USA & Canadian Certified
Product Summary

Display instrumentation
for use in **hazardous**
and **safe areas**

- Loop Powered Indicators
- Panel Meters
- Set Point [Generators]
- Rate Totalizers
- Counters
- Tachometers
- Timers or Clocks
- Modbus Displays
- Fieldbus Indicators & Displays
- Flow Batch Controllers
- Indicating Temperature Transmitters
- Sounders & Beacons
- LED Cluster Lamps

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

BEKA associates

FM APPROVED · ETL Intertek · Ex · IEC IECEx · FieldComm Group MEMBER · PROFIBUS

Field Mounting
4/20mA Loop Powered Digital Indicators

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

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**
>   Div 1, Div 2 and AEx certified

> **Robust impact resistant GRP and 316 stainless steel IP66 enclosures (Similar to NEMA 4X)**
>   Compact 'G' models with GRP or stainless steel enclosure
>   'E' models with separate terminal compartment

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

> **-40°F to +158°F (-40°C 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.*
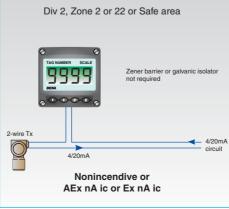>   Laser engraved stainless steel legend plates

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

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

Div 1, Zone 1, 21	Safe area

2-wire Tx

Zener barrier or galvanic isolator

4/20mA

4/20mA circuit

Intrinsically Safe

Div 2, Zone 2 or 22 or Safe area

Zener barrier or galvanic isolator not required

2-wire Tx

4/20mA

4/20mA circuit

Nonincendive or AEx nA ic or Ex nA ic

Zone 1 or 21

Zener barrier or galvanic isolator not required

2-wire Tx

4/20mA

4/20mA circuit

Ex eb mb ib or Ex ib mb tb

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

Model No.	Digits		North America Class I Division		North America Class II Division		North America Class III Division		North America Gas Zone Class 1			North America Dust Zone Class 1			ATEX/IECEx Gas Zone			ATEX/IECEx Dust Zone			General purpose
	No.	Height	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
GRP ENCLOSURE, COMPACT																					
BA304G	4	1.34" (34mm)	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	–
BA324G	5	1.14" (29mm)	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	–
BA304NG*	4	1.34" (34mm)	–	–	–	–	–	–	–	–	nA	–	–	ic	–	–	nA	–	–	ic	–
BA324NG*	5	1.14" (29mm)	–	–	–	–	–	–	–	–	nA	–	–	ic	–	–	nA	–	–	ic	–
BA304SG	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	eb	eb	–	tb	tb	–
BA324SG	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	eb	eb	–	–	tb	–
BA504G	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA524G	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

*To be discontinued by 31-Dec-21 use **BA304SG** or **BA324SG**

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia
nA = AEx or Ex nA ic
ic = AEx or Ex ic tc

eb = Ex eb mb ib
tb = Ex ib mb tb

Model No.	Digits		Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
STAINLESS STEEL ENCLOSURE, COMPACT																					
BA304G-SS	4	1.34" (34mm)	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	–
BA324G-SS	5	1.14" (29mm)	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	–
BA504G-SS	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA524G-SS	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

Model No.	Digits		Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
GRP ENCLOSURE, SEPARATE TERMINAL COMPARTMENT																					
BA304E	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	–	–	–	–
BA304E-D*	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	ia	ia	ia	–
BA304E-FM	4	1.34" (34mm)	IS	NI	IS	NI	IS	NI	–	–	–	–	–	–	ia	ia	ia	–	–	–	–
BA324E	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	–	–	–	–
BA324E-D*	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	ia	ia	ia	–
BA324E-FM	5	1.14" (29mm)	IS	NI	IS	NI	IS	NI	–	–	–	–	–	–	ia	ia	ia	–	–	–	–
BA304NE*	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	nA	–	–	tc	–
BA324NE*	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	nA	–	–	tc	–
BA504E	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA524E	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

*D = Dust
*To be discontinued by 31-Dec-21 use **BA304SG** or **BA324SG**

IS = Intrinsically Safe
NI = Nonincendive

ia = Ex ia
nA = Ex nA ic
tc = Ex tc

Model No.	Digits		Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
ROUND ALUMINIUM OR STAINLESS STEEL FLAMEPROOF HOUSING																					
BR323AL	5	0.39" (10mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	d	d	–	d	d	–
BR323SS	5	0.39" (10mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	d	d	–	d	d	–

d = Ex d

Panel Mounting
4/20mA Loop Powered Digital Indicators

Gasket provides IP66 seal to panel

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**
>   Div 1, Div 2 and AEx certified

> **Rugged stainless steel models**

> **Combined analogue and digital display indicators**

> **IP66 front panels (Similar to NEMA 4X)**

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

> **-40°F to +158°F (-40°C to +70°C) operating temperature range**
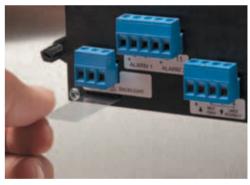
> **Accessories**
>   Dual isolated alarms
>   Display backlight may be loop or separately powered
>   Scale card - *can be supplied printed with units of measurement and tag information for no additional charge.*
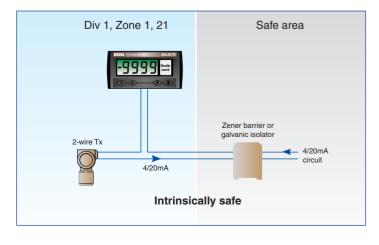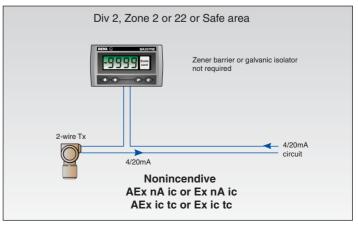>   BA495 rear IP66 sealing kit

Sturdy panel clamps supplied with unit

Easy scale card installation without the need to remove indicator from the panel.
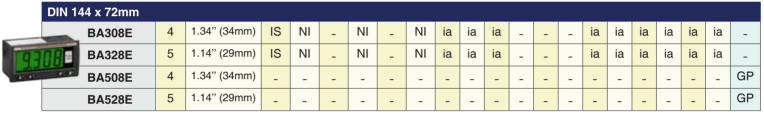
Div 1, Zone 1, 21 | Safe area

2-wire Tx

4/20mA

Zener barrier or galvanic isolator

4/20mA circuit

Intrinsically safe

Div 2, Zone 2 or 22 or Safe area

Zener barrier or galvanic isolator not required

2-wire Tx

4/20mA

4/20mA circuit

**Nonincendive
AEx nA ic or Ex nA ic
AEx ic tc or Ex ic tc**

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

FM APPROVED (c us) | Ex (ATEX) | IEC IECEx

Model No.	Digits No.	Height	Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III Div 1	Class III Div 2	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	General purpose
1/8 DIN 96 x 48mm																					
BA307E	4	0.59" (15mm)	IS	NI	–	NI	–	NI	ia	ia	ia	–	–	–	ia	ia	ia	ia	ia	ia	–
BA327E	5	0.43" (11mm)	IS	NI	–	NI	–	NI	ia	ia	ia	–	–	–	ia	ia	ia	ia	ia	ia	–
BA507E	4	0.59" (15mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA527E	5	0.43" (11mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = AEx ia   ia = Ex ia

Model No.	Digits No.	Height	Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III Div 1	Class III Div 2	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	General purpose
DIN 144 x 72mm																					
BA308E	4	1.34" (34mm)	IS	NI	–	NI	–	NI	ia	ia	ia	–	–	–	ia	ia	ia	ia	ia	ia	–
BA328E	5	1.14" (29mm)	IS	NI	–	NI	–	NI	ia	ia	ia	–	–	–	ia	ia	ia	ia	ia	ia	–
BA508E	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA528E	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = AEx ia   ia = Ex ia

Model No.	Digits No.	Height	Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III Div 1	Class III Div 2	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	General purpose
STAINLESS STEEL ENCLOSURE, RUGGED 105mm x 60mm																					
BA307E-SS	4	0.59" (15mm)	IS	NI	–	–	–	NI	ia	ia	ia	–	–	–	ia	ia	ia	ia	ia	ia	–
BA327E-SS	5	0.43" (11mm)	IS	NI	–	–	–	NI	ia	ia	ia	–	–	–	ia	ia	ia	ia	ia	ia	–
BA307NE*	4	0.59" (15mm)	–	–	–	–	–	–	–	–	nA	–	–	ic	–	–	nA	–	–	ic	–
BA327NE*	5	0.43" (11mm)	–	–	–	–	–	–	–	–	nA	–	–	ic	–	–	nA	–	–	ic	–
BA507E-SS	4	0.59" (15mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA527E-SS	5	0.43" (11mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

*Design change by 2022

IS = Intrinsically Safe
NI = Nonincendive
ia = Ex ia
nA = AEx or Ex nA ic
ic = AEx or Ex ic tc

Model No.	Digits No.	Height	Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III Div 1	Class III Div 2	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	General purpose
DIN 48 x 144mm Combined Analog & Digital Indicator, 100 Segment Bargraph																					
BA326C	4.5	0.22" (5.5mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	–	–	–	–
BA526C	4.5	0.22" (5.5mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

ia = Ex ia

Model No.	Digits No.	Height	Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III Div 1	Class III Div 2	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust Zone 20	Dust Zone 21	Dust Zone 22	General purpose
STAINLESS STEEL ENCLOSURE, RUGGED 122mm x 120mm																					
BA304G-SS-PM	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	ia	ia	ia	–
BA324G-SS-PM	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	ia	ia	ia	–
BA504G-SS-PM	4	1.34" (34mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
BA524G-SS-PM	5	1.14" (29mm)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP

ia = Ex ia

Modbus Displays

Low cost operator interfaces with graphical display, push buttons and switch outputs, for simple display and machine control in hazardous and safe areas.

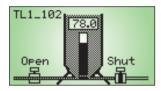## > Applications:

Modbus slave display
view up to 8 variables

ASCII data display
view output from weighing system, RFID reader or any similar device.

Message display
view operator instructions

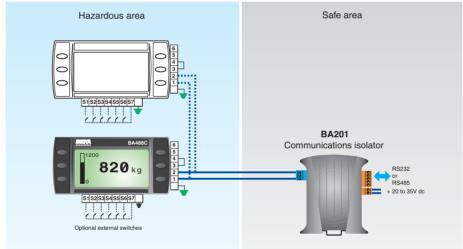> Up to 8 variables shown on 11 standard or custom screens.

> Push buttons status returned to system host.

> 2 isolated software controlled outputs.

> Intrinsically safe models are powered and communicate via BA201 isolator which has RS232 and RS485 ports.

> General purpose models have RS232 or RS485 port.

> Panel & field mounting models

> Free ScreenWriter software and simulator enable control programs and custom screens to be developed on a Windows PC.

FREE simulation and ScreenWriter software

Model No.	Communication	North America						North America						ATEX/IECEx						General purpose
		Class I		Class II		Class III		Gas		Dust				Gas		Dust				
		Division		Division		Division		Zone Class 1						Zone						
		1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
FIELD MOUNTED																				
BA484D	Via BA201 Galvanic Isolator RS232 or RS485	IS	NI	IS	NI	IS	NI	–	–	–	–	–	–	ia	ia	ia	ia	ia	ia	–
BA684D		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
	IS = Intrinsically Safe NI = Nonincendive																*ia = Ex ia*			
PANEL MOUNTED																				
BA488C	Via BA201 Galvanic Isolator RS232 or RS485)	IS	NI	–	–	–	–	–	–	–	–	–	–	ia	ia	ia	–	–	–	–
BA688C		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	GP
	IS = Intrinsically Safe NI = Nonincendive																*ia = Ex ia*			
COMMUNICATION ISOLATOR																				
BA201	Galvanic Isolator	IS	NI	IS	NI	IS	NI	ia	ia	ia	–	–	–	ia	ia	ia	–	–	–	–
	IS = Intrinsically Safe NI = Nonincendive								*ia = AEx ia*							*ia = Ex ia*				

Fieldbus Indicators & Displays

An extensive range of bus powered, single and eight variable Displays, Indicators and Listeners for use with FOUNDATION fieldbus and Profibus PA systems in hazardous or safe areas.

FIELDBUS INDICATORS

5 digit 0.79" high LCD digits with a 31 segment bargraph

> Single variable FOUNDATION fieldbus models
> 8 variable FOUNDATION fieldbus models which can be nodes or listeners.
> 8 variable Profibus PA models which can be nodes or listeners.

FIELDBUS DISPLAYS

Graphical display which can show up to 8 variables

> Models for FOUNDATION fieldbus or Profibus PA applications.
> Choice of 11 standard display screen formats, some with bargraphs.
> Backlight
> Push buttons for operator acknowledgements
> 6 optional outputs

INDICATORS
One variable displayed at a time

FISCO & FNICO compliant

DISPLAYS
Up to eight variables may be displayed at a time
FISCO compliant

Model No.	Variables	Protocol	North America Class I Division		North America Class II Division		North America Class III Division		North America Gas Zone Class 1			North America Dust Zone Class 1			ATEX/IECEx Gas Zone			ATEX/IECEx Dust Zone			General purpose
			1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
FIELD MOUNTED INDICATOR																					
BA414DF	1	FF	IS	NI	IS	NI	IS	NI	-	-	-	-	-	-	ia	ia	ia/c	ia	ia	ia	-
BA444DF	8	FF or Profibus	IS	NI	IS	NI	IS	NI	-	-	-	-	-	-	ia	ia	ia/c	ia	ia	ia	-
BA614DF	1	FF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
BA644DF	8	FF or Profibus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
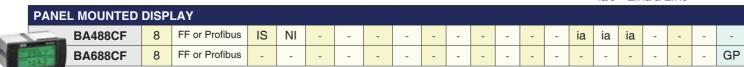
IS = Intrinsically Safe
NI = Nonincendive
ia = Ex ia
ia/c = Ex ia & Ex ic

Model No.	Variables	Protocol	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	GP
FIELD MOUNTED DISPLAY																					
BA484DF	8	FF or Profibus	IS	NI	IS	NI	IS	NI	-	-	-	-	-	-	ia	ia	ia	ia	ia	ia	-
BA684DF	8	FF or Profibus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = Ex ia

Model No.	Variables	Protocol	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	GP
PANEL MOUNTED INDICATOR																					
BA418CF	1	FF	IS	NI	-	-	-	-	-	-	-	-	-	-	ia	ia	ia/c	-	-	-	-
BA448CF	8	FF or Profibus	IS	NI	-	-	-	-	-	-	-	-	-	-	ia	ia	ia/c	-	-	-	-
BA618CF	1	FF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
BA648CF	8	FF or Profibus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = Ex ia
ia/c = Ex ia & Ex ic

Model No.	Variables	Protocol	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	GP
PANEL MOUNTED DISPLAY																					
BA488CF	8	FF or Profibus	IS	NI	-	-	-	-	-	-	-	-	-	-	ia	ia	ia	-	-	-	-
BA688CF	8	FF or Profibus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = Ex ia

Field Mounting
Rate Totalisers

This extensive range includes one and two pulse input instruments and loop powered 4/20mA rate totalisers. All models can display rate of flow and total flow on separate displays in the same or different engineering units. The pulse input instruments will operate with most types of sensor and all models include square root extraction and an adjustable lineariser enabling flow to be displayed in linear engineering units.

> **Large high contrast separate rate and total displays with wide viewing angle**

> **General purpose and certified hazardous area models**
> International Gas & Dust certification

> **Robust impact resistant IP66 GRP enclosures (Similar to NEMA 4X)**
> Compact 'G' models
> 'E' models with separate terminal compartment

> **Isolated pulse output**

> **-40˚F to +158˚F (-40°C to +70°C) operating temperature range**

> **Accessories**
> Dual isolated alarms
> Isolated 4/20mA output
> Backlight
> 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
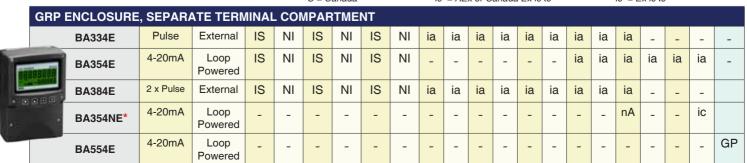
A *Rate Totaliser*
for every *application*. . . . .

Model No.	Input	Powered	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
GRP ENCLOSURE, COMPACT																					
BA334G	Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA384G	2 x Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA334NG*	Pulse	External	-	-	-	C	-	C	-	-	nA	-	-	ic	-	-	nA	-	-	ic	-
BA384NG*	2 x Pulse	External	-	-	-	C	-	C	-	-	nA	-	-	ic	-	-	nA	-	-	ic	-
BA534G	Pulse	External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
BA584G	2 x Pulse	External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA334G** or **BA384G***

IS = Intrinsically Safe
NI = Nonincendive
C = Canada

ia = AEx or Ex ia
nA = AEx or Canada Ex nA ic
ic = AEx or Canada Ex ic tc

ia = Ex ia
nA = Ex nA ic
ic = Ex ic tc

Model No.	Input	Powered	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
GRP ENCLOSURE, SEPARATE TERMINAL COMPARTMENT																					
BA334E	Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	-	-	-	-
BA354E	4-20mA	Loop Powered	IS	NI	IS	NI	IS	NI	-	-	-	-	-	-	ia	ia	ia	ia	ia	ia	-
BA384E	2 x Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	-	-	-	-
BA354NE*	4-20mA	Loop Powered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	nA	-	-	ic	-
BA554E	4-20mA	Loop Powered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA354E***

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

ia = or Ex ia
nA = Ex nA ic
ic = Ex ic tc

Panel Mounting
Rate Totalisers

Includes one and two pulse input instruments and loop powered 4/20mA rate totalisers which can display rate and total flow separately. The pulse input instruments will operate with most types of sensor and all models include square root extraction and an adjustable lineariser. The rugged stainless steel totalisers can be safely mounted in a certified panel enclosure without invalidating the panel enclosure's certification.

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

> **General purpose and certified hazardous area models**
International Gas & Dust certification.

> **Rugged stainless steel Ex ia models**
May be installed in a certified panel enclosure without invalidating the enclosure's certification.

> **Isolated pulse output**

> **IP66 front panels (Similar to NEMA 4X)**

> **-40˚F to +158˚F (-40°C to +70°C) operating temperature range**

> **Accessories**
Dual isolated alarms
Isolated 4/20mA output
Backlight
Scale cards - *can be supplied printed with units of measurement and tag information for no additional charge.*
IP66 rear sealing kit.

. . .delivered ready for *installation*

Model No.	Input	Powered	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
1/8 DIN 96 x 48mm																					
BA337E	Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA537E	Pulse	External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe   ia = AEx or Ex ia   ia = Ex ia
NI = Nonincendive

Model No.	Input	Powered	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
DIN 144 x 72mm																					
BA338E	Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA358E	4-20mA	Loop Powered	IS	NI	-	NI	-	NI	ia	ia	ia	-	-	-	ia	ia	ia	ia	ia	ia	-
BA388E	2 x Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA538E	Pulse	External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
BA558E	4-20mA	Loop Powered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
BA588E	2 x Pulse	External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

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NI = Nonincendive

Model No.	Input	Powered	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
STAINLESS STEEL ENCLOSURE, RUGGED 105mm x 60mm																					
BA337E-SS	Pulse	External	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA337NE*	Pulse	External	-	-	-	-	-	-	-	nA	-	-	ic	-	-	nA	-	-	ic	-	-
BA537E-SS	Pulse	External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA337E-SS**

IS = Intrinsically Safe   ia = AEx or Ex ia   ia = Ex ia
NI = Nonincendive   nA = AEx or Canada Ex nA ic   nA = Ex nA ic
ic = AEx or Canada Ex ic tc   ic = Ex ic tc

Counters

An extensive range of one and two input pulse counters which can display total and rate on separate displays in the same or different engineering units. The two input models can display the sum or differences of the inputs and can also decode a quadrature detector and display position.

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

> **General purpose and certified hazardous area models**
> International Gas & Dust certification

> **Field mounting models have IP66 GRP enclosure**
> Compact 'G' models
> 'E' models with separate terminal compartment
> Pipe and panel mounting accessories

> **Panel mounting models**
> Choice of sizes all with IP66 front panels.
> (Similar to NEMA 4X)
> Rugged stainless steel models may be installed in certified panel enclosures without invalidating the enclosure's certification.
> Rear IP66 sealing kit

> **Isolated pulse output**
> Synchronous with input for retransmission

> **-40˚F to +158˚F (-40°C to +70°C) operating temperature range**

> **Accessories**
> Dual isolated alarms
> Isolated 4/20mA output
> Backlight
> Scale cards - *can be supplied printed with units of measurement and tag information for no additional charge.*
> Laser engraved stainless steel legend plates

Model No.	Input	North America Class I Div 1	Class I Div 2	Class II Div 1	Class II Div 2	Class III Div 1	Class III Div 2	Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust 20	Dust 21	Dust 22	ATEX Gas Zone 0	Gas Zone 1	Gas Zone 2	Dust 20	Dust 21	Dust 22	General purpose
FIELD MOUNTED, GRP ENCLOSURE, COMPACT																				
BA364G	2 x Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA364NG*	2 x Pulse	-	-	-	C	-	C	-	-	nA	-	-	tc	-	-	nA	-	-	tc	-
BA564G	2 x Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA364G**

IS = Intrinsically Safe
NI = Nonincendive
C = Canada

ia = AEx or Ex ia
nA = AEx or Canada Ex nA ic
tc = AEx or Canada Ex ic tc

ia = Ex ia
nA = Ex nA ic
tc = Ex ic tc

Model No.	Input	Class I Div 1	Div 2	Class II Div 1	Div 2	Class III Div 1	Div 2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
FIELD MOUNTED, GRP ENCLOSURE, SEPARATE TERMINAL COMPARTMENT																				
BA364E	2 x Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	-	-	-	-

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

ia = Ex ia
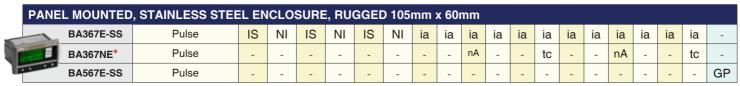
Model No.	Input	Class I Div 1	Div 2	Class II Div 1	Div 2	Class III Div 1	Div 2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, 1/8 DIN 96 x 48mm																				
BA367E	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA567E	Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

ia = Ex ia

Model No.	Input	Class I Div 1	Div 2	Class II Div 1	Div 2	Class III Div 1	Div 2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, DIN 144 x 72mm																				
BA368E	2 x Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA568E	2 x Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

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NI = Nonincendive

ia = AEx or Ex ia

ia = Ex ia

Model No.	Input	Class I Div 1	Div 2	Class II Div 1	Div 2	Class III Div 1	Div 2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, STAINLESS STEEL ENCLOSURE, RUGGED 105mm x 60mm																				
BA367E-SS	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA367NE*	Pulse	-	-	-	-	-	-	-	-	nA	-	-	tc	-	-	nA	-	-	tc	-
BA567E-SS	Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA367E-SS**

IS = Intrinsically Safe
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tc = AEx or Canada Ex ic tc

ia = Ex ia
nA = Ex nA ic
tc = Ex ic tc

Tachometers

A tachometer for every application which can display speed and run-time on separate displays. Operates with most transducers.

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

> **General purpose and certified hazardous area models**
> International Gas & Dust certification

> **Field mounting models have IP66 GRP enclosure**
> Compact 'G' models
> 'E' models with separate terminal compartment
> Pipe and panel mounting accessories

> **Panel mounting models**
> Choice of sizes all with IP66 front panels.
> (Similar to NEMA 4X)
> Rugged stainless steel models may be installed in certified panel enclosures without invalidating the enclosure's certification.
> Rear IP66 sealing kit

> **Isolated pulse output**
> Synchronous with input for retransmission

> **-40˚F to +158˚F (-40°C to +70°C) operating temperature range**

> **Accessories**
> Dual isolated alarms
> Isolated 4/20mA output
> Backlight
> Scale cards - *can be supplied printed with units of measurement and tag information for no additional charge.*
> Laser engraved stainless steel legend plates

Model No.	Input	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
FIELD MOUNTED, GRP ENCLOSURE, COMPACT																				
BA314G	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA314NG*	Pulse	-	-	-	C	-	C	-	-	nA	-	-	tc	-	-	nA	-	-	tc	-
BA514G	Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA314G***

IS = Intrinsically Safe
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C = Canada

ia = AEx or Ex ia
nA = AEx or Canada Ex nA ic
tc = AEx or Canada Ex ic tc

ia = Ex ia
nA = Ex nA ic
tc = Ex ic tc

Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
FIELD MOUNTED, GRP ENCLOSURE, SEPARATE TERMINAL COMPARTMENT																				
BA314E	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	-	-	-	-

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

ia = Ex ia

Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, 1/8 DIN 96 x 48mm																				
BA317E	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA517E	Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

ia = Ex ia
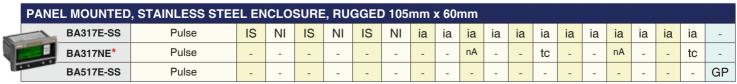
Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, DIN 144 x 72mm																				
BA318E	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA518E	Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia

ia = Ex ia

Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas 0	1	2	Dust 20	21	22	Gas 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, STAINLESS STEEL ENCLOSURE, RUGGED 105mm x 60mm																				
BA317E-SS	Pulse	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA317NE*	Pulse	-	-	-	-	-	-	-	-	nA	-	-	tc	-	-	nA	-	-	tc	-
BA517E-SS	Pulse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA317E-SS***

IS = Intrinsically Safe
NI = Nonincendive

ia = AEx or Ex ia
nA = AEx or Canada Ex nA ic
tc = AEx or Canada Ex ic tc

ia = Ex ia
nA = Ex nA ic
tc = Ex ic tc

Timers or Clocks

One and two input instruments that can be configured as a Timer or as a Clock. As a Timer they can measure and display elapsed time between events, or control events via optional control outputs. As a Clock local time is displayed and optional control outputs can be configured to turn on and off twice in each 24 hour period.

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

> **General purpose and certified hazardous area models**
> International Gas and Dust certification

> **Field mounting models have NEMA 4X (IP66) GRP enclosure**
> Compact 'G' models
> 'E' models with separate terminal compartment
> Pipe and panel mounting accessories

> **Panel mounting models**
> Choice of sizes all with IP66 front panels.
> (Similar to NEMA 4X)
> Rugged stainless steel Ex ia model may be installed in a certified panel enclosure without invalidating the enclosure's certification.
> Rear IP66 sealing kit

> **-40˚F to +158˚F (-40°C to +70°C) operating temperature range**

> **Accessories**
> Dual isolated control outputs
> Backlight
> Scale cards - *can be supplied printed with units of measurement and tag information for no additional charge.*
> Laser engraved stainless steel legend plates

Model No.	Input	North America Class I Division 1	2	Class II Division 1	2	Class III Division 1	2	North America Gas Zone Class 1 0	1	2	Dust 20	21	22	ATEX/IECEx Gas Zone 0	1	2	Dust 20	21	22	General purpose
FIELD MOUNTED, GRP ENCLOSURE, COMPACT																			
BA374G	2 x Sensors	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA374NG*	2 x Sensors	-	-	-	C	-	C	-	-	nA	-	-	tc	-	-	nA	-	-	tc	-
BA574G	2 x Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA374G***

IS = Intrinsically Safe
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C = Canada
ia = AEx or Ex ia
nA = AEx or Canada Ex nA ic
tc = AEx or Canada Ex ic tc
ia = Ex ia
nA = Ex nA ic
tc = Ex ic tc

Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas Zone 0	1	2	Dust 20	21	22	ATEX Gas Zone 0	1	2	Dust 20	21	22	GP
FIELD MOUNTED, GRP ENCLOSURE, SEPARATE TERMINAL COMPARTMENT																			
BA374E	2 x Sensors	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	-	-	-	-

IS = Intrinsically Safe
NI = Nonincendive
ia = AEx or Ex ia
ia = Ex ia
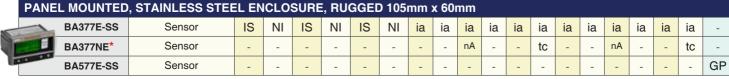
Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas Zone 0	1	2	Dust 20	21	22	ATEX Gas Zone 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, 1/8 DIN 96 x 48mm																			
BA377E	Sensor	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA577E	Sensor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = AEx or Ex ia
ia = Ex ia

Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas Zone 0	1	2	Dust 20	21	22	ATEX Gas Zone 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, DIN 144 x 72mm																			
BA378E	2 x Sensors	IS	NI	IS	NI	IS	NI	ia	ia	ia	-	-	-	ia	ia	ia	-	-	-	-
BA578E	2 x Sensors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe
NI = Nonincendive
ia = AEx or Ex ia
ia = Ex ia

Model No.	Input	Class I Div 1	2	Class II Div 1	2	Class III Div 1	2	Gas Zone 0	1	2	Dust 20	21	22	ATEX Gas Zone 0	1	2	Dust 20	21	22	GP
PANEL MOUNTED, STAINLESS STEEL ENCLOSURE, RUGGED 105mm x 60mm																			
BA377E-SS	Sensor	IS	NI	IS	NI	IS	NI	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	ia	-
BA377NE*	Sensor	-	-	-	-	-	-	-	-	nA	-	-	tc	-	-	nA	-	-	tc	-
BA577E-SS	Sensor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA377E-SS***

IS = Intrinsically Safe
NI = Nonincendive
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nA = AEx or Canada Ex nA ic
tc = AEx or Canada Ex ic tc
ia = Ex ia
nA = Ex nA ic
tc = Ex ic tc

Flow Batch Controllers

Very easy to use, stand alone batch controllers for dispensing and sampling. Graphical display that can be configured to suit applications including up to 9 named batch setpoints.

> **Graphical display with backlight**

> **General purpose and certified hazardous area models**
> North American and ATEX gas and dust certification.

> **Field mounting models have IP66 impact resistant GRP enclosure (Similar to NEMA 4X)**
> Separate terminal compartment
> Pipe mounting accessories.

> **Panel mounting models**
> IP66 front panel (Similar to NEMA 4X)

> **Input**
> Pulse or 4/20mA

> **Three isolated outputs**
> **Output 1:**
> control output
>
> **Outputs 2 & 3 configurable:**
> control outputs
> flow alarm
> reset alarm
> reset status
> batch state
> scaled pulse output
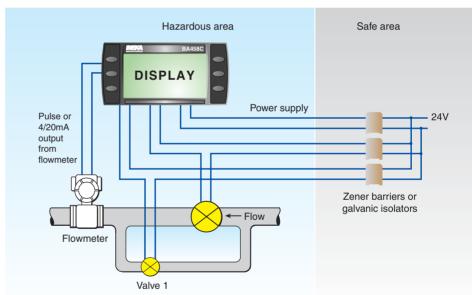
> **Single or two-stage control with overrun compensation**

> **Provision for external push buttons**
> Push button control may be transferred to external switches.

> **-4°F to +140°F (-20°C to +60°C) operating temperature range**

> **Accessories**
> Three additional configurable isolated outputs.
> Laser engraved stainless steel legend plates.

Model No.	North America						North America						ATEX						General purpose
	Class I		Class II		Class III		Gas			Dust			Gas			Dust			
	Division		Division		Division		Zone Class 1						Zone						
	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
FIELD MOUNTED																			
BA454D	IS	NI	IS	NI	IS	NI	-	-	-	-	-	-	ia	ia	ia	ia	ia	ia	-
BA654D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe   ia = Ex ia
NI = Nonincendive

Model No.	North America						North America						ATEX						General purpose
PANEL MOUNTED DIN 144 x 72mm																			
BA458C	IS	NI	IS	NI	IS	NI	-	-	-	-	-	-	ia	ia	ia	-	-	-	-
BA658C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

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NI = Nonincendive

Set Point [Generator]
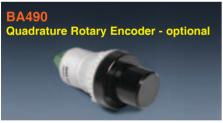
For manually adjusting a 4/20mA process variable or controller set point from within a hazardous or safe area using the instrument's push buttons. These loop powered instruments incorporate a display to show the operator the 4/20mA current in engineering units.

> **General purpose and certified hazardous area models**
> International Gas and Dust certification.
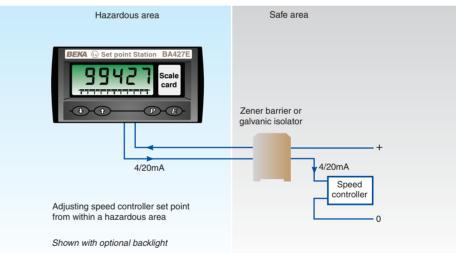
> **Rugged stainless steel Ex ia models**
> May be installed in a certified panel enclosure without invalidating the enclosure's certification.

> **IP66 front panels (Similar to NEMA 4X)**

> **BA490 Quadrature rotary encoder**
> Alternative to using the set point station's push buttons, current can be controlled by an external rotary encoder such as the BA490.

> **-40°F to +158°F (-40°F to +70°C) operating temperature range**

> **Accessories**
> 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*
> Rear IP66 sealing kit

BA490
Quadrature Rotary Encoder - optional

Hazardous area   Safe area

Zener barrier or galvanic isolator

4/20mA

Adjusting speed controller set point from within a hazardous area

Shown with optional backlight

Speed controller

Model No.	North America						North America						ATEX/IECEx						General purpose
	Class I		Class II		Class III		Gas			Dust			Gas			Dust			
	Division		Division		Division		Zone Class 1						Zone						
	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
FIELD MOUNTED																			
BA427E	IS	NI	-	NI	-	NI	ia	ia	ia	-	-	-	ia	ia	ia	ia	ia	ia	-
BA627E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe   ia = AEx or Ex ia   ia = Ex ia
NI = Nonincendive

PANEL MOUNTED DIN 144 x 72mm																			
BA427E-SS	-	-	-	-	-	-	-	-	-	-	-	-	ia	ia	ia	ia	ia	ia	-
BA627E-SS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

ia = Ex ia

PANEL MOUNTED, ROTARY ENCODER																			
BA490	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

✔ = Simple Apparatus

Indicating Temperature Transmitters

HART COMMUNICATION PROTOCOL

⟨FM⟩ APPROVED · ⟨Ex⟩ · IEC. IECEx
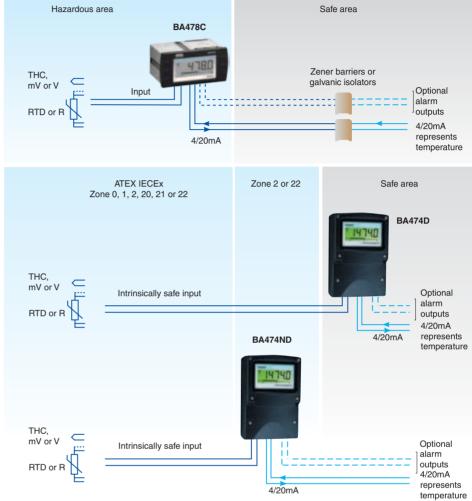
Field and panel mounting loop powered HART enabled temperature transmitters which incorporate a large easy to read temperature display. Innovative certification eliminates need for barrier or isolator for ATEX/IECEx applications.

> **Large high contrast temperature display with 0.79" high digits**

> **General purpose and certified hazardous area models**
> International Gas & Dust certification

> **Field mounting models**
> Separate terminal compartment. Innovative certification eliminates need for barrier or isolator

> **Panel mounting models**
> IP66 front panels (Similar to NEMA 4X)

> **HART communication**
> Sensor diagnostics

> **-4°F to +140°F (-20°F to +60°C) operating temperature range**

> **Accessories**
> Dual isolated alarms
> Backlight loop powered
> Scale card - *can be supplied printed with units of measurement and tag information for no additional charge*
> Laser engraved stainless steel legend plates
> Pipe mounting kits

Hazardous area — BA478C — **Safe area**

THC, mV or V / RTD or R — Input — Zener barriers or galvanic isolators — Optional alarm outputs — 4/20mA represents temperature — 4/20mA

ATEX IECEx Zone 0, 1, 2, 20, 21 or 22 — **Zone 2 or 22** — **Safe area**

BA474D

THC, mV or V / RTD or R — Intrinsically safe input — Optional alarm outputs — 4/20mA represents temperature — 4/20mA

BA474ND

THC, mV or V / RTD or R — Intrinsically safe input — Optional alarm outputs — 4/20mA represents temperature — 4/20mA

An ***Indicating Temperature Transmitter*** for every ***application*** . . . .delivered ready for ***installation***

Model No.	North America						North America						ATEX/IECEx						General purpose
	Class I Division		Class II Division		Class III Division		Gas			Dust			Gas			Dust			
							Zone Class 1						Zone						
	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
FIELD MOUNTED																			
BA474D	-	-	-	-	-	-	-	-	-	-	-	-	ia	ia	ia	ia	ia	ia	-
BA474ND*	-	-	-	-	-	-	-	-	-	-	-	-	nA*	nA*	nA*	td	td	td	-
BA674D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

*To be discontinued by 31-Dec-21 use **BA474D**

ia = Ex ia
nA* = Ex nA & input = ia
td = Ex td

Model No.	North America						North America						ATEX/IECEx						General purpose
PANEL MOUNTED DIN 144 x 72mm																			
BA478C	-	-	-	-	-	-	-	-	-	-	-	-	ia	ia	ia	-	-	-	-
BA678C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

ia = Ex ia

Universal process panel meters with MULTICOLOR displays

New, high quality universal process panel meters featuring multicolored, negative liquid crystal five digit and bargraph displays which are visible in all lighting conditions from bright sunlight to total darkness. The display color is fully adjustable and can be linked to the meter's optional alarms, providing operators with a very conspicuous status warning. Display colors and brightness can easily be adjusted on-site to match other instrumentation on the panel.

The meters have process current, voltage and resistance thermometer inputs, with separate versions for powering from a low voltage dc or from an ac mains supply.

All models have IP66 front of panel protection and a scratch resistant glass window. For marine or harsh environments where the front of the instrument may be impacted, the rugged A90-SS has a stainless steel enclosure with a 10mm thick toughened glass window.

Panel meters can be supplied configured to customer's requirements and fitted with a printed slide-in scale card showing specified units of measurement and tag information for no additional charge.

Courtesy of Saffron Scientific Equipment.

NEW!

> **High quality**
> UK designed and manufactured

> **Large high contrast multicolor 5 digit display with bargraph**
> Fully adjustable display color
> Visible in all lighting conditions
> Negative liquid crystal technology

> **Input - may be configured on-site**
> 4-20mA or 0-50mA
> 0-100mV, 0-1V or 0-10V
> Pt100 2-wire or 3-wire RTD

> **Power supply - separate versions for:**
> 10 to 36V dc
> 90 to 264V ac 47-63Hz

> **IP66 front of panel protection with toughened glass window (Similar to NEMA 4X)**

> **A90-SS has stainless steel enclosure and 10mm thick toughened glass window**
> For harsh and marine environments

> **-40˚F to +131˚F (-40°C to +55°C) operating temperature range**

> **Accessories**
> Isolated Modbus RTU
> Dual isolated alarms with changeover contacts, alarms can be linked to display color.
> Isolated 4/20mA output
> Isolated 24V transmitter power supply
> IP66 rear sealing kit
> Scale cards - *can be supplied printed with units of measurement and tag information for no additional charge.*

General Purpose - for use in safe areas	
Model No.	*Separate versions for 10-36V dc or 90 to 264V ac supplies*
A90	Universal process meter
A90-SS	Rugged universal process meter in stainless steel enclosure

Ex ia Sounders & Beacons

FM APPROVED · Ex (ATEX) · IEC IECEx

High performance Ex ia intrinsically safe sounder and flashing beacon in IP66 enclosures, may be used separately or as a pair powered from a single intrinsically safe circuit. Both are IECEx, ATEX and US certified for use in gas hazardous areas.

BR385 SOUNDER
> 49 different sounds
> 3 stage alarm
> Up to 105dBA output
> IP66 enclosure (Similar to NEMA 4X)

BA386 BEACON
> Red, Amber, Green, Blue & White models
> 2 double flashes per second
> Alarm accept function silences sounder for pre-set time.
> Steady state BA386S version also available

Model No.	North America						North America						ATEX/IECEx						General purpose
	Class I Division		Class II Division		Class III Division		Gas			Dust			Gas			Dust			
							Zone Class 1						Zone						
	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
AUDIBLE SOUNDER																			
BR385	IS	-	-	-	-	-	ia	-	-	-	-	-	ia	ia	ia	-	-	-	-

IS = Intrinsically Safe · NI = Nonincendive · ia = Ex ia

Model No.																			
LED FLASHING BEACON																			
BA386	IS	NI	-	-	-	-	ia	-	NI	-	-	-	ia	ia	ia	-	-	-	-

IS = Intrinsically Safe · NI = Nonincendive · ia = Ex ia · ia = Ex ia

Model No.																			
LED STEADY STATE BEACON																			
BA386S	IS	NI	-	-	-	-	ia	-	NI	-	-	-	ia	ia	ia	-	-	-	-

IS = Intrinsically Safe · NI = Nonincendive · ia = Ex ia · ia = Ex ia

LED Panel Lamps

FM APPROVED · Ex (ATEX) · IEC IECEx

Bright, low cost panel mounting lamps with IP66 front of panel protection which have a ten year life expectancy.

> Red, Amber, Green, Blue & White models
> BA390 lamps have 20mA constant current consumption
> BA390S lamps have specified performance at 4mA
> BA599 rear sealing kit includes cable gland

Model No.	Input	North America						North America						ATEX/IECEx						General purpose
		Class I Division		Class II Division		Class III Division		Gas			Dust			Gas			Dust			
								Zone Class 1						Zone						
		1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22	
30mm LENS FOR 22.5mm CUT-OUT																				
BA390	20mA Constant Current	IS	NI	-	-	-	-	ia	ia	ia	-	-	-	ia	ia	ia	ia	ia	ia	-
BA390S	Low Current 4mA	IS	NI	-	-	-	-	ia	ia	ia	-	-	-	ia	ia	ia	ia	ia	ia	-
BA590	20mA Constant Current	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP
BA590S	Low Current 4mA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GP

IS = Intrinsically Safe · NI = Nonincendive · ia = Ex ia · ia = Ex ia

Accessories
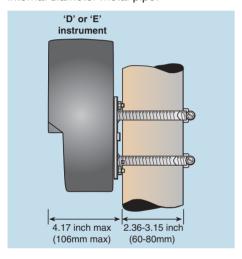## for FIELD mounting instruments

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   IP66 GRP enclosure with separate terminal compartment
Model numbers with a 'G' suffix   IP66 compact GRP enclosure
Model numbers with a 'G-SS' suffix   IP66 compact 316 stainless steel enclosure
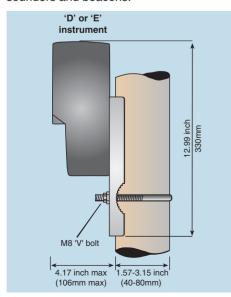
'D' and 'E' Instruments

PIPE MOUNTING KITS

BA392D Standard duty 316 stainless steel bracket secured by two stainless steel worm drive hose clips which attach instrument to any 2-3.15 inch (60-80mm) outside diameter vertical or horizontal pipe. Usually suitable for clamping to a 2 inch internal diameter metal pipe.

'D' or 'E' instrument

4.17 inch max (106mm max)   2.36-3.15 inch (60-80mm)
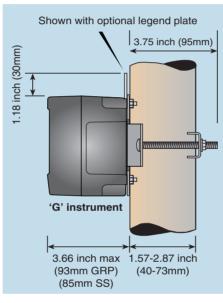
BA393 Heavy duty 316 stainless steel pipe mounting bracket using a single 'V' bolt which attaches instrument to any vertical or horizontal pipe with an outside diameter between 1.57 and 3.15 inch. Will also support BEx series flameproof sounders and beacons.

'D' or 'E' instrument

12.99 inch 330mm

M8 'V' bolt

4.17 inch max (106mm max)   1.57-3.15 inch (40-80mm)

'G' and 'G-SS' Instruments
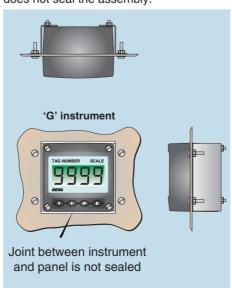
PIPE MOUNTING KIT

BA393G 316 stainless steel pipe mounting bracket attaches 'G' instruments to any vertical or horizontal pipe with an outside diameter between 1.57 and 2.8 inch.

Shown with optional legend plate

1.18 inch (30mm)

3.75 inch (95mm)

'G' instrument

3.66 inch max (93mm GRP) (85mm SS)   1.57-2.87 inch (40-73mm)
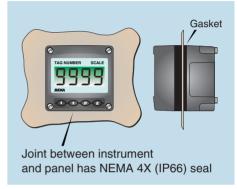
PANEL MOUNTING KITS

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.
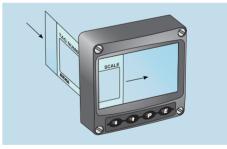
'G' instrument

TAG NUMBER   SCALE
9999
BEKA

Joint between instrument and panel is not sealed

BA494G sealing panel mounting kits

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

Gasket

TAG NUMBER   SCALE
9999
BEKA

Joint between instrument and panel has NEMA 4X (IP66) seal

BA494G   for a GRP enclosure

BA494G-SS for a stainless steel enclosure.

SLIDE IN SCALE CARD

TAG NUM
SCALE

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.

LEGEND PLATE

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.
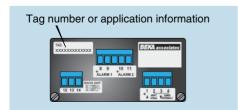

Scale card for 'E' suffix instruments is inserted from the rear of the instrument.

%	%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 information
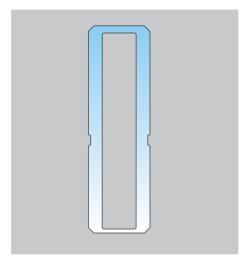
Tag number or application printed on rear panel of instrument.

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

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.

Fieldbus Indicators & Indicating Temperature Transmitters

SCALE CARD

Panel mounting Indicating Temperature Transmitters and Fieldbus indicators have an internal scale card around the display which can be supplied printed with customer specified application information.

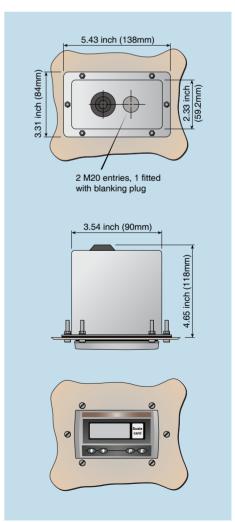*Scale card can be printed with customer specified information.*

For 96 x 48mm, Rugged 'E' suffix, and A90 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.*

BA495 rear IP66 sealing kit

5.43 inch (138mm)
3.31 inch (84mm)
2.33 inch (59.2mm)

2 M20 entries, 1 fitted with blanking plug

3.54 inch (90mm)
4.65 inch (118mm)

Why Buy *BEKA*

> Three-Year warranty on all products

> Fast manufacturing times, typically 3-5 working days

> Widest range available of hazardous area indicators and displays

> International certifications for global applications

> High reliability products for hazardous areas and general purpose applications

> Privately owned by engineers designing products for engineers since 1984

> Direct telephone or email contact to sales team and knowledgeable engineers

> Excellent customer support pre and post sales

> World-wide support network of agents and distributors

> Set-up and scale printing on most models for no additional charge

> Comprehensive website and easy access to all documentation

North America

Europe

South America

Africa & The Middle East

Asia Pacific

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