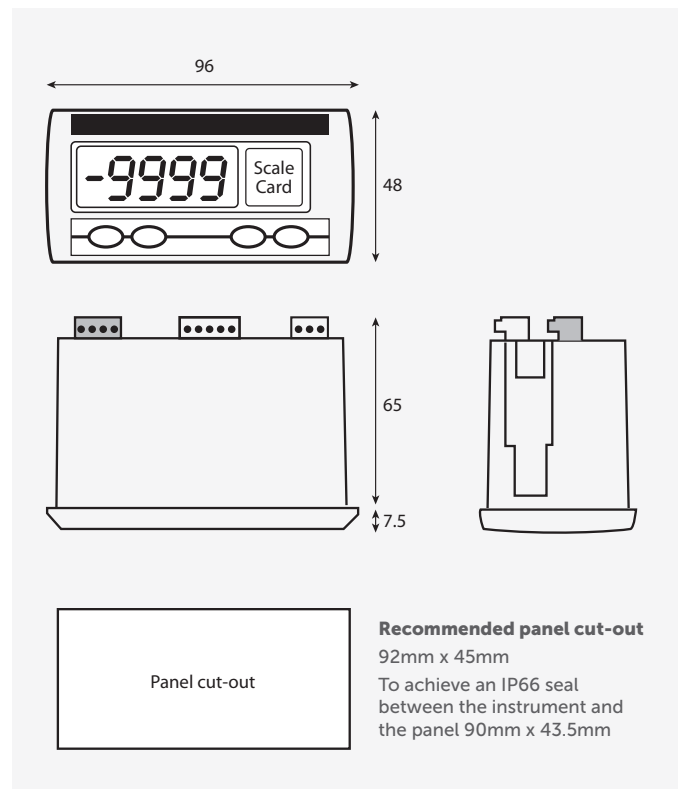
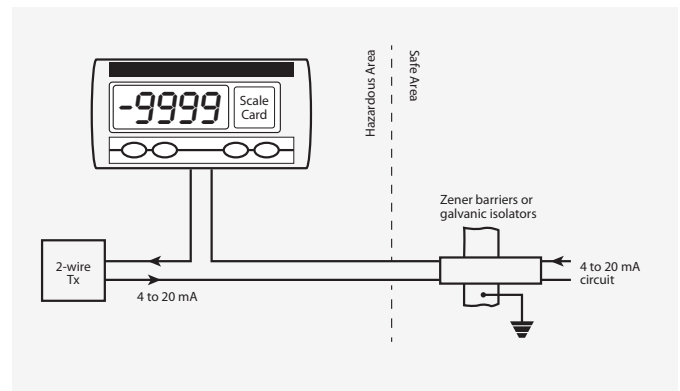


# BA307E

## Loop powered 2-Wire 4 to 20mA 4 digit indicator

Indicators



The HBS307E is a loop-powered 4 digit lcd indicator used to display a measured variable in customer selected engineering units within a hazardous area. The zero and span of the display are independently adjustable allowing the indicator to be calibrated to display any linear variable represented by the 4 to 20mA signal. The scale card can easily be marked to show the units of measurement and be installed on-site without dismantling the indicator enclosure or removing it from the panel.

A bold 15mm high 4 digit display provides maximum contrast and has a very wide viewing angle, allowing the indicator to be read easily in most lighting conditions over a wide temperature range. The four digits, with three decimal points and a negative sign, may be configured to display any variable between -9999 and 9999.

**Intrinsically safe for use in all gas and dust hazardous areas**

# BA307E

## Loop powered 2-Wire 4 to 20mA 4 digit indicator

### Specification

<b>Input</b>	
<b>Current</b>	4 to 20mA
<b>Voltage</b>	Less than 1.2V at 20°C Less than 1.3V at -40°C
<b>Overrange</b>	±200mA or ±30V will not damage the indicator.
<b>Display</b>	
<b>Type</b>	Liquid crystal, non-multiplexed 4 digit 15mm high.
<b>Span</b>	Adjustable between 0 & ±9999 for a 4/20mA input.
<b>Zero</b>	Adjustable between 0 & ±9999 with 4mA input.
<b>Decimal point</b>	1 of 3 positions or absent
<b>Polarity</b>	Automatic minus sign
<b>Zero blanking</b>	Blanked apart from 0 in front of decimal point
<b>Direction</b>	Display may increase or decrease with increasing 4/20mA input.
<b>Reading rate</b>	2 per second
<b>Overrange</b>	9999 or -9999 with all decimal points flashing
<b>Push buttons</b>	(Function in display mode)
▼	Shows display with 4mA input
▲	Shows display with 20mA input
'P'	Displays input in mA or a % of span.
'E'	' Used for tare function
<b>Accuracy at 20°C</b>	
<b>Linear</b>	±0.02% of span ±1digit
<b>Root extracting</b>	±16µA at input ±1 digit.
<b>Temperature effect on:</b>	
<b>Zero</b>	Less than 25ppm of span/°C
<b>Span</b>	Less than 50ppm of span/°C
Series mode rejection Less than 0.05% of span error for 1mA pk to pk 50 or 60Hz interference.	

### Intrinsic safety

<b>Europe ATEX</b>	
<b>Code</b>	Group II Category 1GD Ex ia IIC T5 Ga Ex ia IIIC T80°C Da IP20 Tamb = -40 to 70°C
<b>Input parameters</b>	
<b>Ui</b>	30V dc
<b>Ii</b>	200mA
<b>Pi</b>	0.84W
<b>Output parameters</b>	Complies with requirements for simple apparatus. ITS11ATEX27254X
<b>Cert. No.</b>	(Special conditions only apply for use in Group IIIC conductive dusts)
<b>USA FM</b>	
<b>Standard Code</b>	3610 Entity CL I: Div 1 Gp A, B, C, & D T5 @ 70°C
<b>Standard</b>	3611 Nonincendive Code CL I, II, III: Div 2 Gp A, B, C, D, E, F & G T5 @ 70°C File 3041487
<b>Canada cFM</b>	
<b>File International IECEx</b>	3041487C
<b>Code</b>	Ex ia IIC T5 Ga Ex ia IIIC T80°C Da IP20 Tamb = -40 to 70°C IECEx ITS11.0015X
<b>Cert. No</b>	(Special conditions only apply for use in Group IIIC conductive dusts)
<b>Brazil INMETRO NCC 12.0969X</b>	
<b>Environmental</b>	
<b>Operating temp</b>	-40 to 70°C
<b>Storage temp</b>	-40 to 85°C
<b>Humidity</b>	to 95% at 40°C noncondensing
<b>Vibration</b>	Report available
<b>Enclosure</b>	Front IP66, rear IP20
<b>EMC</b>	Complies with 2004/108/EC
<b>Mechanical</b>	Terminals Screw clamp for 0.5 to 1.5mm <sup>2</sup> cable, removable terminal blocks.
<b>Weight</b>	0.2kg