

Yamatake-Honeywell

SPECIFICATION

A thermo-resistance input from Ni or Pt bulb is converted into a proportional current signal of 4 ~ 20 mA DC. An intrinsically safe model is also provided.

Specifications

Input: Ni bulb; Span of 10°C or greater. (3 wire system 10 ohms or less in resistance.)

Pt (100 Ω) bulb; Span of 25°C or greater. (3 wire system with 5 ohms or less in resistance.)

Output: 4 ~ 20 mA DC

Output impedance: 250 kΩ or greater.

External load: 0 ~ 600 ohms (0 ~ 12 V voltage drop)

Accuracy:

General type; ±0.25% FS

Intrinsic-safety type;

{ ±0.25% FS
(Ni-Span 10°C or greater.)
(Pt-Span 50°C or greater.)
±0.25°C
(Pt-Span 50°C or less.)

Common mode rejection: 120 dB

Power supply: DC 24V ^{+15%}/_{-10%} or

AC 100, 110/115, 120, 220/240V ±10%,
50/60Hz ±2Hz

Power consumption:

General type;

{ 4 VA (AC drive type)
2.4 W (DC drive type)

Intrinsic-safety type;

{ 5 VA (AC drive type)
3 W (DC drive type)

Ambient temperature limit: 0 ~ 50°C

Relative humidity limit: 10 ~ 90% RH

Finish: Dark beige

Installation: Surface or rear of instrument mounting

Net weight:

General type;

{ 1.7 kg (AC drive type)
1.5 kg (DC drive type)

Intrinsic-safety type;

{ 2.2 kg (AC drive type)
1.7 kg (DC drive type)

Option

Following option is available.

(1) *Intrinsic-safety use (Isolation barrier type)*

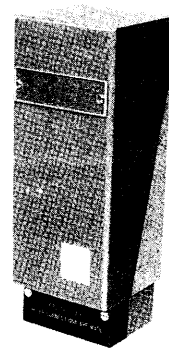
Rating; 250V AC

Intrinsic safety code; i3nG5

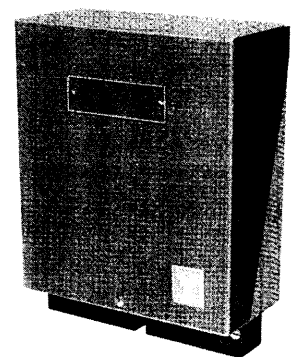
RESISTANCE TO CURRENT

(MV/I) CONVERTER

MODEL ; NAX101/ NTX101

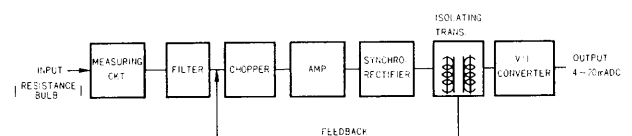


General Type



Intrinsic-Safety Type

Principle of Operation



An input signal is given to the measuring circuit and is converted into a millivoltage. The multisection filter removes any prevailing AC stray pick-ups and this filtered millivolt signal is compared with a feedback voltage. The resultant DC signal enters to a chopper inverter circuit where it is DC to AC converted and is fed to the amplifier. The amplified AC signal is synchro-rectified and goes through an isolating transformer where it is diverged into two; to the feedback and to the output circuits. The diverged signals are then rectified and filtered to provide, respectively a feedback signal and an input voltage signal to the V/I converter where a 4 ~ 20 mA DC signal is generated as the output signal.

The input and output of this device are completely isolated by isolating transformer.

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Process Control Division

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Model Number Table

► CURRENTRONIK Series (AC Drive)

Ex: NAX101-1

Basic Model No.	Selection		Description
	Mounting		
NAX101			MV/I Converter
	-1		Surface Mounting
	-2		Rear of Instrument Mounting

► NUTRONIK Series (DC Drive)

Ex: NTX101-0S-X

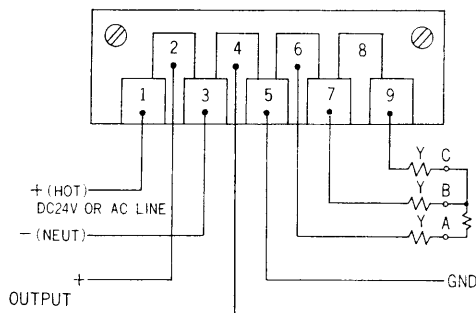
Basic Model No.	Selections		Option	Description
	Power Supply	Mounting		
NTX101				MV/I Converter
	-0			DC 24V
		S		Surface Mounting
			-X	No Option

► Intrinsic-Safety Type (DC or AC Drive)

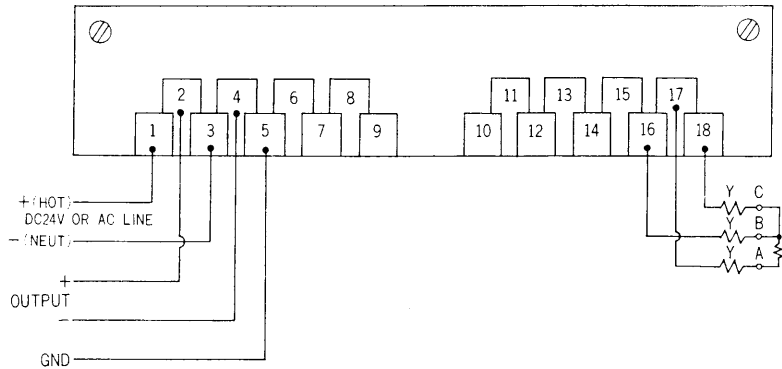
Ex: NAX101-0S-H

Basic Model No.	Selections			Description
	Power Supply	Mounting	Option	
NAX101				MV/I Converter
	-0			DC 24V
	-1			AC 220/240V, 50Hz
	-2			AC 220/240V, 60Hz
	-3			AC 100V, 50Hz
	-4			AC 100V, 60Hz
	-5			AC 110/115V, 50Hz
	-6			AC 110/115V, 60Hz
	-7			AC 120V, 50Hz
-8			AC 120V, 60Hz	
		S		Surface Mounting
			-H	Intrinsic-safety Use

Terminal Connections



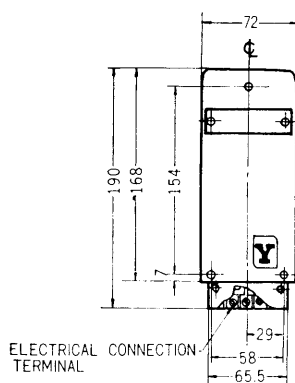
General Type



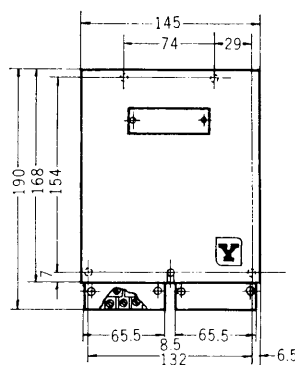
Intrinsic-Safety Type

Y, WIRE RESISTANCE
FOR Pt BULB: 5 OHMS OR LESS
FOR Ni BULB: 10 OHMS OR LESS

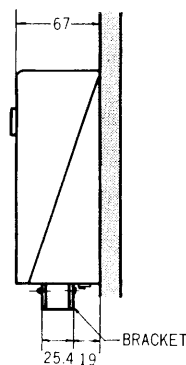
Dimensions



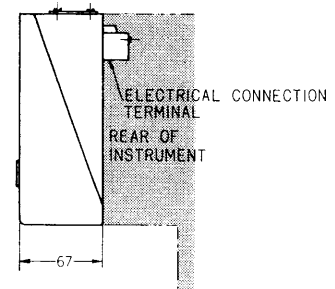
General Type



Intrinsic-Safety Type



Surface Mounting



Rear of Instrument Mounting

Ordering Information

When ordering, please specify:

- 1) Model No.
- 2) Scale range
- 3) Type of resistance bulb

- * Specifications are subject to change without notice.
- * Reference instruction manual . . . FET-1054 (NAX)
FET-2035 (NTX)