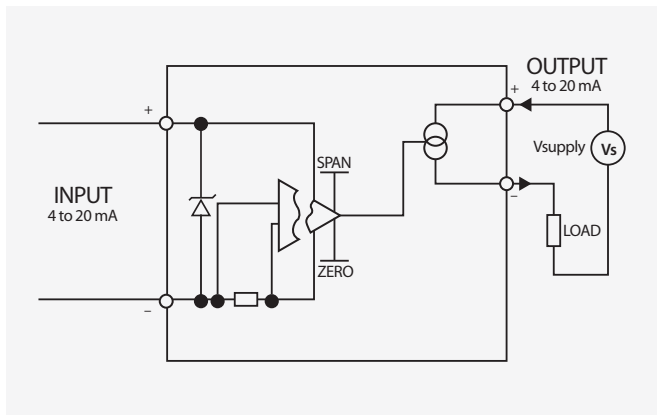


SEM1020 Process Signal Isolator

4 to 20mA Isolator / Loop Booster



The SEM1020 isolator is designed for use when power is available at both sides of the isolation barrier. This isolator requires no user adjustment during commissioning, apart from an initial test, to ensure it operates correctly over its full working range. Minor adjustments can be made to the calibration of the device by means of the two front panel accessible calibration potentiometers.

Specification

Input Type	Current input 2 wire loop powered
Range	4 to 20 mA (30 mA MAX)
Protection	Reverse connection
Voltage Drop	2.7 V Maximum
Max. Loop Volts	35 V
Output Type	2 Wire current sink 4 to 20 mA
Loop Voltage	5 to 32 V d.c. (reverse protected)
Loop Volt Drop = 2.7 V	Load = 900 Ω @ Vs=24 V Load = 1200 Ω @ Vs=30 V
	Loads must be > 250 Ω for ambients > 50 °C
Connection	Captive clamp screws
Cable Size	Maximum 4 mm ² solid / 2.5 mm ² stranded
Case Material	Grey Polyamide
Flammability	To UL94-VO VDE 0304 Part 3, Level IIIA
Dimensions	Case A: (60 x 60 x 12.5) mm (67.5 mm above rail)
Mounting	Snap on "Top Hat" rail (DIN EN 50022-35)
Adjustment	Front Entry Fine Zero and Span Adjustment
Isolation	500 VAC (flash tested @ 1 kV) (Isolation method, opto coupler/transformer)
Environment	BS EN61010-1 Pollution Degree 2; Installation CAT II; CLASS I
Ambient	0 to 70°C; 10 to 95 % RH non condensing
Linearity	0.05 %
Stability	0.01 %/°C
Response Time	Less than 100 ms to reach 70 % of final value.
EMC	Tested to IEC 801-2 Susceptibility to E.S.D. IEC 801-3 Radiated Susceptibility IEC 801-4 Susceptibility to conducted interference EN55022 Radiated Emissions