

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 enabing

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

beka.co.uk/ba504g-ss-pm



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SPECIFICATION

Input

Voltage

4 to 20mA Current

Less than 1.2V at 20°C Less than 1.3V at -40°C Less than 5V with optional loop powered backlight.

Overrange

±200mA or ±30V will not damage the indicator.

Display

Type

Zero

Span

Decimal point

Polarity Zero blanking

Direction

Reading rate

Overrange

Push buttons

P

E

Accuracy at 20°C

Linear Root extracting Temperature effect on:

Zero Span

Series mode rejection

Environmental

Operating temp Storage temp Humidity **EMC**

Mechanical

Front of indicator Material Ingress protection Impact

Rear Weight

Terminals

Scale card

Accessories

Backlight

Loop powered

Separately powered V supply I in

Liquid crystal, non-multiplexed

4 digits 34mm high.

Adjustable between 0 & ±9999

for a 4/20mA input.

Adjustable between 0 & ±9999 with 4mA input.

1 of 3 positions or absent Automatic minus sign Blanked apart from 0 in front of

decimal point. Display may increase or

decrease with increasing 4/20mA input.

2 per second

9999 or -9999 with all decimal

points flashing.

(Function in display mode) 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

±0.02% of span ±1digit ±16µA at input ±1 digit

Less than 25ppm of span/°C Less than 50ppm of span/°C Less than 0.05% of span error for 1mA pk to pk 50 or 60Hz

interference.

-40 to +70°C -40 to +85°C

To 95% at 40°C noncondensing Complies with EMC Directive

2014/30/EU.

316 stainless steel **IP66**

7J, Window 4J

IP20 1.1ka

Orange with screw clamp for 0.5 to 1.5mm² cable.

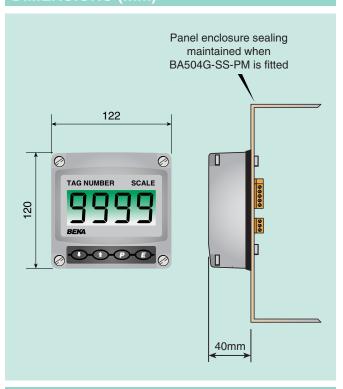
Slide-in card showing units of measurement and tag information through display window.

Green, may be loop or separately powered.

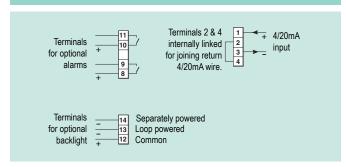
Indicator input voltage increases to 5V

11 to 30V dc 35mA

DIMENSIONS (mm)



TERMINAL CONNECTIONS



Alarms

Output

Vmax

Imax

Ron Roff

Two alarm outputs each of which may be independently configured as a high or low alarm contact with a NO or NC output.

Isolated, voltage free solid

state switch 40V dc 200mA $5\Omega + 0.7V \text{ max}$

 $1M\Omega$ min

HOW TO ORDER

Model number

Display mode Display at: 4.000mA 20.000mA

Scale card marking

Units Tag

Accessories

Display backlight Dual alarms

Please specify BA504G-SS-PM

Linear, root or lineariser*

XXXX XXXX Include position of decimal point & sign if negative.*

Legend required Legend required

Please specify if required

Backlight 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.

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