

# 2-Wire RTD Transmitter Type M-345

Low Cost

- 2 Wire head mounted transmitter
- 4-20 mA output
- Accuracy of 0.15% F.S
- Pt-100 linearization
- Adjustable zero and span
- Wide measuring ranges
- RFI immune
- 3 year warranty



The M-345 is a low cost two-wire loop powered transmitter of the third generation.

The transmitter converts the PT-100 signal into a standard 4-20mA current signal proportional and linear to the temperature. The linearization complies with the DIN-43760 and IEC-751 standards. By means of an electrical circuit the M-345 compensates the sensor lead lengths to avoid reading errors.

The M-345 can be ordered to a very wide measuring ranges pre-calibrated or not assembled to enable the user to choose any desired range. The transmitter ranges cover all PT-100 measuring range starting -200 °C up to 850 °C.

With two easily accessible multi-turn trim-pots (zero and span) located on the top of the transmitter it is very easy to perform a fine calibration and to perform the annual routine calibration.

The M-345 is designed to fit any standard DIN-B connection head.



# Technical Specifications

**Power supply:** 9-36 VDC polarity protected

**Power supply effect:** <0.005%/V

**Output:** 4-20mA

**Load:** max.  $R_{Load}(ohms) = (V_{Supply}-10)/0.020$

**Input:** RTD type PT-100 according to DIN-43760 or IEC-751

**RTD connection:** 3 wire system

**Transmitter span:** 50°C to +850°C

**Accuracy:** combined linearity, Hysteresis and repeatability:<0.15% F.S

**Sensor lead compensation:** up to 10  $\Omega$  each lead, must be symmetrical to all 3 leads

**Sensor current excitation:** 0.8mA

**Temperature stability:** <+/-0.03% of span/ °K

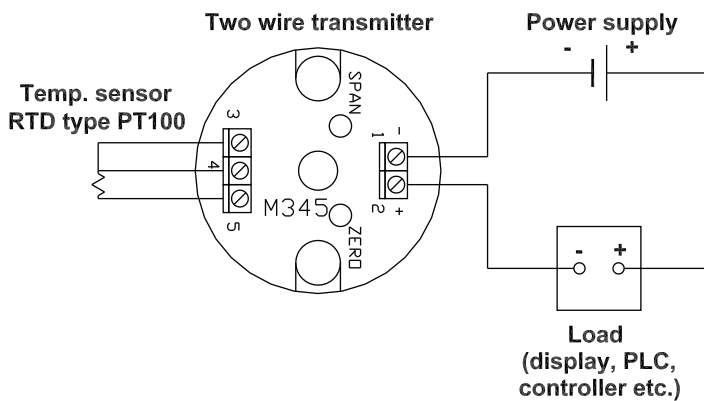
**Operating temperature:** -40 to 85 °C

**Storage temperature:** -45 to 85 °C

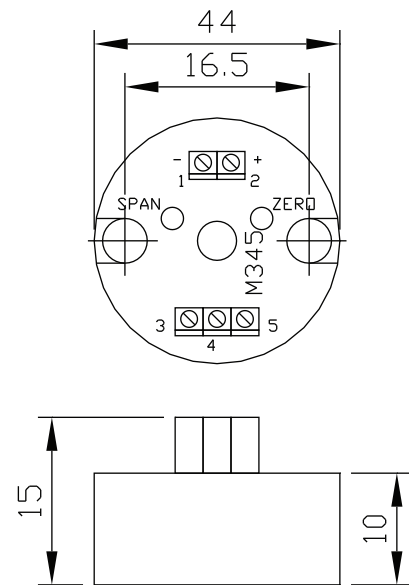
**Burn out:** upscale (max 30mA)

**Humidity:** 5-95% none condensing

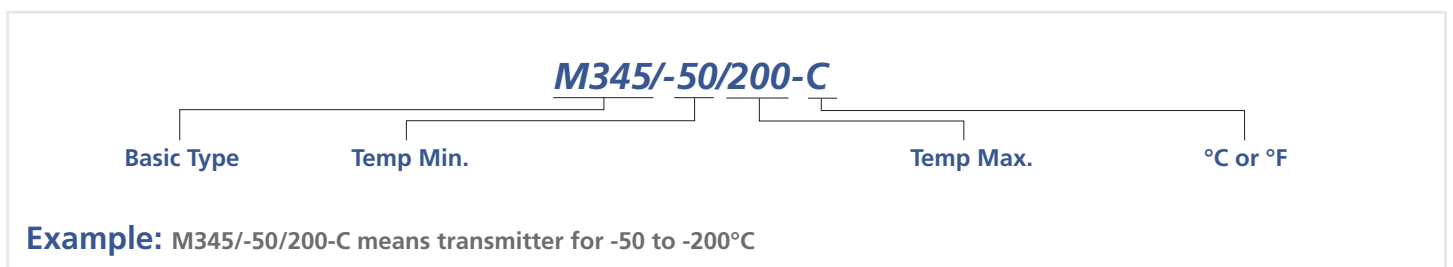
## CONNECTION DIAGRAM



## DIMENSIONS (mm)



## How to order:



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Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.

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