

The **BA534G** is a third generation, general purpose, field mounting rate totaliser housed in a compact IP66 GRP enclosure. The totaliser is easy to use and can be configured on-site to operate with flowmeters having a magnetic pick-off, switch contact, proximity detector, open collector or a voltage pulse output.

Main application of the BA534G is to process the pulse output from a process area flowmeter such as a turbine meter and simultaneously display the rate and total flow in engineering units. The BA534G will compensate for flowmeter nonlinearity using up to sixteen flowmeter K-factors which can be entered on-site.

The large display has high contrast and a wide viewing angle, enabling the rate totaliser to be read in most lighting conditions over a wide temperature range. Rate of flow may be displayed in almost any units of measurement per second, minute or hour. Total flow may be shown in the same or in different units and the total display may be reset using the front panel push buttons or an external contact closure.

Display backlighting which is internally powered from the totaliser is available as a factory fitted option. It provides green background illumination enhancing daylight viewing and allowing the display to be easily read at night or when installed in a poorly illuminated area.

IP66 protection is provided by the robust GRP enclosure which has stainless steel fittings, a silicone gasket and an 8mm thick armoured glass window. Ingress and impact protection have been independently assessed by Intertek.

The isolated open collector pulse output may be configured to synchronously retransmit the pulse input to the rate totaliser, or a scaled pulse when the least significant digit of the total display is incremented.

The scale card which shows the Rate Totaliser's units of measurement and tag information, slides into an internal slot and can easily be changed on-site. New instruments are supplied with a printed scale card showing customer specified information, if this information is not specified a blank card is fitted which can easily be marked on-site. For application requiring external marking an optional stainless steel legend plate is available, which can be supplied with custom specified engraving.

An isolated 4/20mA current sink output is available as a factory fitted option. It may be configured to represent any part of the rate or total display.

Optional dual alarms can switch loads such as a sounder or a solenoid valve. The two galvanically isolated, solid state voltage free outputs may be independently conditioned as rate or total alarms with normally open or closed outputs. Annunciators on the BA534G display show the status of both alarm outputs.

The BA584G is a two input version which enables the sum or difference of two flowmeters to be displayed. Other rate totalisers in this range include field and panel mounting models with intrinsic safety and Ex n certification, plus other general purpose models.

BA534G

one input rate totaliser

General purpose

- ◆ Configurable input: magnetic pick-off, switch contact, proximity detector, open collector or voltage pulse.
- ◆ Separate rate and total displays.
- ◆ IP66 GRP enclosure
- ◆ Lineariser
- ◆ Isolated pulse output
- ◆ Simple on-site scale card installation.
- ◆ Optional: Backlight
Dual alarms
4/20mA output
- ◆ 3 year guarantee

BEKA

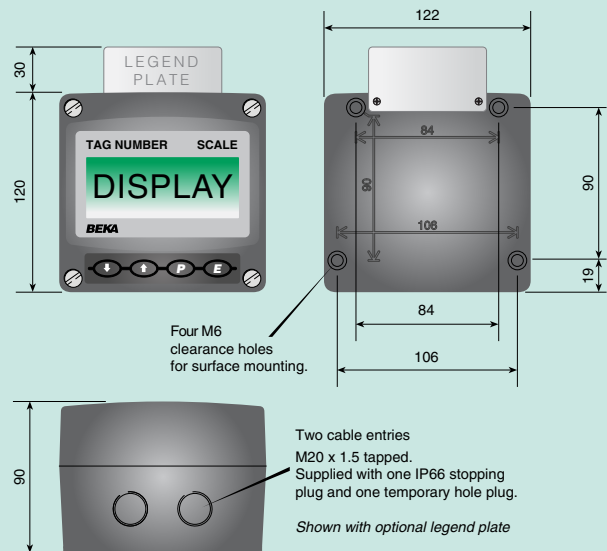
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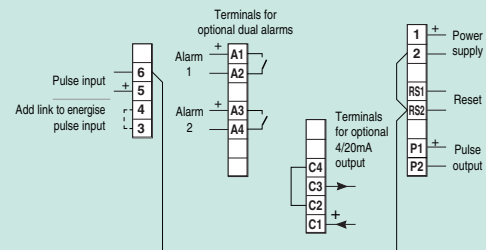
SPECIFICATION

Power supply	
Voltage	10 to 30V dc
Current	16mA max plus 16mA for optional backlight
Input	
	Lower Upper switching thresholds
Switch contact	100Ω 1kΩ
Proximity detector (NAMUR)	1.2mA 2.1mA
Open collector	2kΩ 10kΩ
Magnetic pick-off	0 +40mV
Voltage pulse (low)	1V 3V 30V max
Voltage pulse (high)	3V 10V 30V max
Frequency	
Switch contact	150Hz typ.] <i>Depends upon pulse width &</i>
Other inputs	100kHz max.] <i>totaliser debounce setting.</i>
Display	
Type	Liquid crystal
Zero blanking	Blanked apart from 0 in front of decimal point
Total ‡	
Decimal point	8 digits 18mm high 1 of 7 positions or absent
Rate ‡	
Decimal point	6 digits 12mm high 1 of 5 positions or absent
‡ Rate & Total can be shown on either 6 or 8 digit display	
Grand total	Maximum count 10 ¹⁶
Remote reset	
	Contact closure with resistance less than 10kΩ.
Pulse output	
Frequency	Isolated open collector 5kHz max, synchronous with input pulse, or when least significant digit of total display is incremented. Divisible with selectable width. 1, 10, 100, 1000 or 10000 0.1, 0.5, 1, 2.5, 5, 10, 25, 50, 100, 250 or 500ms. Ron 51Ω + 3V max Roff 1MΩ min Vmax 30Vdc I max 10mA
Configurable functions	
Rate scale factor	Adjustable between 0.0001 and 99999 pulses/unit vol.
Flowmeter K-factor	16 K-factors may be entered
Lineariser	Rate may be displayed per second, minute or hour.
Rate timebase	Adjustable digital filter
Rate display filter	Adjustable between 0.0001 and 99999
Total scale factor	
Environmental	
Operating temp	-40 to +70°C display -20 to +70°C
Storage temp	-40 to +85°C
Humidity	to 95% at 40°C non condensing
Vibration	Report available
Enclosure	
Material	GRP
Ingress	IP66
EMC	Complies with 2014/30/EU
Mechanical	
Terminals	Screw clamp for 0.5 to 1.5mm ²
Weight	1.1kg
Accessories	
Backlight	Green LED internally powered
4/20mA output	Isolated current sink 5 to 30V
Voltage drop	
Dual alarms	Two alarms each of which may be independently configured as a rate or total, high or low alarm with a NO or NC output.
Outputs	
	Isolated single pole, voltage free solid state switch.
Ron	5Ω + 0.7V max
Roff	1MΩ min
Vmax	30Vdc
I max	200mA
Scale card	Blank card fitted to all instruments. Can be supplied printed with specified units of measurement and tag information for no additional charge at time of purchase. #

DIMENSIONS (mm)



TERMINAL CONNECTIONS



Legend plate	316 Stainless steel plate laser engraved with tag number or application information attached to rear of the instrument, visible from the front. #
Pipe mounting kit	BA393G 316 stainless steel #
Panel mounting kits	BA394G 316 stainless steel not sealing # BA494G GRP sealing #

See accessory datasheet for details

HOW TO ORDER

Model number	Please specify BA534G
Input Type *	
Rate scale factor	XXXXX * <i>If linearisation is required, up to 16 rate scale factors may be entered for different flow rates.</i>
Rate timebase	Seconds, minutes or hours*
Total scale factor	XXXXX *
Accessories	Please specify if required
Display backlight	Backlight
4/20mA output	4/20mA output
Dual alarms	Alarms
Scale card marking	
Units	Legend required
Tag	Legend required <i>No charge if ordered with totaliser</i>
Stainless legend plate	Legend required
Pipe mounting kit	BA393G
Panel mounting kit	BA394G or BA494G

* Totaliser can be supplied configured as required for no additional charge. If configuration information is not supplied, instrument will be configured for open collector input with rate and total scaling factors of 1.0 and a timebase of seconds with direct pulse retransmission. Can easily be reconfigured on-site.