

Intrinsically Safe and General Purpose

**4/20mA**

# **Loop powered Digital Indicators**



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- > Large high contrast displays with a wide viewing angle
- > Applications for:
  - Intrinsically safe Ex ia
  - Increased safety Ex eb Zone 1 & 2
  - Type Ex ec Zone 2
  - General purpose
- > Robust GRP and Stainless Steel enclosures, including Stainless Steel panel mounting models.
- > Combined analogue and digital display indicators
- > IP66 field and panel mounting instruments
- > Internal calibrator, root extractor, lineariser & tare function

# Field Mounting

## 4/20mA Loop Powered Digital Indicators



Ex i Intrinsically Safe

Ex eb Increased Safety

Ex d Flameproof

General Purpose

An extensive range of 4/20mA loop powered field mounting indicators in GRP and 316 stainless steel enclosures.

> **Large high contrast displays with a wide viewing angle**

> **General purpose and certified hazardous area models**

International Ex ia gas and dust intrinsic safety,  
Ex eb increased safety and Ex t dust ignition  
protection certification.

> **Robust impact resistant GRP and 316 stainless steel IP66 enclosures**

> **Internal calibrator, root extractor, lineariser & tare function**

> **-40 to +70°C operating temperature range**

> **Accessories**

Dual isolated alarms

Display backlight may be loop or separately powered

Pipe & panel mounting kits

Scale cards - can be supplied printed with units of measurement  
and tag information for no additional charge.

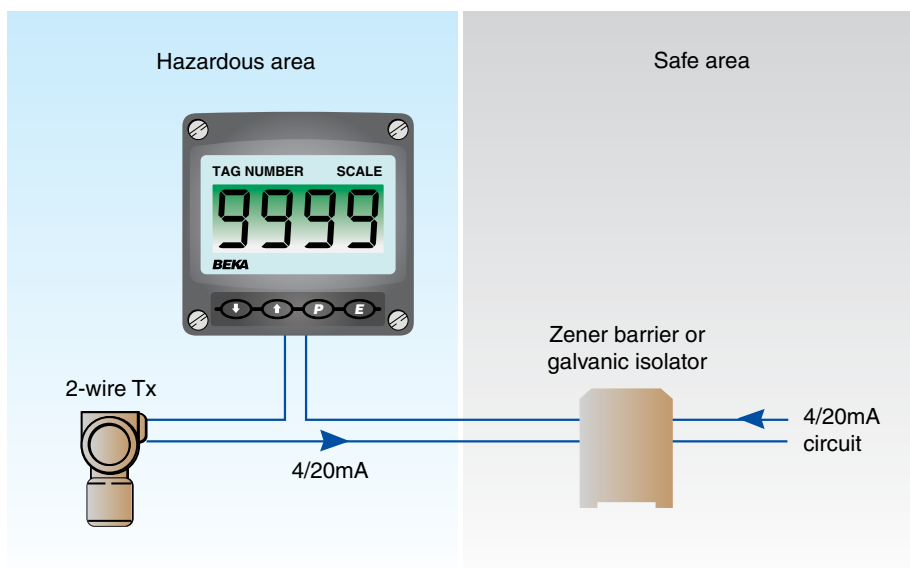
Laser engraved stainless steel legend plates



Slide-in scale card can be supplied printed with customer specified information for no extra charge.



'G' instrument panel mounted using BA494G panel mounting kit.



'G' instrument attached to pipe using BA393G panel mounted kit.

An **indicator** for every **application** -  
delivered ready for **installation**



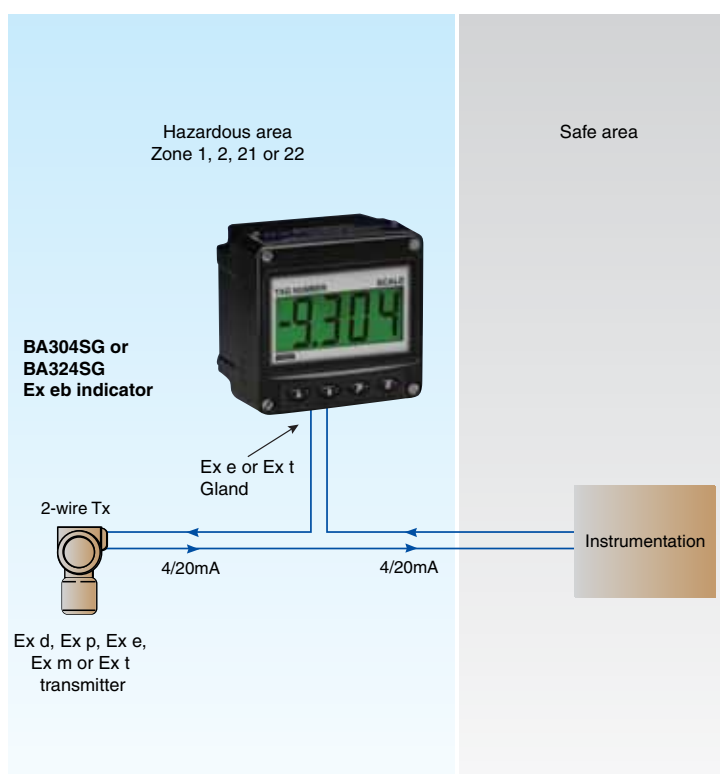
#### Models available

Model No.	Enclosure	Display				Certification					
		Digits		Bargraph		Europe/UK ATEX/UKEX		International IECEx		USA & Canada	
		Number	Height	Segments	Length	Gas	Dust	Gas	Dust	Gas	Dust
Ex ia intrinsically safe - for use in Zones 0, 1 & 2 and 21 & 22											
BA304G ▲	GRP Compact	4	34mm	—	—	✓	✓	✓	✓	✓	✓
BA304G-SS ▲	Stainless Steel	4	34mm	—	—	✓	✓	✓	✓	✓	✓
BA324G ▲	GRP Compact	5	29mm	31	83mm	✓	✓	✓	✓	✓	✓
BA324G-SS ▲	Stainless Steel	5	29mm	31	83mm	✓	✓	✓	✓	✓	✓
Ex eb ib mb & Ex ib mb tb for use in Zones 1 and 2, 21 and 22 without Zener barriers or galvanic isolators											
BA304SG	GRP Compact	4	34mm	—	—	✓	✓	✓	✓	—	—
BA324SG	GRP Compact	5	29mm	31	83	✓	✓	✓	✓	—	—
Ex d & Ex td Flameproof for use in Zones 1, 2, 21 and 22											
BR323AL	Aluminium	5	10mm	—	—	✓	✓	—	—	—	—
BR323SS	Stainless Steel	5	10mm	—	—	✓	✓	—	—	—	—
General Purpose - for use in safe areas											
BA504G	GRP Compact	4	34mm	—	—						
BA504G-SS	Stainless Steel	4	34mm	—	—						
BA524G	GRP Compact	5	29mm	31	83mm						
BA524G-SS	Stainless Steel	5	29mm	31	83mm						

CCC Ex certified

## Ex eb alternative to flameproof Ex d indicators

- > Less expensive
- > Large easier to read displays
- > Zener barriers or galvanic isolators not required.
- > Gas and dust certification



# Panel Mounting

## 4/20mA Loop Powered Digital Indicators



**Intrinsically safe**

**Ex nA**

**General purpose**

An extensive range of panel mounting 4/20mA loop powered indicators in Noryl or rugged 316 stainless steel enclosures.

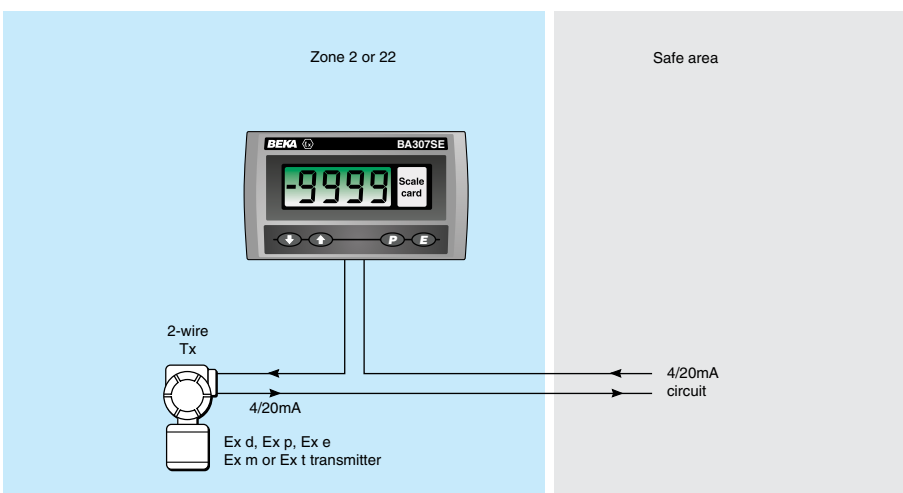
- > **Large high contrast displays with a wide viewing angle**
- > **General purpose and certified hazardous area models**  
International Ex ia intrinsic safety and Ex ec increased safety certification.
- > **Rugged stainless steel Ex ia models**  
May be installed in certified Ex e, Ex p or Ex t panel enclosure without invalidating the enclosure's certification.
- > **Combined analogue and digital display indicators**
- > **IP66 front panels**
- > **Internal calibrator, root extractor, lineariser & tare function**
- > **-40 to +70°C operating temperature range**
- > **Accessories**
  - Dual isolated alarms
  - Display backlight may be loop or separately powered
  - Scale card - *can be supplied printed with units of measurement and tag information for no additional charge.*
  - BA495 rear IP66 sealing kit



*Gasket provides IP66 seal to panel*



*Sturdy panel clamps supplied with unit*



*Easy scale card installation without the need to remove indicator from the panel.*



An **indicator** for every **application** -  
delivered ready for **installation**



#### Models available

Model No.	Enclosure	Display				Certification					
		Digits		Bargraph		Europe/UK ATEX/UKEX		International IECEx		USA & Canada	
		Number	Height	Segments	Length	Gas	Dust	Gas	Dust	Gas	Dust

#### Ex ia intrinsically safe - for use in Zones 0, 1 & 2 and 21 & 22

BA304G-SS-PM* ▲	Rugged 120 x 122	4	34mm	—	—	✓	✓	✓	✓	—	—
BA324G-SS-PM* ▲	Rugged 120 x 122	5	29mm	31	83mm	✓	✓	✓	✓	—	—
BA307E ▲	96 x 48	4	15mm	—	—	✓	✓	✓	✓	✓	—
BA308E ▲	144 x 72	4	34mm	—	—	✓	✓	✓	✓	✓	—
BA327E ▲	96 x 48	5	11mm	31	44mm	✓	✓	✓	✓	✓	—
BA328E ▲	144 x 72	5	29mm	31	83mm	✓	✓	✓	✓	✓	—
BA326C	144 x 48 Combined	4½	5.5mm	100	95mm	✓	—	✓	—	—	—
BA307E-SS*	Rugged 105 x 60	4	15mm	—	—	✓	✓	✓	✓	✓	—
BA327E-SS*	Rugged 105 x 60	5	11mm	31	44mm	✓	✓	✓	✓	✓	—

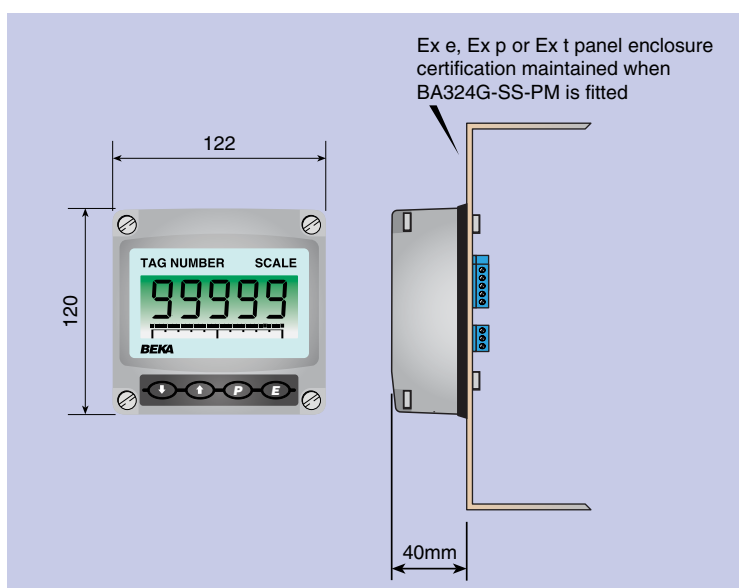
\* Certification allows installation in an Ex e, or Ex p or Ex t panel enclosure without invalidating enclosure certification

#### Ex ec & Ex tc - for use in Zones 2 and 22 without Zener barriers or galvanic isolators

BA307SE	Rugged 105 x 60	4	15mm	—	—	✓	✓	✓	✓	—	—
BA327SE	Rugged 105 x 60	5	11mm	31	44mm	✓	✓	✓	✓	—	—

#### General Purpose - for use in safe areas

BA504G-SS-PM	Rugged 120 x 122	4	34mm	—	—						
BA524G-SS-PM	Rugged 120 x 122	5	29mm	31	83mm						
BA507E	96 x 48	4	15mm	—	—						
BA508E	144 x 72	4	34mm	—	—						
BA527E	96 x 48	5	11mm	31	44mm						
BA528E	144 x 72	5	29mm	31	83mm						
BA526C	144 x 48 Combined	4½	5.5mm	100	95mm						
BA507E-SS	Rugged 105 x 60	4	15mm	—	—						
BA527E-SS	Rugged 105 x 60	5	11mm	31	44mm						



Rugged indicator maintains panel enclosure's impact and ingress protection and does not invalidate its certification.

# Accessories

## for FIELD mounting instruments

BEKA field mounting instruments are housed in one of three enclosures, each with a range of mounting and marking accessories.

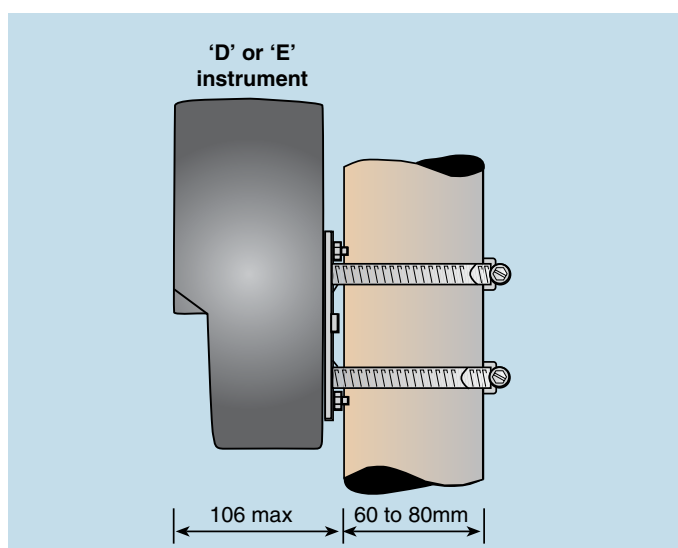
Model numbers with a 'D' or 'E' suffix  
Model numbers with a 'G' suffix  
Model numbers with a 'G-SS' suffix

IP66 GRP enclosure with separate terminal compartment  
IP66 compact GRP enclosure  
IP66 compact 316 stainless steel enclosure

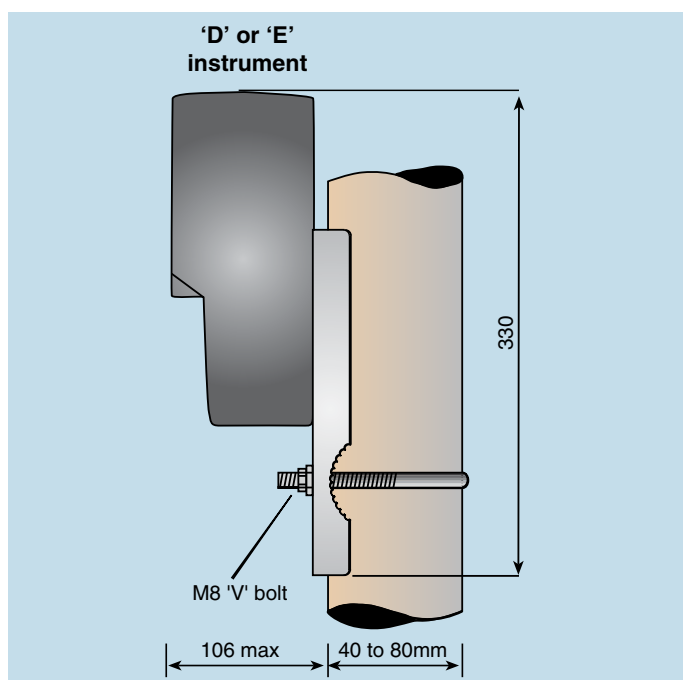
### 'D' and 'E' Instruments

#### PIPE MOUNTING KITS

**BA392D Standard duty** 316 stainless steel bracket secured by two stainless steel worm drive hose clips which attach instrument to any 60 to 80mm outside diameter vertical or horizontal pipe. Usually suitable for clamping to a 2 inch internal diameter metal pipe.



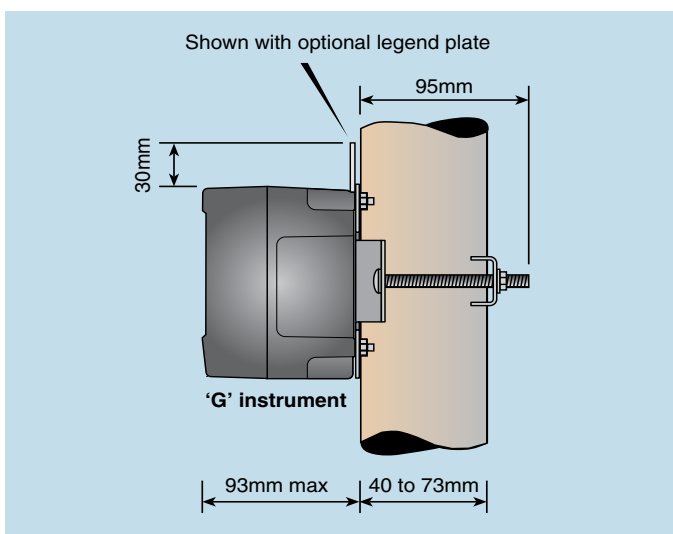
**BA393 Heavy duty** 316 stainless steel pipe mounting bracket using a single 'V' bolt which attaches instrument to any vertical or horizontal pipe with an outside diameter between 40 and 80mm. Will also support BEx series flameproof sounders and beacons.



### 'G' and 'G-SS' Instruments

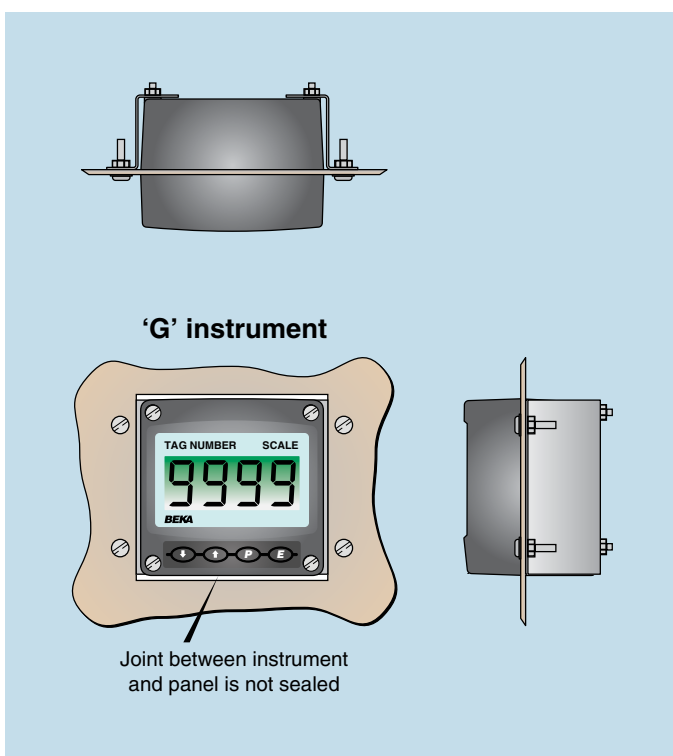
#### PIPE MOUNTING KIT

**BA393G 316 stainless steel** pipe mounting bracket attaches 'G' instruments to any vertical or horizontal pipe with an outside diameter between 40 and 73mm.

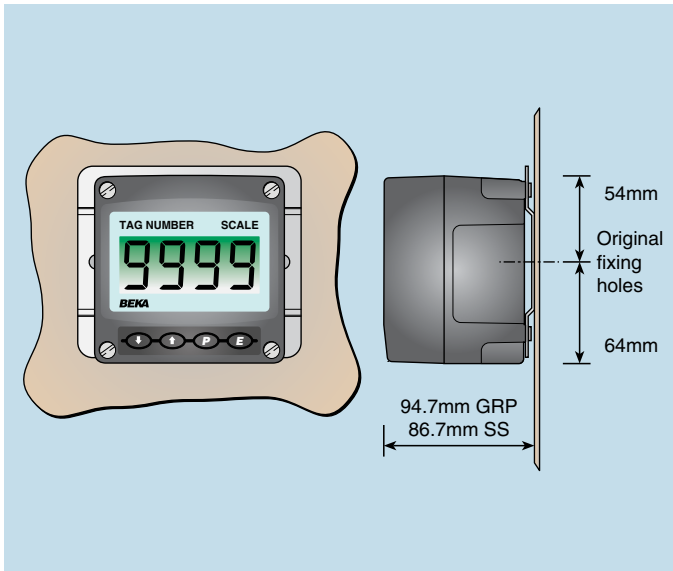


#### PANEL MOUNTING KIT

**BA394G 316 stainless steel** panel mounting kit secures a GRP or stainless steel 'G' instrument in a panel aperture but does not seal the assembly.



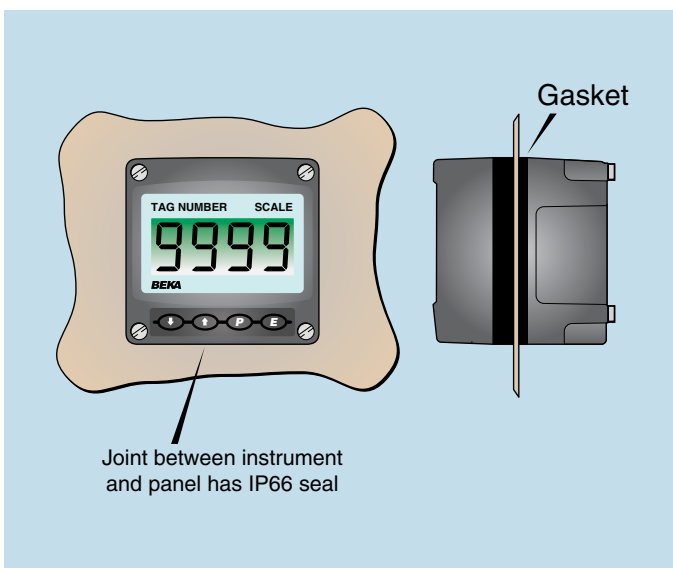
## BA496G SURFACE MOUNTING KIT



The **BA496G surface mounting kit** enables a BEKA 'G' GRP or Stainless Steel field instrument to replace a surface mounting BEKA 'E' or 'D' field mounting instrument using the existing surface mounting holes.

### BA494G sealing panel mounting kits

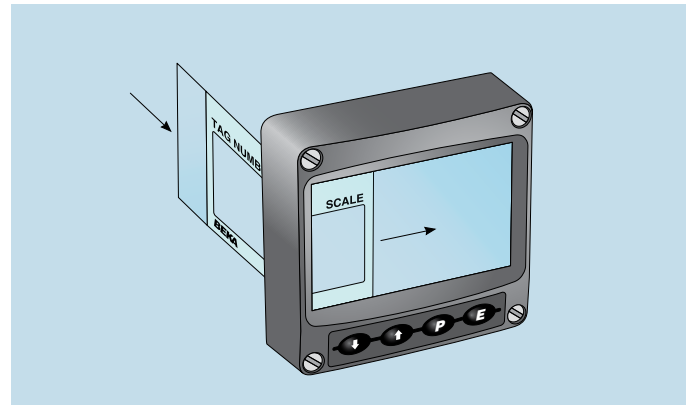
Secures 'G' instrument in a panel aperture and seals the panel.



**BA494G** for a GRP enclosure

**BA494G-SS** for a stainless steel enclosure.

## SLIDE IN SCALE CARD



All 'G' suffix field and panel mounting instruments have a slide-in scale card which can accommodate scale and tag marking. If requested the instrument can be supplied with the scale card printed to show customer specified units of measurement, tag and application information.

## EXTERNAL STAINLESS STEEL LEGEND PLATE

For customers requiring traditional labelling, 'G' instruments can be supplied with a laser etched stainless steel legend plate showing customer specified information.



*'G' instrument panel mounted using BA494G panel mounting kit*

# Accessories

## for PANEL mounting instruments

### 'E' suffix, Rugged and A90 meters

#### SLIDE IN SCALE CARD

A slide-in scale card can be fitted without removing the instrument from the panel or opening the instrument enclosure. A customer specified scale card is a no cost accessory when an 'E' or Advisor instrument is ordered. A pack of 30 scale cards pre-printed with common legends is available for on-site configuration.



*Scale card for 'E' suffix instruments is inserted from the rear of the instrument.*

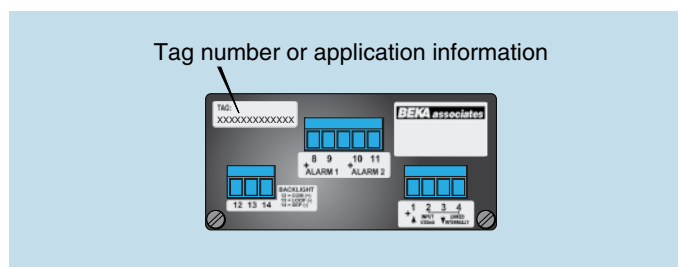
%	%RH	°C	°F	A
bar	barg	FT	FT-LBS	gal
in.wg	kg	kg/h	kPa	Litres

L/h	L/min	L/s	m³/h	mbar
mbarg	Pa	pH	psi	rpm
SPM	t/h	tonnes		

*Pre-printed scale cards*

#### TAG NUMBER

Customer specified tag number or application information can be thermally printed or laser etched onto the instrument rear panel adjacent to the terminals.

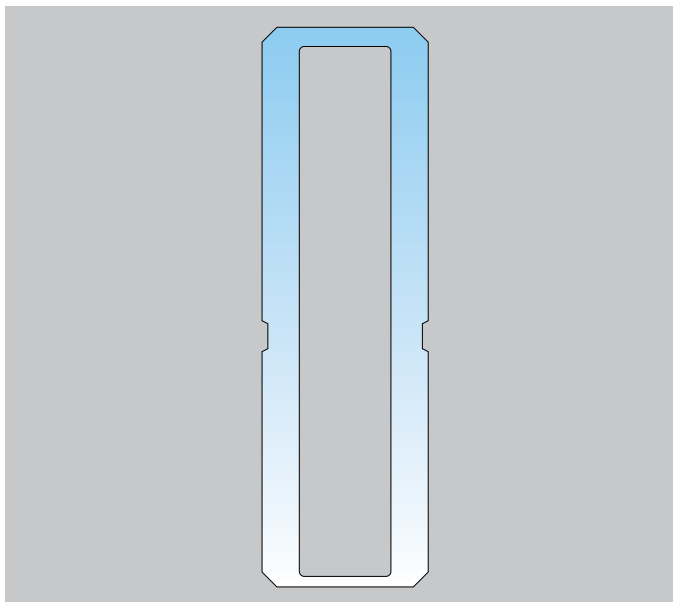


*Tag number or application printed on rear panel of instrument.*

### BA326C and BA526C Combined Indicators

#### SCALE CARD

The factory fitted internal scale card can be printed with a customer specified scale for the analogue bargraph and with the units of measurement for the digital display.



*Scale card can be printed with customer specified bargraph scale and units of measurement.*

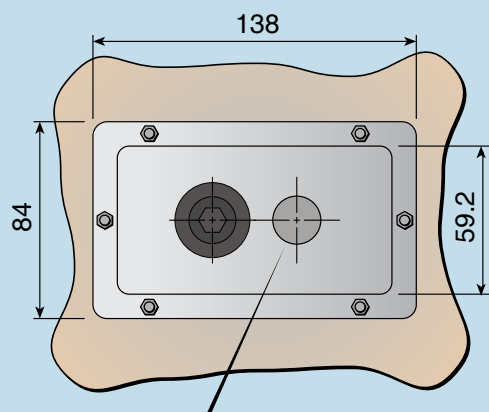
All instruments can typically accommodate up to 2 rows of 18 characters



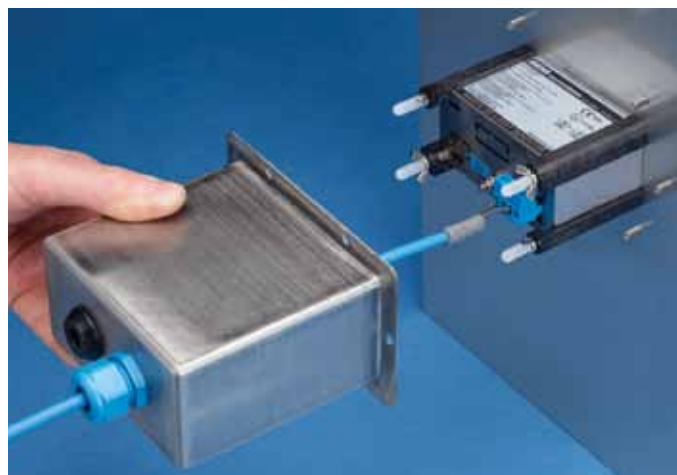
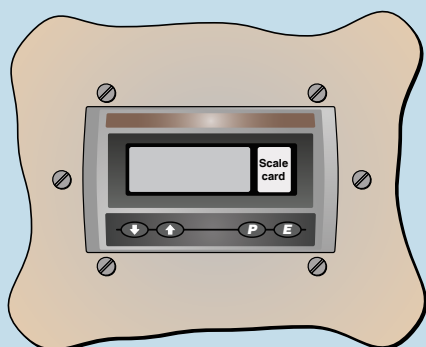
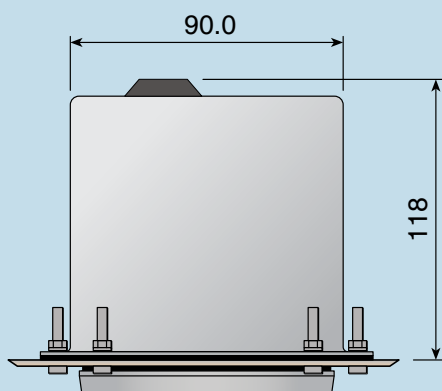
## For 96 x 48mm, Rugged 'E' suffix and A90 panel meters

### REAR COVER AND SEALING KIT

The BA495 rear cover and sealing kit provides impact and IP66 ingress protection for a single 96 x 48mm or a 105 x 60mm rugged instrument. The 316 stainless steel rear cover has two M20 cable entries, one fitted with a blanking plug. *Note: cannot be used with stainless steel support plate.*



2 M20 entries, 1 fitted with blanking plug



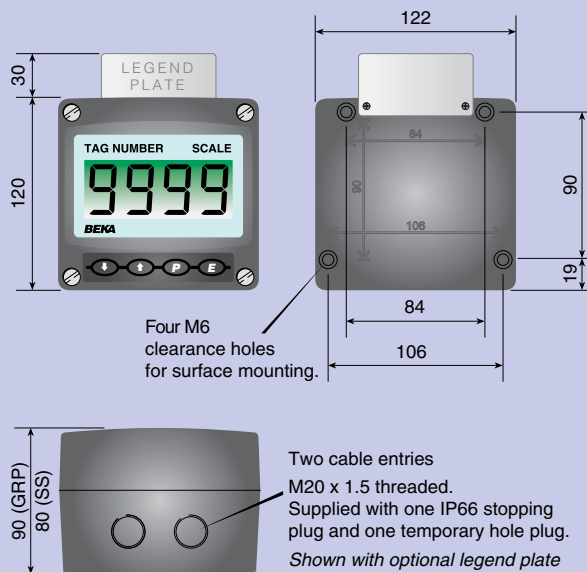
BA495 rear IP66 sealing kit



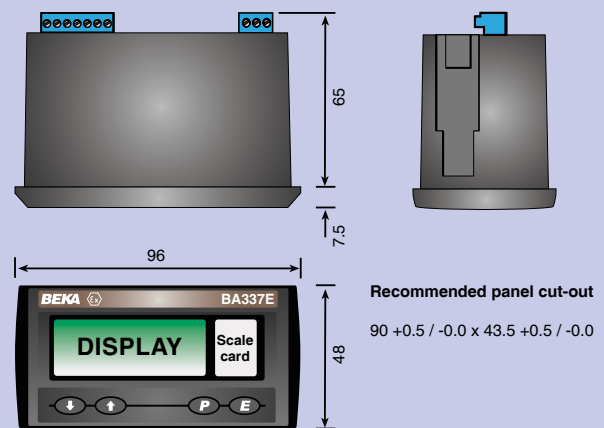
Gasket provides IP66 seal to panel

# Dimensions

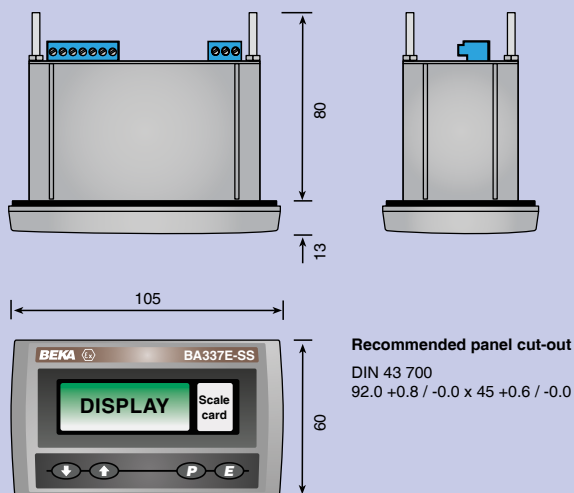
## Compact GRP and SS field mounting model



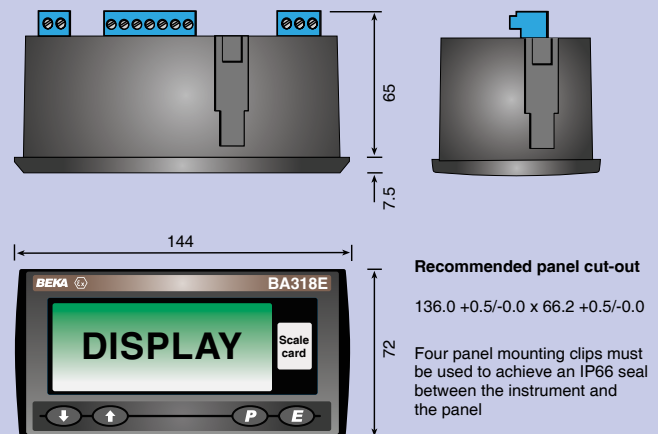
## 96 x 48 panel mounting model



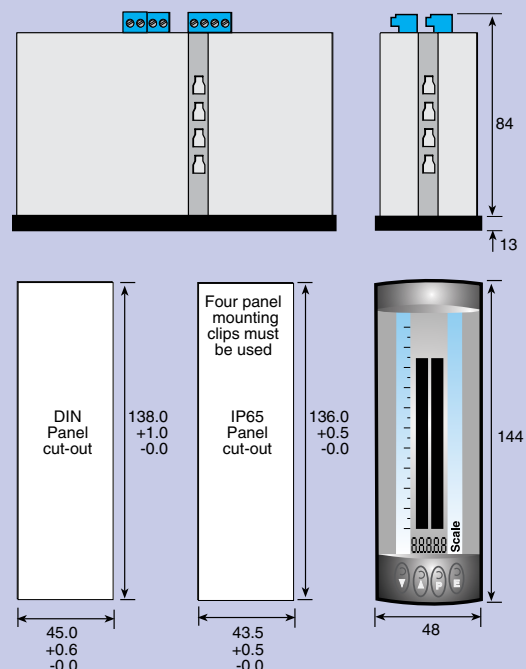
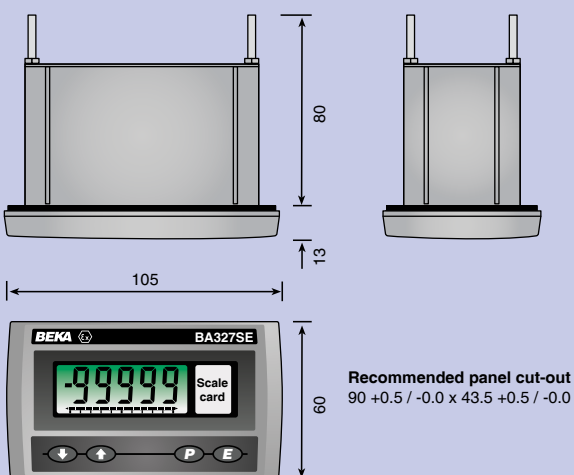
## Rugged stainless steel panel mounting Ex ia models



## 144 x 72 panel mounting model



## Rugged stainless steel panel mounting Ex e, Ex tc models



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