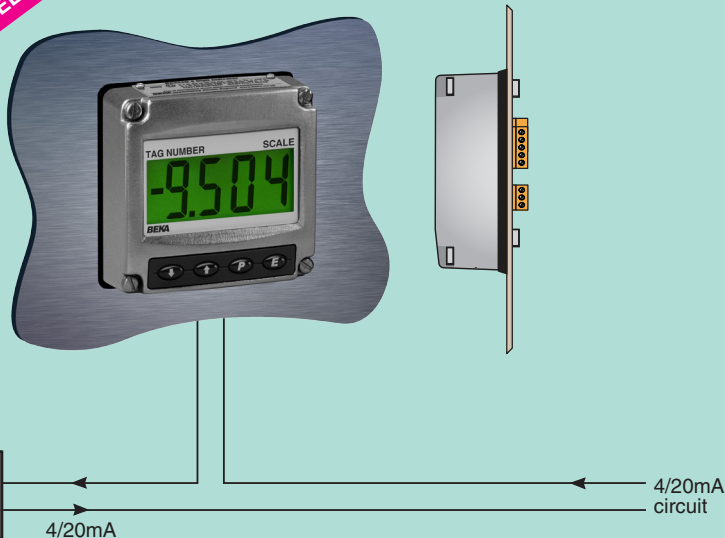


NEW  
PANEL MOUNTING  
MODEL



Shown with optional backlight - loop powered

The **BA504G-SS-PM loop powered 4/20mA indicator** is a rugged, general purpose panel mounting instrument with a large 4 digit display. It has an impact resistant IP66 stainless steel front which maintains the integrity of the panel enclosure in which it is mounted.

**Main application** of the BA504G-SS-PM is to display a measured variable in engineering units within a harsh process 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 4/20mA signal. Root extraction and an adjustable sixteen segment lineariser enable flow and variables such as tank levels to be shown in linear engineering units. For weighing applications a tare function is included.

**The large 34mm high 4 digit display** provides maximum contrast and has a very wide viewing angle, thus the BA504G-SS-PM indicator is easily read in most lighting conditions. An optional backlight is available for installations in poorly illuminated areas. The four digit display, with three decimal points and a negative sign, may be configured to display any variable between -9999 and 9999.

**IP66 and impact protection** are provided by a rugged 316 stainless steel front with a 6mm thick armoured glass window and silicone gaskets. Impact and ingress protection have been independently assessed by a UKAS accredited authority.

**Display backlighting** which may be loop or separately powered is available as a factory fitted option. It provides green background illumination enabling

the display to be read at night or in poorly illuminated areas. When powered from the 4/20mA loop, no additional wiring is required but the indicators voltage drop is increased. Powering from a separate supply produces a slightly brighter backlight but requires additional field wiring.

**Optional dual alarm outputs** which can switch low power loads, such as sounders, beacons or solenoid valves, are available as a factory fitted option. The two galvanically isolated solid state outputs may be independently conditioned as high or low alarms with normally open or closed outputs. Annunciators on the display show the status of both alarms.

**The scale card** which shows units of measurement and tag information slides into an internal slot and can easily be changed on-site. New instruments can be supplied with the scale card printed to show customer specified information for no additional charge, if this is not requested a blank card is fitted which can easily be marked on-site.

**Reliability is ensured** by protection from incorrect connection and radio frequency interference. The indicator has been subjected to extensive vibration and thermal testing and is supported by a three year guarantee.

**Other panel mounting models** in this range include the five digit BA524G-SS-PM and the smaller 4 digit BA507E-SS and 5 digit BA527E-SS.

**If flammable atmospheres are present** the intrinsically safe BA304G-SS-PM has the same features as the BA504G-SS-PM with international gas and dust certification.

## BA504G-SS-PM Rugged 2-wire 4/20mA 4 digit indicator





*General purpose panel mounting for use in harsh environments.*

- ◆ Rugged IP66 stainless steel front maintains panel enclosure's IP66 protection.
- ◆ Loop powered only 1.2V drop.
- ◆ 4 digit 34mm high display.
- ◆ Optional backlight & alarms.
- ◆ Root extractor and 16 segment lineariser.
- ◆ Easy scale card installation on-site.
- ◆ 3 year guarantee

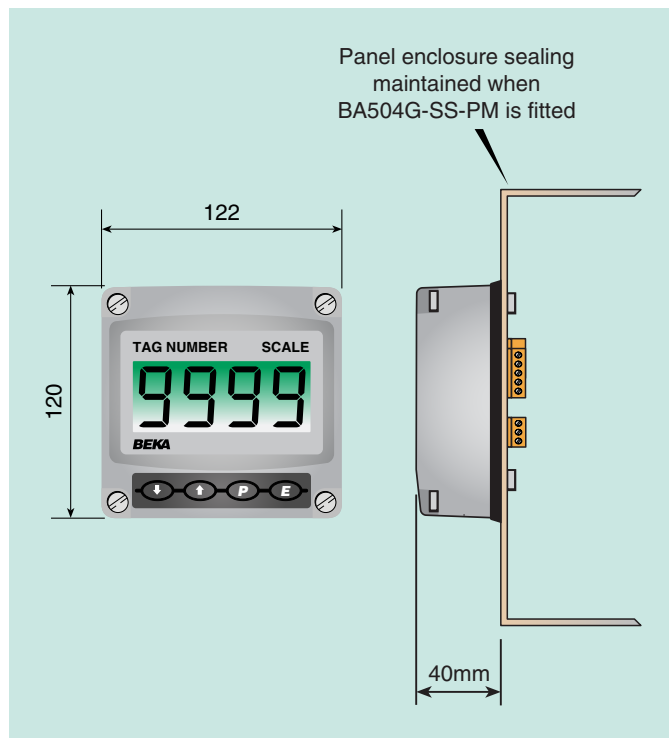
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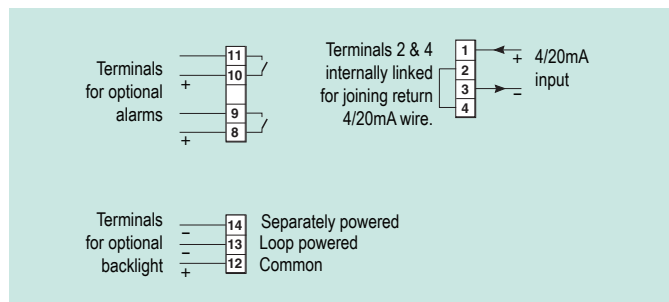
## SPECIFICATION

|   |   |
|---|---|
| <b>Input</b>  |   |
| Current   | 4 to 20mA   |
| Voltage   | Less than 1.2V at 20°C<br>Less than 1.3V at -40°C<br>Less than 5V with optional loop powered backlight. |
| Overrange   | ±200mA or ±30V will not damage the indicator.   |
| <b>Display</b>  |   |
| Type  | Liquid crystal, non-multiplexed<br>4 digits 34mm high.  |
| 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.   |
| <b>Push buttons</b>   |   |
|    | (Function in display mode)<br>Shows display with 4mA input  |
|    | Shows display with 20mA input   |
|    | Displays input in mA or as a % of span, has a modified function when alarms are fitted.                 |
|  | Used for tare function  |
| <b>Accuracy at 20°C</b>   |   |
| 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.                                 |
| <b>Environmental</b>  |   |
| Operating temp  | -40 to +70°C  |
| Storage temp  | -40 to +85°C  |
| Humidity  | To 95% at 40°C noncondensing  |
| EMC   | Complies with EMC Directive 2014/30/EU.   |
| <b>Mechanical</b>   |   |
| Front of indicator  |   |
| Material  | 316 stainless steel   |
| Ingress protection  | IP66  |
| Impact  | 7J, Window 4J   |
| Rear  | IP20  |
| Weight  | 1.1kg   |
| Terminals   | Orange with screw clamp for 0.5 to 1.5mm <sup>2</sup> cable.  |
| Scale card  | Slide-in card showing units of measurement and tag information through display window.                  |
| <b>Accessories</b>  |   |
| Backlight   | Green, may be loop or separately powered.   |
| Loop powered  | Indicator input voltage increases to 5V   |
| Separately powered  |   |
| V supply  | 11 to 30V dc  |
| I in  | 35mA  |

## DIMENSIONS (mm)



## TERMINAL CONNECTIONS



|                  |  |
|------------------|--|
| Alarms           | Two alarm outputs each of which may be independently configured as a high or low alarm contact with a NO or NC output. |
| Output           | Isolated, voltage free solid state switch  |
| V <sub>max</sub> | 40V dc   |
| I <sub>max</sub> | 200mA  |
| R <sub>on</sub>  | 5Ω + 0.7V max  |
| R <sub>off</sub> | 1MΩ min  |

## HOW TO ORDER

|                    |   |
|--------------------|---|
| Model number       | <b>Please specify</b><br>BA504G-SS-PM                                   |
| Display mode       | Linear, root or lineariser*   |
| Display at:        | XXXX } Include position of decimal point & sign if negative.*<br>XXXX } |
| 4.000mA            |   |
| 20.000mA           |   |
| Scale card marking | Legend required   |
| Units              | Legend required   |
| Tag                |   |
| <b>Accessories</b> | <b>Please specify if required</b>                                       |
| Display backlight  | Backlight   |
| Dual alarms        | Alarms  |

\* Will be set to display 0.0 at 4mA and 100.0 at 20mA with a linear display if calibration information is not supplied. Can easily be recalibrated on-site.