ASHE CONTROLS PVT LTD
an ISO 9001:2015 certified company

TX-242

TX-Series Variable Resistance Tap Position Transmission



RoHS Compliant

MAKE IN INDIA

Overview

The ASHE TX series of Signal Conditioners, Isolators, Transducers, Transmitters and Multipliers comprise a wide range of high quality and reliable instruments for the conversion, amplification, isolation and multiplication 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 etc. and provide buffered and isolated outputs with enhanced load driving capacity. Additionally, the TX-Series Transducers can optionally provide the input process signal on RS485 Modbus RTU. The instruments find wide usage in single loop or distributed process measurement and control applications.

The new Series TX-242 Resistance signal Isolating Multipliers measure the signal from a variable resistance and convert the signal into two or more isolated analog current loop signals of 4 to 20 mA DC [or as required]. The Output signals are linear with respect to the Input sensor signal and each output is galvanically and optically isolated to a potential level of 3 KV RMS for one minute. An RS485 signal can also be provided at the terminals for data communication.

The instruments operate on 90 to 270 Volts AC, 50/60 Hz universal power supply. Optional features include higher load driving capability, digital indication facility, control relay outputs, two-wire operation with auxiliary power output, data communication etc.

The instruments are available in compact industrial grade enclosures in DIN Rail / Wall-mounting execution, or optionally in IP66 protected field mount weather-proof enclosures, or in Ex-d 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.

This product is backed by a full two-year warranty, covering all manufacturing defects and workmanship issues under normal operating conditions.

Specifications

Model	ASHE TX-242.
Type	Resistance Isolating Multiplier for Tap Position Transmission
Principle	Optical Isolation and Signal Conditioning.
Input Sensor	Variable Resistance [potentiometric transformer] Taps.
Output Signals	Two isolated and buffered outputs of 4 to 20 mA DC. [or as required].
Load Driving Capacity	600 Ohms for each output.
Communication	RS485 on Modbus RTU communication (optional) (to be pre-specified)
Linearity	$\pm$ 0.1%.
Range	To be specified.
Isolation	Between Input // Outputs // Power Supply.
Isolation Type	Optical and Galvanic.
Isolation Level	3 kV RMS for one minute.
Output Protection	Short / Open Circuit protection.
Calibration Facility	Zero and Span settings [external] for each output.
Accuracy	$\pm$ 0.1%.
Indication	Red LED for Power On.
Power Supply	90 V AC to 270 V AC, 50/60 Hz Universal AC/DC Power Supply [Optionally 20 to 70 V DC].
Dimensions	100 x 22 x 110 mm. [H x W x D].
Execution	DIN-Rail / Rear panel mounting.
Enclosure	Industrial grade ABS.
Weight	Approximately 0.4 Kgs.
Operating Temperature	0 to 55^{0}C.

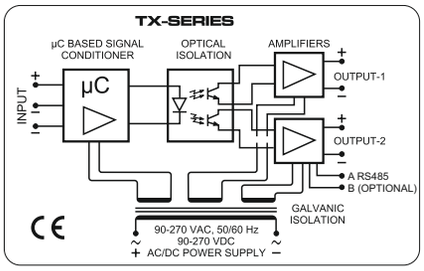
Features

- Optical & Galvanic Isolation between Input, Outputs & Power Supply
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple [upto four] isolated outputs (offered in other enclosure)
- High load driving capacity of retransmitted signal
- RS485 on Modbus RTU output option (to be pre-specified)
- 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
- Rugged, industrial grade ABS enclosure
- Panel / Field / Hazardous area installation in IP66 execution
- Current limiting for I/O protection
- Customized outputs offered
- Two-year Performance Warranty
- Proven track record of successful site installations

TX-242

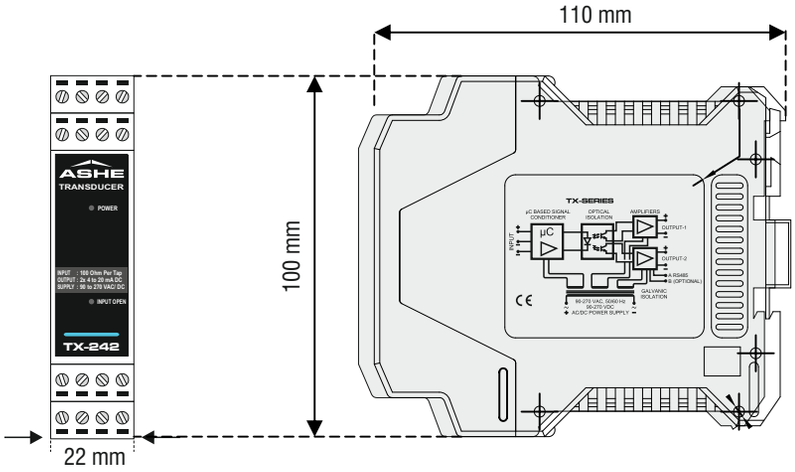
TX-Series Variable Resistance Tap Position Transmission

Block diagram



FRONT VIEW

Dimensional Diagram



SIDE VIEW

How To Order

	RESISTANCE SIGNAL REPEATER (dual channel)	**TX-242**			
	Configuration and add-on options				
1	**POWER SUPPLY**				
▸	AC Voltage 90 to 270 VAC, 50/60 Hz		A		
▸	DC Voltage 20 to 70 VDC		D		
2	**INPUT SIGNAL**				
▸	Resistance			E	
3	**OUTPUT SIGNAL**				
▸	DC Current				L
▸	DC Voltage				V

Our Other Products



FLOW TOTALIZER



SIGNAL ISOLATORS & TRANSDUCERS



TEMPERATURE SCANNER



FLAMEPROOF INSTRUMENTS



STATIC POWER SWITCHES

ASHE CONTROLS PVT LTD
an ISO 9001:2015 certified company

Designed and Manufactured by :
ASHE CONTROLS PRIVATE LIMITED
6/317, 318 & 319, Jogani Industrial Complex, Near ATI, Sion-Trombay Road, Chunabhatti (East), Mumbai - 400 022, India.
Phone : (022) 2405 1561, 2405 5791, 2405 5543 • E-mail : sales@ashecontrols.com • Website: http://www.ashecontrols.com