new range of

Rate Totalisers, Counters, Tachometers, **Timer/Clocks**

for use in **hazardous**

and **safe areas**

visit our website **www.beka.co.uk**

- > *General purpose, intrinsically safe & Zone 2 internationally certified instruments*
- > *IP66 field and panel mounting instruments*
- > *Rugged stainless steel panel mounting models certified for installation in Ex e, Ex n, Ex p and Ex t enclosures*
- > *Two input Rate Totalisers & Counters can display sum or difference of inputs*
- > *Optional backlight, isolated alarms and retransmitted 4/20mA and pulse outputs (standard on most models)*

BEKA associates

Rate Totalisers
Total flow and flow rate indicators

An extensive new range of easy to use field and panel mounting instruments that can display rate and total flow in engineering units from most pulse or 4/20mA output flowmeters.

- General purpose, intrinsically safe & Zone 2 internationally certified instruments.
- IP66 field and panel mounting instruments.
- Rugged stainless steel panel mounting models certified for installation in Ex e, Ex n, Ex p and Ex t enclosures.
- Two input models can display sum or difference of inputs.
- Optional backlight, isolated alarms and retransmitted pulse and 4/20mA outputs.

Models available

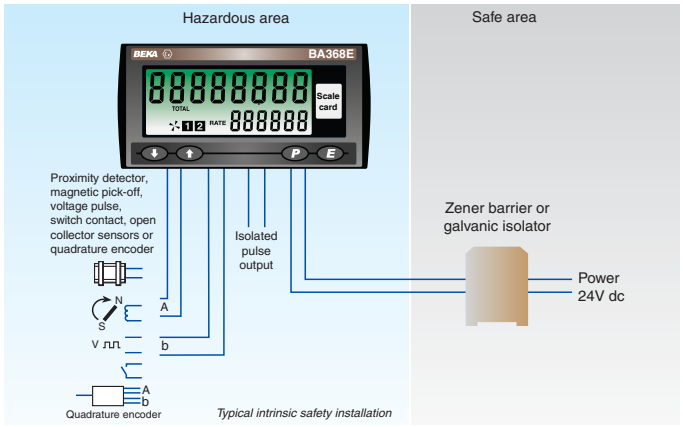
Model No.	Mounting	Input	Powered	Display digits		Certification					
						Europe ATEX		International IECEx		USA & Canada	
				TOTAL No. x height	RATE No. x height	Gas	Dust	Gas	Dust	Gas	Dust
Ex i intrinsically safe - for use in Zones 0, 1 & 2 and 20, 21 & 22 where certified											
BA334G	Field compact	Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA334E	Field - separate terminal compartment	Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
BA337E	Panel 96 x 48	Pulse	External	8 x 9mm	6 x 6mm	✔	–	✔	–	✔	✔
BA337E-SS*	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
BA338E	Panel 144 x 72	Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
BA354E	Field - separate terminal compartment	4/20mA	Loop	8 x 18mm	5 x 12mm	✔	✔	✔	✔	✔	✔
BA358E	Panel 144 x 72	4/20mA	Loop	8 x 18mm	5 x 12mm	✔	✔	✔	✔	✔	–
BA384G	Field compact	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA384E	Field - separate terminal compartment	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
BA388E	Panel 144 x 72	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
Ex nA & Ex tc - for use in Zones 2 and 22 without Zener barriers or galvanic isolators											
BA334NG	Field compact	Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA337NE	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
BA384NG	Field compact	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA354NE	Field - separate terminal compartment	4/20mA	Loop	8 x 18mm	6 x 12mm	✔	✔	✔	✔	–	–
General Purpose - for use in safe areas											
BA534G	Field compact	Pulse	External	8 x 18mm	6 x 12mm						
BA537E	Panel 96 x 48	Pulse	External	8 x 9mm	6 x 6mm						
BA537E-SS	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm						
BA538E	Panel 144 x 72	Pulse	External	8 x 18mm	6 x 12mm						
BA554E	Field - separate terminal compartment	4/20mA	Loop	8 x 18mm	5 x 12mm						
BA558E	Panel 144 x 72	4/20mA	Loop	8 x 18mm	5 x 12mm						
BA584G	Field compact	2 x Pulse	External	8 x 18mm	6 x 12mm						
BA588E	Panel 144 x 72	2 x Pulse	External	8 x 18mm	6 x 12mm						

** Certification allows installation in an Ex e or Ex p panel enclosure without invalidating enclosure certification*

Counters
Counter and position indicator

New one and two input, easy to use externally powered counters which can display total, rate and position in engineering units from a wide variety of sensors.

- General purpose, intrinsically safe & Zone 2 internationally certified instruments.
- IP66 panel and field mounting instruments
- Rugged stainless steel panel mounting model certified for installation in Ex e, Ex n, Ex p and Ex t enclosures.
- May be used with voltage, switch, open collector, magnetic pick-off or proximity detector sensors.
- Two input models can display sum or difference of inputs, or decode a quadrature encoder.
- Optional backlight, isolated alarms, pulse and 4/20mA outputs.
- Pulse output is synchronous with input pulse for retransmission.



Models available

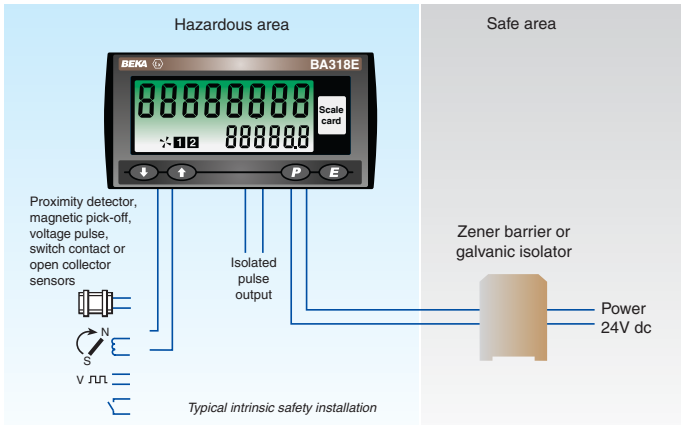
Model No.	Mounting	Input	Powered	Display digits		Certification					
						Europe ATEX		International IECEx		USA & Canada	
				TOTAL No. x height	RATE No. x height	Gas	Dust	Gas	Dust	Gas	Dust
Ex i intrinsically safe - for use in Zones 0, 1 & 2 and 20, 21 & 22 where certified											
BA364G	Field compact	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA364E	Field - separate terminal compartment	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
BA367E	Panel 96 x 48	Pulse	External	8 x 9mm	6 x 6mm	✔	–	✔	–	✔	✔
BA367E-SS*	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
BA368E	Panel 144 x 72	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
Ex nA & Ex tc - for use in Zones 2 and 22 without Zener barriers or galvanic isolators											
BA364NG	Field compact	2 x Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA367NE	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
General Purpose - for use in safe areas											
BA564G	Field compact	2 x Pulse	External	8 x 18mm	6 x 12mm						
BA567E	Panel 96 x 48	Pulse	External	8 x 9mm	6 x 6mm						
BA567E-SS	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm						
BA568E	Panel 144 x 72	2 x Pulse	External	8 x 18mm	6 x 12mm						

** Certification allows installation in an Ex e or Ex p panel enclosure without invalidating enclosure certification*

Tachometers
Speed and hours run indication

New easy to configure, externally powered instruments that measure and display speed in engineering units from a wide range of sensors. To assist with maintenance all models include a run-time display.

- > General purpose, intrinsically safe & Zone 2 internationally certified instruments.
- > IP66 panel and field mounting models
- > Rugged stainless steel panel mounting model certified for installation in Ex e, Ex n, Ex p and Ex t enclosures.
- > May be used with voltage, switch, open collector or proximity detector sensors.
- > Optional backlight, isolated alarms, pulse and 4/20mA outputs.
- > Synchronous isolated pulse output for retransmission.



Typical intrinsic safety installation

Models available

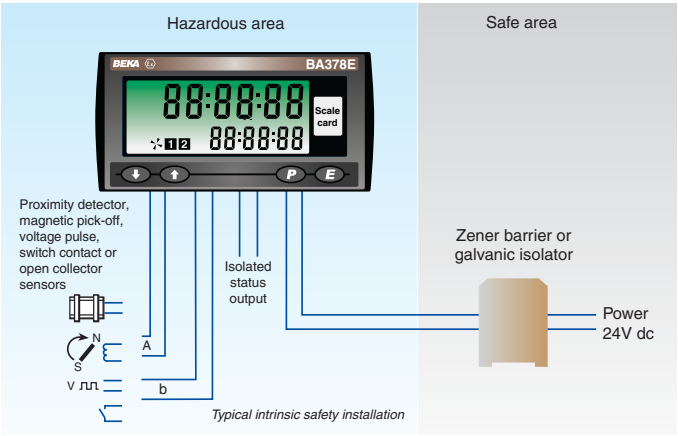
Model No.	Mounting	Input	Powered	Display digits		Certification					
				SPEED No. x height	RUN-TIME No. x height	Europe ATEX		International IECEx		USA & Canada	
						Gas	Dust	Gas	Dust	Gas	Dust
Ex i intrinsically safe - for use in Zones 0, 1 & 2 and 20, 21 & 22 where certified											
BA314G	Field compact	Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA314E	Field - separate terminal compartment	Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
BA317E	Panel 96 x 48	Pulse	External	8 x 9mm	6 x 6mm	✔	–	✔	–	✔	✔
BA317E-SS*	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
BA318E	Panel 144 x 72	Pulse	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
Ex nA & Ex tc - for use in Zones 2 and 22 without Zener barriers or galvanic isolators											
BA314NG	Field compact	Pulse	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA317NE	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
General Purpose - for use in safe areas											
BA514G	Field compact	Pulse	External	8 x 18mm	6 x 12mm						
BA517E	Panel 96 x 48	Pulse	External	8 x 9mm	6 x 6mm						
BA517E-SS	Panel Rugged 105 x 60	Pulse	External	8 x 9mm	6 x 6mm						
BA518E	Panel 144 x 72	Pulse	External	8 x 18mm	6 x 12mm						

** Certification allows installation in an Ex e or Ex p panel enclosure without invalidating enclosure certification*

Timers or clocks
Time based indicators

New one and two input externally powered instruments that can be easily configured as a Timer or as a Clock. As a Timer, they can measure the elapsed time between events or control events with the versatile easy to use state and event structure. As a Clock, local time can be displayed with 4 optional configurable outputs every 24 hours.

- > General purpose, intrinsically safe & Zone 2 internationally certified instruments.
- > IP66 panel and field mounting models
- > Rugged stainless steel panel mounting model certified for installation in Ex e, Ex n, Ex p and Ex t enclosures.
- > May be used with voltage, switch, open collector or proximity detector sensors.
- > One and two input models



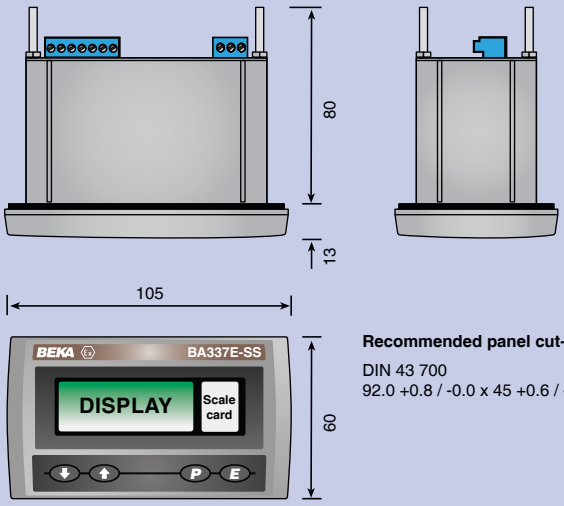
Models available

Model No.	Mounting	Input	Powered	Display digits		Certification					
				PRIMARY No. x height	SECONDARY No. x height	Europe ATEX		International IECEx		USA & Canada	
						Gas	Dust	Gas	Dust	Gas	Dust
Ex i intrinsically safe - for use in Zones 0, 1 & 2 and 20, 21 & 22 where certified											
BA374G	Field compact	2 x Sensors	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA374E	Field - separate terminal compartment	2 x Sensors	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
BA377E	Panel 96 x 48	Sensors	External	8 x 9mm	6 x 6mm	✔	–	✔	–	✔	✔
BA377E-SS*	Panel Rugged 105 x 60	Sensors	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
BA378E	Panel 144 x 72	2 x Sensors	External	8 x 18mm	6 x 12mm	✔	–	✔	–	✔	✔
Ex nA & Ex tc - for use in Zones 2 and 22 without Zener barriers or galvanic isolators											
BA374NG	Field compact	2 x Sensors	External	8 x 18mm	6 x 12mm	✔	✔	✔	✔	✔	✔
BA377NE	Panel Rugged 105 x 60	Sensors	External	8 x 9mm	6 x 6mm	✔	✔	✔	✔	✔	✔
General Purpose - for use in safe areas											
BA574G	Field compact	2 x Sensors	External	8 x 18mm	6 x 12mm						
BA577E	Panel 96 x 48	Sensors	External	8 x 9mm	6 x 6mm						
BA577E-SS	Panel Rugged 105 x 60	Sensors	External	8 x 9mm	6 x 6mm						
BA578E	Panel 144 x 72	2 x Pulse	External	8 x 18mm	6 x 12mm						

** Certification allows installation in an Ex e or Ex p panel enclosure without invalidating enclosure certification*

Dimensions

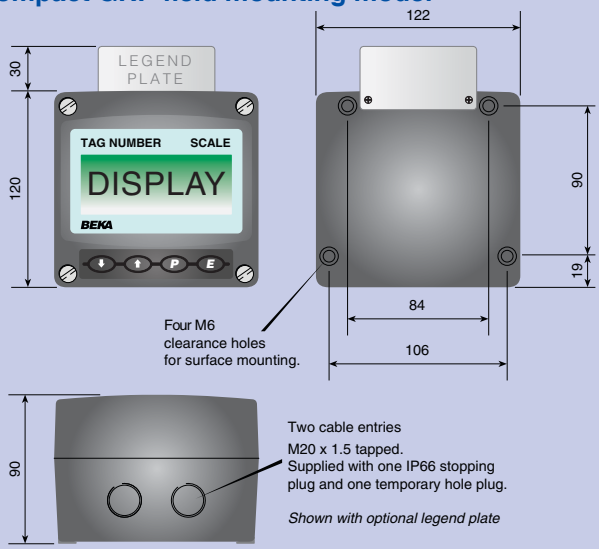
Rugged stainless steel panel mounting model



Recommended panel cut-out

DIN 43 700
92.0 +0.8 / -0.0 x 45 +0.6 / -0.0

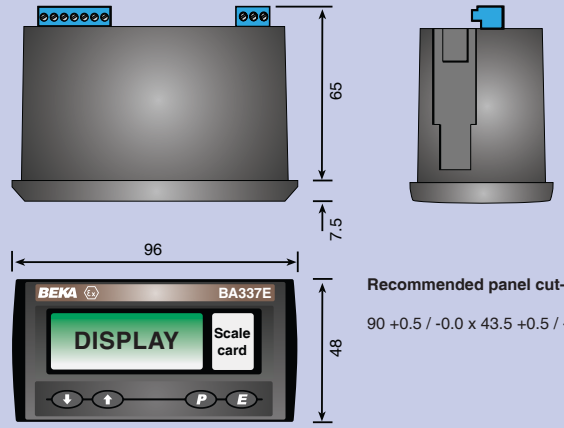
Compact GRP field mounting model



Two cable entries
M20 x 1.5 tapped.
Supplied with one IP66 stopping plug and one temporary hole plug.

Shown with optional legend plate

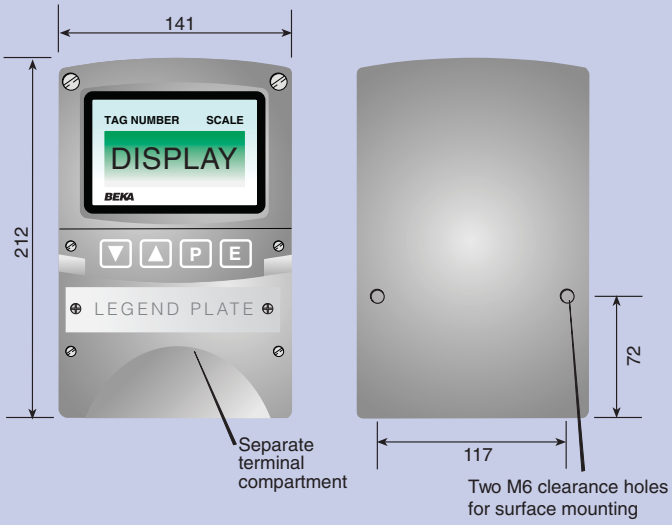
96 x 48 panel mounting model

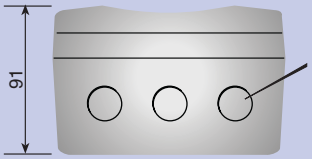


Recommended panel cut-out

90 +0.5 / -0.0 x 43.5 +0.5 / -0.0

GRP Field mounting model (separate terminal compartment)

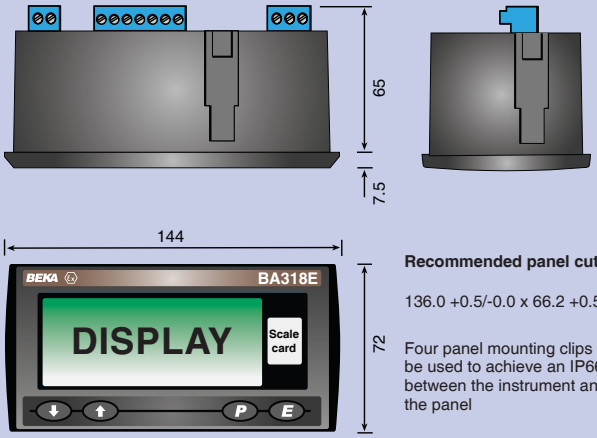




Three cable entries
M20 x 1.5 tapped.
Supplied with two IP66 stopping plugs and one temporary hole plug.

Shown with optional legend plate

144 x 72 panel mounting model



Recommended panel cut-out

136.0 +0.5/-0.0 x 66.2 +0.5/-0.0

Four panel mounting clips must be used to achieve an IP66 seal between the instrument and the panel

Panel mounting models have a slide-in scale card which can be changed without removing the instrument from the panel. (below)

All 'G' suffix field mounting instruments have a slide-in scale card showing units of measurement and tagging. (below)

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