is selected as per the LOGIC.

NOTES

- For input like 0-20 mA. 4-20 mA.. etc. Calibration can be done as per the Specification.
- Contact factory for 4 1/2 digit indicators.

- Contact factory for 24 VDC Loop Power supply.
- 4-20 mA retransmission on request.
- The design and data is subject to change without notice.



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