

The BA526C is a new combined analogue and digital indicator which replaces the BA526. It offers enhanced features and improved visibility in a shorter enclosure. Like its predecessor, the BA526C displays the current flowing in a 4/20mA loop on a 100 segment bargraph and in accurate engineering units on a digital display. The instrument is loop powered but only introduces a 1V drop allowing it to be installed in series with almost any 4/20mA loop.

Main application of the BA526C is to display a measured variable or control signal in a process area. For level and similar measurements the combination of an analogue and digital display provides magnitude and trend information from the bargraph, plus accurate readings in engineering units from the digital display. The relative magnitude of variables can be effectively presented by mounting BA526C indicators side by side. An optional 16 point lineariser enables the BA526C to display non linear variables in linear engineering units.

Control and calibration of the combined indicator is performed via the front panel tactile push-buttons. Using these buttons the operator can temporarily display the measured variable as a percentage of span, the input current in mA and the numerical display at 4 and 20mA input. All the calibration functions are contained in easy to understand menus which may be protected by a four digit user selectable security code.

The analogue bargraph which contains 100 segments, provides a rapid indication of the input current, enabling an operator to quickly assess the magnitude and trend of a process variable.

The bargraph displays zero to full scale for a 4 to 20mA input, but may be calibrated to show deviation from any input current. Either a column or a single segment display may be selected and if only the analogue display is required, the digital display may be disabled.

Separately powered backlighting is available as an option. The orange output enhances daylight contrast and enables the display to be read when the instrument is installed in a poorly illuminated area.

**Optional alarms** provide two galvanically isolated solid state outputs which may be independently programmed for high or low operation with a normally open or closed output. For easy comparison with the 4/20mA input, both setpoints are displayed on a second bargraph together with annunciators showing the status of both alarms.

The IP65 front panel is a robust, easy to clean Noryl moulding surrounding an armoured glass window. A captive neoprene gasket provides a seal between the instrument enclosure and the panel.

Reliability is ensured by an ISO9001 approved quality control system supported by a three year guarantee. The BA526C is protected from reverse connection and overrange input currents, and incorporates extensive radio frequency filtering to comply with the European EMC Directive.

If flammable atmospheres are present the BA326C should be used. This has the same features as the BA526C and has been certified intrinsically safe in both Europe and the USA.

## **BA526C**

# 2-wire 4/20mA analogue & digital indicator

### General purpose

- Loop powered only 1.1V drop
- Optimum visibility
- 100 segment bargraph plus digital display
- Optional:Display backlight

Alarms Lineariser

- 144 x 48mm DIN enclosure with IP65 front
- ♦ 3 year guarantee



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#### **SPECIFICATION**

Input

Current 4 to 20mA

Voltage Less than 1.1V at 20°C

Less than 1.2V at -20°C

Overrange ±200mA will not cause damage

Display

Liquid crystal Type

Reading rate

Analogue 4 per second Digital 2 per second

Analogue 95mm long 100 segment column or single

segment.

0 to 100% for 4 to 20mA input Range

4<sup>1</sup>/2 digit (-19999 to 19999) 5.5mm high; Digital

selectable dummy trailing zero extends display

range to (-19990 to 99990). Adjustable between 0 & ±19999

Span Adjustable between ±19999 with 4mA input Zero

Decimal point 1 of 5 positions or absent Automatic minus sign Polarity

Display may increase or decrease with Direction

increasing current.

Over & 4 least significant digits are blanked

underrange

(In operating mode) **Push-buttons** 

Down button Shows displays with 4mA input Up button Shows displays with 20mA input

'P' button Displays input current in mA or as a percentage

of span.

Accuracy at 20°C

±0.5% Analogue

Digital ±0.02% ±1 digit Linear Root extracting 16µA at input ±1 digit

Temp. effect

Analogue ±0.5% between -20 & 60°C

Digital

Less than 25ppm/°C Zero Less than 50ppm/°C Span

Less than 0.5% error for 1mA pk to pk Series mode

50Hz or 60Hz signal.

**Environmental** 

Operating temp -20 to +60°C -40 to +85°C Storage temp

To 95% at 40°C non-condensing Humidity

Enclosure Front IP65 rear IP20

**EMC** In accordance with EU Directive 89/336/EEC,

full report available.

Mechanical

Removable terminal block for 0.5 to **Terminals** 

1.5mm<sup>2</sup> cables

Weight 0.5kg

**Accessories** 

Separately LED backlight

powered backlight

lin

18 to 30V dc, may be dimmed by reducing Vin

voltage below 18V. 40mA typical

Alarms Two independent alarms each of which may be

programmed for high or low operation with a

NC or NO output.

Isolated single pole solid state switch: Outputs

Ron less than  $5\Omega + 0.6V$ greater than 180k Roff

Provides 16 fully adjustable straight lines which Lineariser

may be adjusted to compensate for almost any

non-linear variable.

Typeset scale

Blank scale card fitted to each indicator can be supplied typeset with units of measurement.

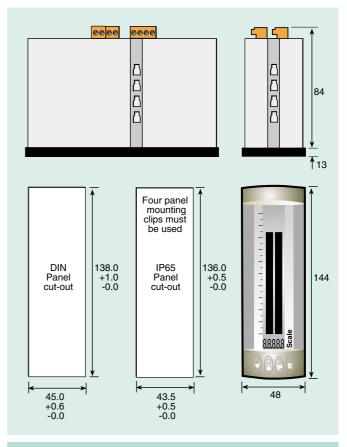
Bargraph scale

Tag number

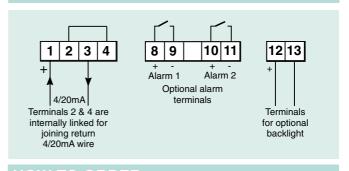
Blank scale fitted to each indicator can be supplied typeset with analogue scale. Thermally printed number on rear of the

instrument

#### **DIMENSIONS (mm)**



#### TERMINAL CONNECTIONS



#### HOW TO ORDER

Please specify

Model number BA526C

Digital display

Display mode Linear or root extracting\*

XXXX,

Display at 4mA Display at 20mA

Include position of decimal point, dummy zero if required & sign XXXX\*

if negative.

Accessories Please specify if required

Display backlight Separately powered backlight

Alarms Alarms Lineariser Lineariser# Scale card Legend

Bargraph scale Required scale graduations

Tag number Legend

\*Will be set to display 0.00 at 4mA and 100.00 at 20mA with a linear display if calibration information is not supplied.

#Contact BEKA if calibration of accessories is required.