

## 1. DESCRIPTION

The BA507E-SS and BA527E-SS are panel mounting general purpose digital indicators which are housed in rugged stainless steel enclosures. They are loop powered by the 4/20mA input which they display in engineering units.

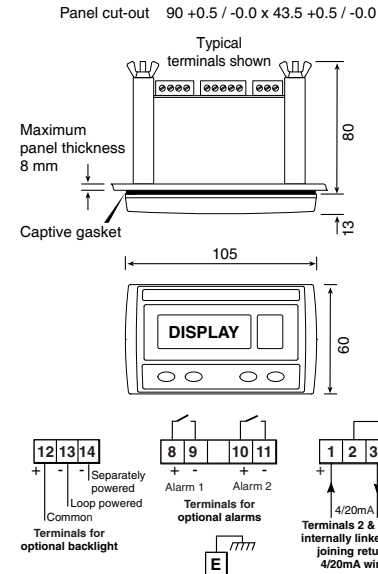
The two models are electrically similar, but have different size displays.

Model	Display
BA507E-SS	4 digits 15mm high
BA527E-SS	5 digits 12.7mm high and bargraph.

This abbreviated instruction sheet is intended to assist with installation and commissioning, a comprehensive instruction manual describing system design and calibration is available from the BEKA sales office or may be downloaded from the BEKA website [www.beka.co.uk/manuals.html](http://www.beka.co.uk/manuals.html)

## 2. INSTALLATION

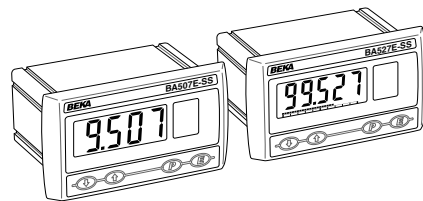
Both models have front panel impact and IP66 ingress protection but should be shielded from direct sunlight and severe weather conditions. The rear of both indicators have IP20 ingress protection.



Connect M4 earth stud to panel enclosure in which indicators is mounted

Fig 1 cutout dimensions & terminals

**Abbreviated instructions for  
BA507E-SS & BA527E-SS  
rugged general purpose panel mounting  
loop powered indicators**



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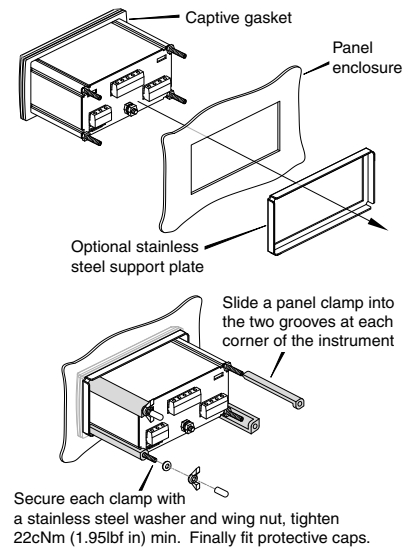


Fig 2 Installation procedure

## EMC

For specified immunity all wiring should be in screened twisted pairs, with the screens earthed at one point

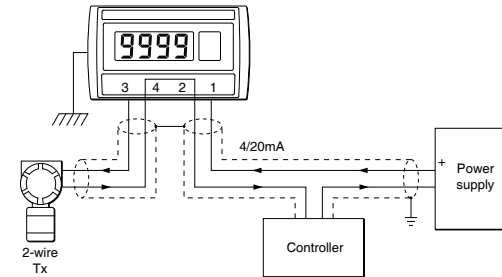


Fig 3 Typical measurement loop

## Scale card

The indicator's units of measurement are shown on a printed scale card visible through a window at the right hand side of the display. The scale card is mounted on a flexible strip that is inserted into a slot at the rear of the instrument as shown below.

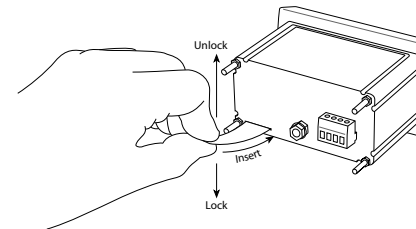


Fig 4 Inserting flexible strip carrying scale card into slot at the rear of indicator.

Thus the scale card can easily be changed without removing the indicator from the panel or opening the instrument enclosure.

New indicators are supplied with a printed scale card showing the requested units of measurement, if this information is not supplied when the indicator is ordered a blank card will be fitted.

A pack of self-adhesive scale cards printed with common units of measurement is available as an accessory from BEKA associates. Custom printed scale cards can also be supplied.

To change a scale card, unclip the protruding end of the flexible strip by gently pushing it upwards and pulling it out of the enclosure. Peel the existing scale card from the flexible strip and replace it with a new printed card, which should be aligned as shown below. Do not fit a new scale card on top of an existing card.

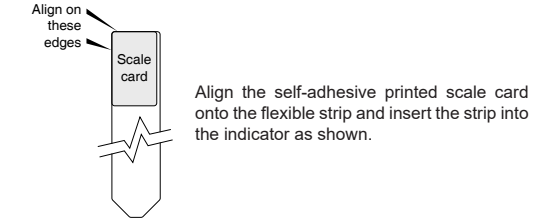


Fig 5 Fitting scale card to flexible strip

## 3. OPERATION

The indicators are controlled via four front panel push buttons. In the display mode i.e. when the indicator is displaying a process variable, these push buttons have the following functions:

- P** While this button is pushed the indicator will display the input current in mA, or as a percentage of the instrument span depending upon how the indicator has been conditioned. When the button is released the normal display in engineering units will return. The function of this push button is modified when optional alarms are fitted to the indicator.
- ▼** While this button is pushed the indicator will display the numerical value and analogue bargraph\* the indicator has been calibrated to display with 4mA input. When released the normal display in engineering units will return.
- ▲** While this button is pushed the indicator will display the numerical value and analogue bargraph\* the indicator has been calibrated to display with 20mA input. When released the normal display in engineering units will return.
- E** No function in the display mode unless the tare function is being used.
- P + ▼** Indicator displays firmware number followed by version.
- P + ▲** When optional alarms are fitted provides direct access to the alarm setpoints if the 'ACSP' access setpoints in display mode function has been enabled.
- P + E** Provides access to the configuration menu via optional security code.

\* Only the BA527E-SS has a bargraph

The BA507E-SS and BA527E-SS are CE marked to show compliance with the European EMC Directive 2014/30/EU. They are also UKCA marked to show compliance with UK Electromagnetic Compatibility Regulations UKSI 2016:1091 (as amended)

#### 4. CONFIGURATION

Indicators are supplied calibrated as requested when ordered, if not specified default configuration will be supplied but can easily be changed on-site.

Fig 6 shows the location of each function within the configuration menu with a brief summary of the function. Please refer to the full instruction manual for detailed configuration information and for a description of the lineariser and the optional dual alarms.

Access to the configuration menu is obtained by pressing the **P** and **E** buttons simultaneously. If the indicator security code is set to the default '0000' the first parameter 'FunC' will be displayed. If the indicator is protected by a security code, 'CodE' will be displayed and the code must be entered to obtain access to the menu.

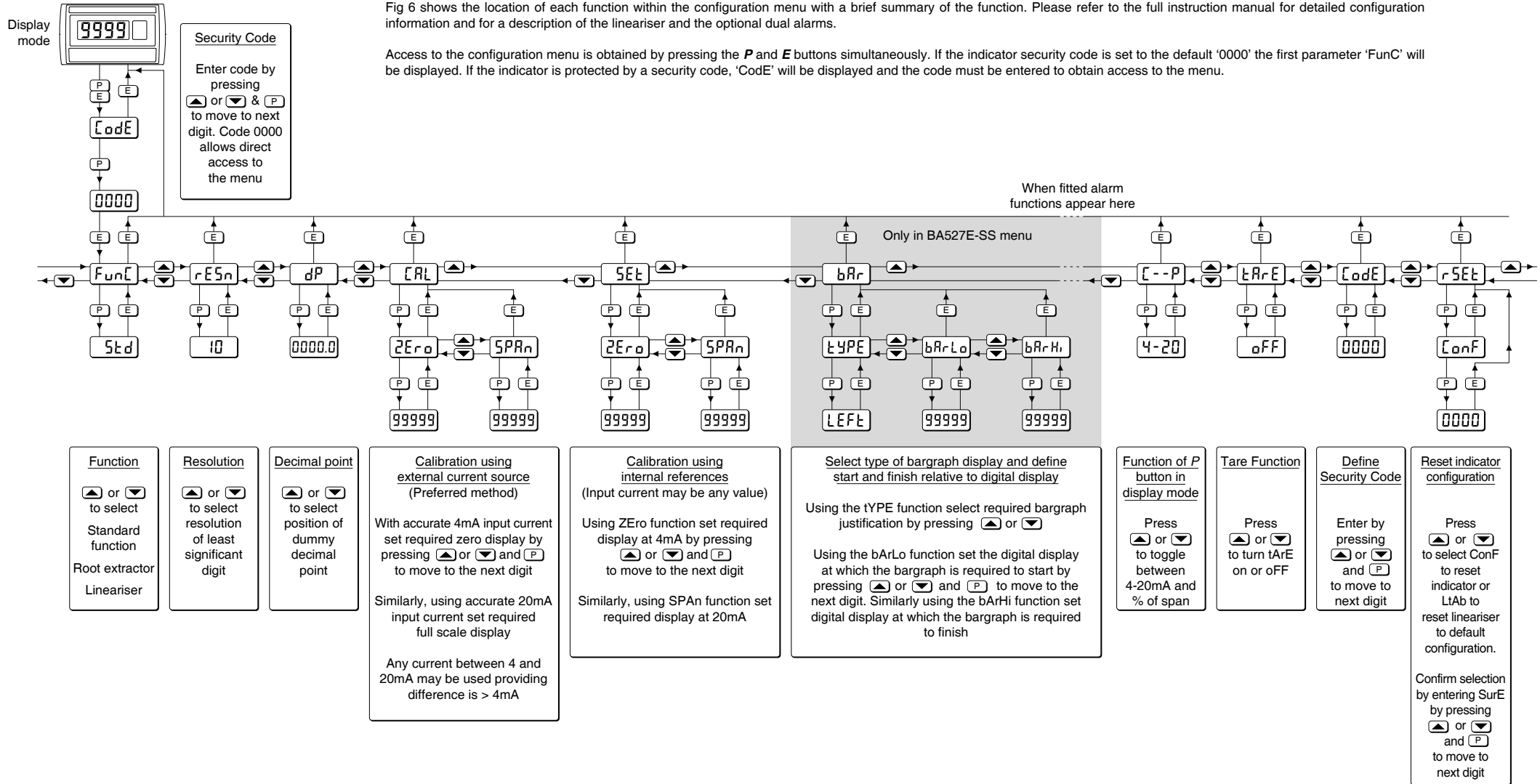


Fig 6 Configuration menu



Manuals, certificates and data-sheets can be downloaded from <http://www.beka.co.uk/lpi7/>

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