

The BA448CF-F Fieldbus Indicator is an intrinsically safe instrument that can display up to eight fieldbus process variables within a hazardous area. A numeric annunciator on the left hand side of the screen shows which variable is being displayed. This version of the instrument supports FOUNDATION™ fieldbus protocol; for PROFIBUS PA systems an alternative version is available – please see the BA448CF-P PROFIBUS datasheet.

**Configuration as a fieldbus Node or Listener** allows the indicator to be tailored to suit local requirements. As a FOUNDATION™ fieldbus Node the indicator is configured by the fieldbus host and the displayed variable is selected from the eight pre-configured fieldbus variables using the indicator's push buttons.

When configured as a Listener, the indicator is not visible to the fieldbus host; may not be subject to a Node Licence Fee and is configured and controlled by the indicator's push buttons.

The liquid crystal display has large 20mm high digits providing maximum contrast and a wide viewing angle, allowing the BA448CF-F indicator to be read easily in most lighting conditions. The five digits, with four decimal points and a negative sign, may be configured to display any variable between -99999 and 99999. The 31 segment bargraph, which provides a bold analogue indication of the fieldbus variable, may be conditioned to any starting or finishing values within the fieldbus variable's range.

The instrument front panel provides IP66 protection and a neoprene gasket seals the joint between the fieldbus indicator and the panel, making it suitable for use in areas that will be cleaned with a hose. To simplify installation and maintenance, the indicator has a removable terminal block that allows panel wiring to be completed before the BA448CF-F indicator is installed.

**ATEX intrinsic safety certification** allows the BA448CF-F to be installed in all gas hazardous areas. The two fieldbus terminals comply with the Fieldbus Intrinsic Safety Concept FISCO simplifying system design and documentation. Separate entity input safety parameters also allow connection to most non-FISCO intrinsically safe systems. A BA448CF-F indicator may therefore be connected to almost any intrinsically safe FOUNDATION™ fieldbus segment, provided the segment can supply 13mA to power the instrument.

**FM, cFM and IECEx approvals** allow installation in the USA, Canada plus the growing number of countries accepting IECEx certificates. All approvals incorporate FISCO certification.

**Units of measurement** can be marked onto the display escutcheon prior to despatch and the tag number or application thermally printed onto the rear panel adjacent to the terminals.

**For field mounting applications** see the BA444DF-F FOUNDATION™ fieldbus datasheet. This instrument has a similar electrical specification but is housed in an IP66 field mounting enclosure.

# BA448CF-F

## FOUNDATION™ fieldbus Fieldbus Indicator 8 variables

*Intrinsically safe for use  
in all gas hazardous areas*

- ◆ Large 5 digit display with bargraph.
- ◆ FOUNDATION™ fieldbus protocol.
- ◆ Displays up to 8 fieldbus variables.
- ◆ Selectable Node or Listener modes
- ◆ Intrinsically safe ATEX, FM, cFM & IECEx.
- ◆ Entity parameters & FISCO compliant.
- ◆ 144 x 72mm DIN enclosure.
- ◆ IP66 front.
- ◆ 3 year guarantee



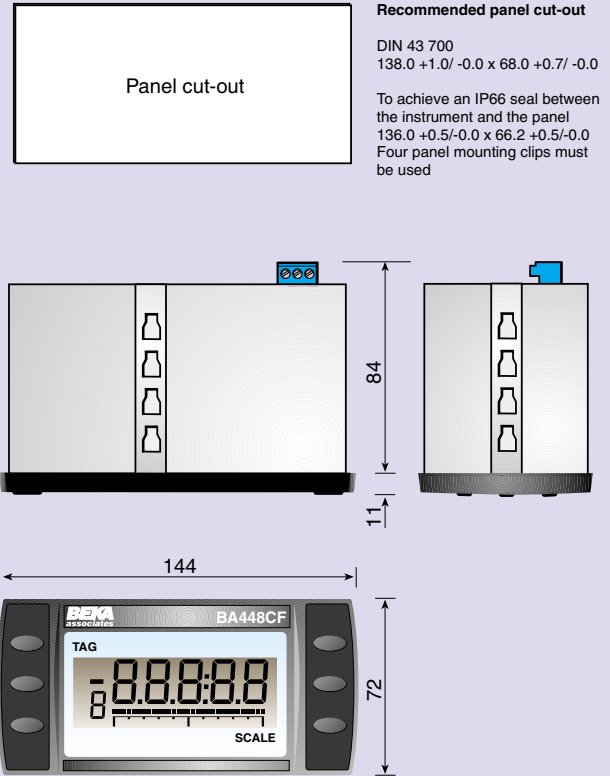
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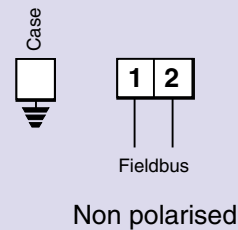
## SPECIFICATION

<b>Display</b>	
Type	Liquid crystal 5 digit 20mm high (-99999 to 99999) 31 segment bargraph 8
Variables	
<b>Fieldbus communication</b>	
Voltage	9 to 32V (Limited by intrinsic safety input safety parameters)
Current	13mA.
Compliant with Protocol	IEC61158 FOUNDATION™ fieldbus
Function blocks	2 x IS (input selector) 6 x DI (digital input)
Function	Fieldbus Node or Listener selected by front panel push buttons.
<b>Intrinsic safety</b>	
<b>Europe ATEX</b>	
Code	Group II Category 1G Ga Ex ia IIC T4 FISCO Field Device Ex ia IIC T4 Tamb = -40 to 70°C
Input parameters	
Entity	Ui = 22V Ii = 250mA Pi = 1.2W
FISCO	Ui = 17.5V Ii = 380mA Pi = 5.32W
Location	Zone 0, 1 or 2
Cert. No.	ITS06ATEX25314/2X
<b>USA FM</b>	
Standard Code	3610 Entity CL I: Div 1 GP A, B, C & D T4 @ 70°C
Standard Code	3611 Nonincendive CL I: Div 2 GP A, B, C & D T4 @ 70°C
File	3027031
<b>Canada cFM</b>	
File	3027031C
<b>International IECEx</b>	
Code	Ex ia IIC T4 Ga FISCO Field Device Ex ia IIC T4 Ta = -40 to 70°C
Cert. No	IECEx ITS 06 0013X
<b>Environmental</b>	
Operating temp	-20 to +70°C (ATEX, FM & IECEx certification -40°C to 70°C)
Storage temp	-40 to +85°C
Humidity	To 95% @ 40°C
Enclosure	Front IP66, rear IP20
EMC	In accordance with EU Directive 2004/108/EC
<b>Mechanical</b>	
Terminals	Removable with screw clamp for 0.5 to 1.5mm <sup>2</sup> cable.
Weight	0.7kg

## DIMENSIONS (mm)



## TERMINAL CONNECTIONS



### Accessories

Scale legend	Units of measurement marked onto display escutcheon.
Tag legend	Tag number or application marked onto display escutcheon.
Tag strip	Tag number or application thermally printed onto rear of the instrument.

## HOW TO ORDER

<b>Please specify</b>	
Model number	BA448CF-F FOUNDATION™ fieldbus
<b>Please specify if required</b>	
Accessories	
Escutcheon markings	
Scale	Legend
Tag	Legend
Tag strip	Legend