

Temperature Transmitter

SERIES: SEM104

- > 2-WIRE 4-20 mA OUTPUT
- > ADJUSTABLE ZERO AND SPAN
- > RTD OR THERMOCOUPLE INPUT
- > CHANGEABLE MEASURING RANGE



INTRODUCTION

ndumart *SEM104 Series* 2-Wire Temperature Transmitters provide accurate and reproducible conversion of RTD or thermocouple signals to 4-20 mA output.

One model is designed to accept RTD (Pt-100, 2 or 3 wire) input. The others accept types J, K and T thermocouple inputs and also provide automatic thermocouple cold junction compensation.

The transmitters will be supplied in standard factory calibrated ranges, but on board links allow the transmitter to be easily re-ranged to operate over most industrial and commercial applications. ZERO and SPAN potentiometers are provided to allow fine re-calibration at both ends of the scale.

The SEM104 Series are mounted on the standard 33 mm fixing centers of miniature RTD or thermocouple connection heads.

33 mm 42 mm

SPECIFICATIONS @ 20°C

SEM104P used for RTD

Accuracy ±0.2°C ± 0.2% of reading
Offset Adjustment Range dependent
Gain Adjustment 25 to 500°C

SEM104J, K or T

Linear to mV

Accuracy

Offset adjustment

Linear to mV

±0.1% FRO + Cold Junc. err.

±100°C; Solder links & potentiometer

Span Adjustment 100 to 1000°C Impedance >1M Ohm Upscale standard;

Downscale by link
Cold Junction Automatic 0 to 70°C

GENERAL

Output 4-20 mA loop powered, Max. 30 mA

Loop Supply
10 to 30 VDC
Loop Resistance
700

Ambient Temperature
Ambient RH
0 to 70

0 to 70

0 to 95

0 non-condensing
Case Size
42 mm dia. × 23 mm Height

