

WATER SUPPLIES DEPARTMENT
STANDARD SPECIFICATION E-82-12
SIGNAL CONVERTERS

1. **GENERAL**

Signal converters are used to provide galvanic isolation of input analogue circuits and to transmit the output signals at the required range or form.

The signal converters shall comply with the latest version of the relevant international standard listed below:

IEC 60715 Dimensions of low voltage switchgear and controlgear -
Standardised mounting on rails for mechanical support of
switchgear, controlgear and accessories

2. **DESIGN**

Signal converters shall meet the following design requirements:

(a) General

Number of signals	: 1 transmitter for up to 2 input signals
Isolation	: Better than 1000V a.c./d.c. between input and output
Power supply	: 220V 50Hz or 24V d.c. or loop powered
Operating temperature	: 0 - 55°C
Mounting	: DIN rail to IEC 60715

(b) Input

Input signal	: mA, mV, V, or variable resistance as specified
Input resistance	: Not exceeding 250Ω for current input Greater than 1MΩ for voltage input

(c) Output

Output signal : 4 - 20mA proportional to input

Accuracy : Better than $\pm 0.2\%$ of span

Minimum driving output : 500 Ω
load

- End of this Specification -