

HIGH SPEED BUFFER AMPLIFIER (FOR SERVO VALVES) TX-108



OVERVIEW

The ASHE TX series of Signal Conditioners, Isolators, Converters, Transducers and Transmitters comprise a wide range of high quality and reliable instruments for the conversion, amplification and isolation of analog and digital signals.

The instruments accept standard industrial process input signals such as DC/AC Voltage, DC/AC Current, 4 to 20 mA DC, RTD Pt-100 sensor, Thermocouple sensor, Frequency [Pulse], Resistance, Strain-gauge, etc. and provide a buffered and isolated output with enhanced load driving capacity. The instruments find wide usage in single loop or distributed process measurement and control applications.

The new Series TX-108 Buffer Amplifier / Isolating Transducers for Servo Valves offer bipolar voltage & current conversion with suitable amplification for valve driver applications. The Output signal is linear with respect to the Input signal and is galvanically and optically isolated to a potential level of 1.5 KV rms for one minute.

The instruments operate on 110 or 230 Volts AC mains power supply. Optional features include Signal repeating [multiple isolated outputs], higher load driving capability, digital indication facility, control relay outputs, two-wire operation with auxiliary power output, etc.

The instruments are available in compact industrial grade enclosures in DIN Rail / Wall-mounting execution, or optionally in IP65 protected field mount weather-proof enclosures, or in CIMFR certified explosion-proof enclosures. Absence of any moving parts provides these instruments inherent advantages like immunity to mechanical shocks, dust, ambient temperature, humidity and corrosive atmosphere.

SPECIFICATIONS

Model	ASHE TX-108.
Type	Buffer Amplifier / Isolating Transducer.
Principle	Optical Isolation and Signal Conditioning.
Input Signal	mV or Volts DC [Unipolar / Bipolar].
Output Signal	mA DC [Unipolar / Bipolar].
Load Driving Capacity	600 Ohms.
Linearity	0.1%.
Isolation	Between Input // Output // Power Supply.
Isolation type	Optical and Galvanic.
Isolation level	1.5 kV rms for one minute.
Output protection	Short / Open Circuit protection.
Calibration facility	Zero and Span settings [external].
Accuracy	0.1%.
Indication	Red LED for Power On.
Power Supply	110 V AC or 230 V AC, 50 hz.
Initial warm-up time	One minute.
Dimensions	75 x 55 x 110 mm. [H x W x D].
Execution	DIN-Rail / Rear panel mounting.
Enclosure	Industrial grade ABS.
Enclosure colour	Light Grey [RAL 7035]
Weight	Approximately 0.4 Kgs.
Operating Temperature	0 to 50 °C.

FEATURES

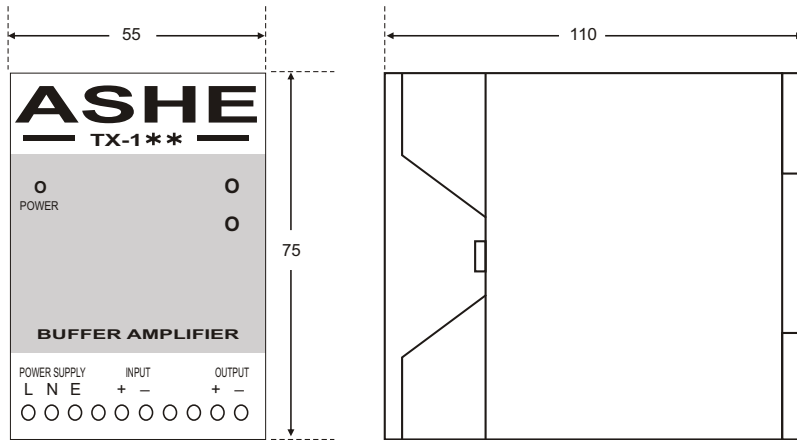
- Suitable for driving most servo valves.
- Optical & Galvanic Isolation between Input, Output & Power Supply.
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple [upto four] isolated outputs
- High load driving capacity of retransmitted signal
- Configurable output option of current / voltage
- Short-circuit / Open-circuit protection of outputs
- Front accessible Zero and Span calibration for all channels
- Digital Indication option with/without control relay outputs
- Auxiliary power for two-wire transmitters
- AC Power Supply operation
- Rugged, industrial grade ABS enclosure
- Panel / Field / Hazardous area installation in IP65 execution
- Current limiting for I/O protection
- Customized outputs offered
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship

HIGH SPEED BUFFER AMPLIFIER (FOR SERVO VALVES) TX-108



DIMENSIONAL DIAGRAM

Dimensions : 75 x 55 x 110 mm
Execution : DIN Rail mount.



HOW TO ORDER

HIGH SPEED BUFFER AMPLIFIER

TX-108

Input (pre-specified) : DC Voltage (Bipolar)
Output : mA DC (Bipolar)
Isolation : Optical and Galvanic.
Power Supply : 230 V AC, 50 Hz / 24 V DC.
Dimensions : 75 x 55 x 110 mm.
Execution : DIN rail mounted.

Configuration and Add-on options w 1 OPTICAL AND GALVANIC ISOLATION

- ▶ Required
- ▶ Not Required

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2 POWER SUPPLY

- ▶ 230 V AC ($\pm 10\%$), 50 Hz ($\pm 10\%$).
- ▶ 110 V AC ($\pm 10\%$), 50/60 Hz ($\pm 10\%$).
- ▶ Other (to be specified).

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3 EXECUTION

- ▶ DIN Rail mounting [75 x 55 x 110 mm]
- ▶ Field mounting in Weather-proof execution (Polycarbonate enclosure, IP65 protection)
- ▶ Field mounting in Flame/Explosion-proof execution (Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)

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4 RETRANSMISSION

- ▶ Retransmission of 0 to 10 V DC
- ▶ No Retransmission
- ▶ Other (to be specified)

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OUR OTHER PRODUCTS



PROCESS CONTROLLER

UNIVERSAL CONTROLLER

FLOW TOTALIZER

TEMP. SCANNER

SIGNAL ISOLATORS & TRANSDUCERS

SMPS POWER SUPPLIES



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