

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

Display

Type Liquid crystal

5 digit 20mm high (-99999 to 99999)

31 segment bargraph

Variables 8

Fieldbus communication

Voltage 9 to 32V (Limited by intrinsic safety

input safety parameters)

Current 13mA.
Compliant with IEC61158

Protocol 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.

Intrinsic safety
Europe ATEX

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

 $\begin{array}{lll} \text{Ii} & = & 250\text{mA} \\ \text{Pi} & = & 1.2\text{W} \end{array}$

FISCO Ui = 17.5V

 $\begin{array}{lll} \text{li} &=& 380\text{mA} \\ \text{Pi} &=& 5.32\text{W} \end{array}$

Location Zone 0, 1 or 2

Cert. No. ITS06ATEX25314/2X

USA FM

Standard 3610 Entity

Code CL I: Div 1 GP A, B, C & D

T4 @ 70°C

Standard 3611 Nonincendive

Code CL I: Div 2

GP A, B, C & D T4 @ 70°C

File 3027031

Canada cFM

File 3027031C

International IECEx

Code Ex ia IIC T4 Ga

FISCO Field Device Ex ia IIC T4

 $Ta = -40 \text{ to } 70^{\circ}C$

Cert. No IECEx ITS 06 0013X

Environmental

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

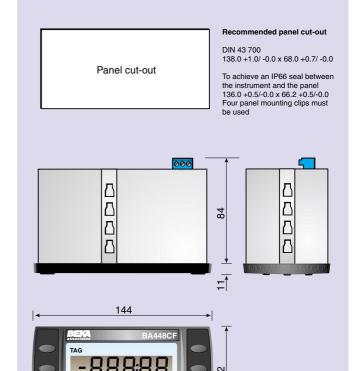
Mechanical

Terminals Removable with screw clamp for 0.5 to

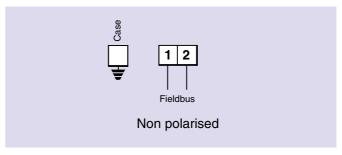
1.5mm² cable.

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

Please specify

Please specify if required

Model number BA448CF-F Foundation™ fieldbus

Legend

Legend

Accessories
Escutcheon markings

Scale

Scale Tag

Tag strip Legend

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