

BA307E-BL

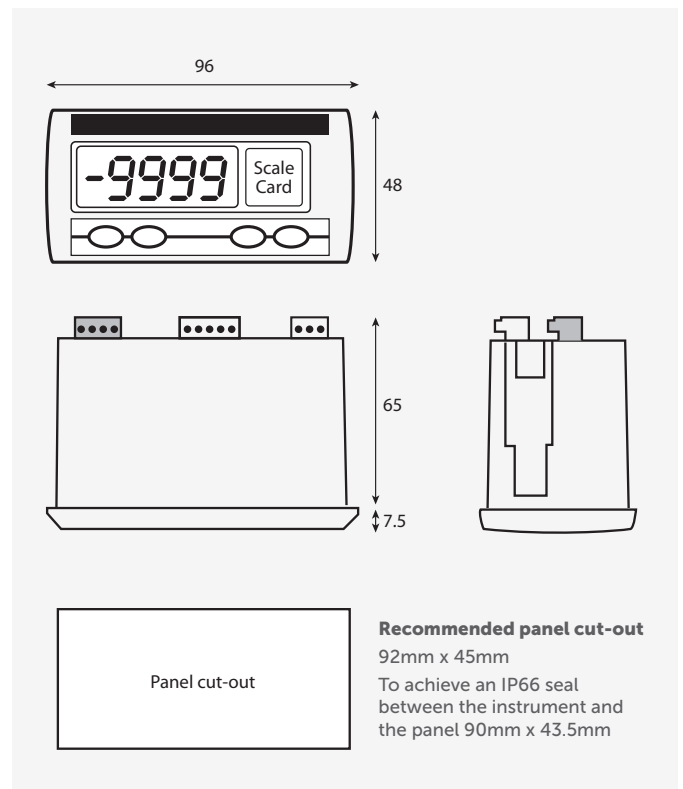
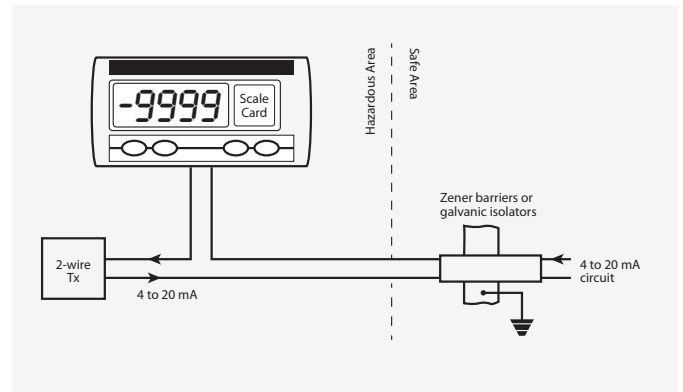
Loop powered 2-Wire 4 to 20mA 4 digit indicator with backlight

Indicators



The HBS307E-BL is a loop-powered 4 digit lcd indicator with backlight 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-BL

Loop powered 2-Wire 4 to 20mA 4 digit indicator with backlight

Specification

Input	
Current	4 to 20mA
Voltage	Less than 1.2V at 20°C Less than 1.3V at -40°C Less than 5V with I loop powered backlight.
Overrange	±200mA or ±30V will not damage the indicator.
Display	
Type	Liquid crystal, non-multiplexed 4 digit 15mm high.
Backlight	Green, loop powered.
Loop powered	Indicator input voltage 5V max.
Span	Adjustable between 0 & ±9999 for a 4/20mA input.
Zero	Adjustable between 0 & ±9999 with 4mA input.
Decimal point	1 of 3 positions or absent
Polarity	Automatic minus sign
Zero blanking	Blanked apart from 0 in front of decimal point
Direction	Display may increase or decrease with increasing 4/20mA input.
Reading rate	2 per second
Overrange	9999 or -9999 with all decimal points flashing
Push buttons	(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
Accuracy at 20°C	
Linear	±0.02% of span ±1digit
Root extracting	±16µA at input ±1 digit.
Temperature effect on:	
Zero	Less than 25ppm of span/°C
Span	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

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