## 3 Port Isolating Signal Converter          BM916

**IEC61508: Typically, SIL2.** (Please contact Sales Office for details).

Function:  The BM916 is a DC powered, low input impedance isolating signal converter. It will accept a 4 to 20mA signal into 10 ohms and convert it to a standard active and passive transmission current or voltage signal.

The BM916 first conditions the signal before feeding it through an opto-isolating circuit.  Both the input and the output stages of the instrument are powered from separate secondaries of the inverter maintaining 3 port isolation.

# SPECIFICATIONS

Please note that the following inputs and outputs are standard ranges for the BM916. We have other instruments (BM303) to cater for other ranges. Please contact our internal sales department for further clarification.

**INPUTS:**
**D C Current**
4-20mA into 10 ohms

**OUTPUTS:**

**DC Current**
**The BM916 comes with both active and passive outputs as standard – simply wire into the required terminals – see below**

0 to 10mA into 10 to 2000 ohms
4 to 20mA into 10 to 1000 ohms
Other ranges as required
Minimum span 1mA
Maximum span 20mA

**DC Voltage**
The voltage output is derived from passing a mA signal through an internal resistor

0 to 1 Volt DC thru 51 ohms
0 to 10 Volt DC thru 510 ohms
1 to 5 Volt DC thru 240 ohms
Other ranges as required
Minimum span 1 Volt DC
Maximum span 10 Volt DC

**Input/Output/Supply Isolation**
600 Volts > 20M ohms

**SUPPLY:**

**Power Supply Voltage**
8 to 30 Volt DC, with converter to maintain signal to power supply isolation

**Power Required**
1.5 Watts Maximum

**Pilot Light**
Red LED shows Power ON

**GENERAL:**

**Linearity Error**
Proportional to input ±0.1% of span

**Response Time**
<50µS - Step 0 to 65%
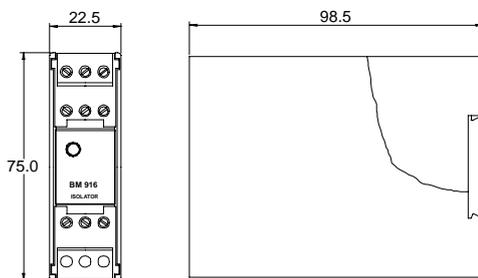-3dB at 4.5KHz

**Temperature Coefficient**
±0.1% of span/_ 10°C

**Operating / Storage Temperature Range**
0 to +45°C / -20 to +60°C

**Weight**
96 gms

## MECHANICAL DETAILS

22.5

98.5

75.0

BM 916
ISOLATOR

## TERMINATION DETAILS

Terminal
1   Power Supply –ve
2   Power Supply +ve
3   Power Supply Screen
4   Input –ve
5   Input +ve
6   Unused

Terminal
7   Output Active –ve / Passive I +ve
8   Output Active +ve
9   Output Passive I -ve
10  Unused
11  Unused
12  Unused

## ORDERING DETAILS
a) Give identification code, i.e. BM916
b) Give power supply voltage,  i.e. 24 Volt DC
c) Give details of output required, both type and range, i.e. 4 to 20mA

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