

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

www.beka.co.uk/ba526c

BEKA

associates

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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

Type	Liquid crystal
Reading rate	
Analogue	4 per second
Digital	2 per second
Analogue	95mm long 100 segment column or single segment.
Range	0 to 100% for 4 to 20mA input
Digital	4½ digit (-19999 to 19999) 5.5mm high; selectable dummy trailing zero extends display range to (-19990 to 99990).
Span	Adjustable between 0 & ±19999
Zero	Adjustable between ±19999 with 4mA input
Decimal point	1 of 5 positions or absent
Polarity	Automatic minus sign
Direction	Display may increase or decrease with increasing current.
Over & underrange.	4 least significant digits are blanked

Push buttons

(In operating mode)	
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

Analogue	±0.5%
Digital	Linear ±0.02% ±1 digit Root extracting 16µA at input ±1 digit
Temp. effect	
Analogue	±0.5% between -20 & 60°C
Digital	
Zero	Less than 25ppm/°C
Span	Less than 50ppm/°C
Series mode	Less than 0.5% error for 1mA pk to pk 50Hz or 60Hz signal.

Environmental

Operating temp	-20 to 60°C
Storage temp	-40 to 85°C
Humidity	To 95% at 40°C non-condensing
Enclosure	Front IP65 rear IP20
EMC	In accordance with EU Directive 2004/108/EC, full report available.

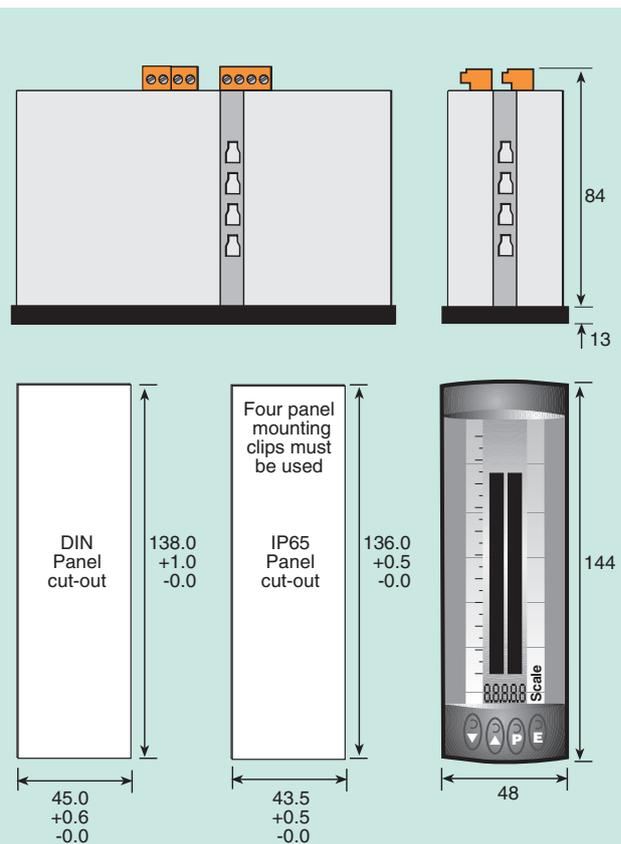
Mechanical

Terminals	Removable terminal block for 0.5 to 1.5mm ² cables.
Weight	0.5kg

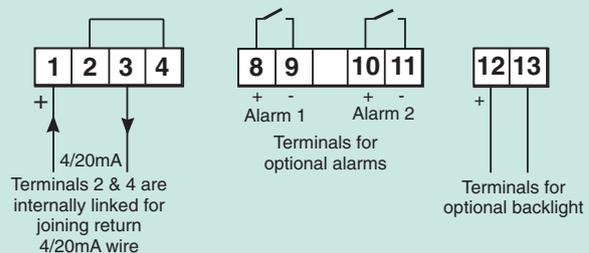
Accessories

Separately powered backlight.	LED backlight
Vin	18 to 30V dc, may be dimmed by reducing voltage below 18V.
Iin	40mA typical
Alarms	Two independent alarms each of which may be programmed for high or low operation with a NC or NO output.
Outputs	Isolated single pole solid state switch: Ron less than 5Ω +0.6V Roff greater than 180k
Lineariser	Provides 16 fully adjustable straight lines which may be adjusted to compensate for almost any non-linear variable.
Typeset scale card.	Blank scale card fitted to each indicator can be supplied typeset with units of measurement.
Bargraph scale	Blank scale fitted to each indicator can be supplied typeset with analogue scale.
Tag number	Thermally printed number on rear of the instrument.

DIMENSIONS (mm)



TERMINAL CONNECTIONS



HOW TO ORDER

Model number	BA526C	Please specify
Display mode	Linear or root extracting*	
Digital display	XXXX*] Include position of decimal point, dummy zero if required & sign if negative.
Display at 4mA	XXXX*	
Display at 20mA		
Accessories	Please specify if required	
Separately powered backlight.	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.