

BA418CF-F FOUNDATION™ fieldbus Fieldbus indicator Single variable

*Intrinsically safe for use
in all gas hazardous areas*

- ◆ 20mm high easy to read 5 digit display.
- ◆ 31 segment bargraph
- ◆ FOUNDATION™ fieldbus protocol.
- ◆ Compatible with most system hosts.
- ◆ Intrinsically safe ATEX, FM, cFM, INMETRO & IECEx certification.
- ◆ Entity Ex ia & Ex ic parameters, FISCO compliant.
- ◆ 144 x 72mm DIN enclosure.
- ◆ IP66 front
- ◆ 3 year guarantee

www.beka.co.uk/ba418cf-f



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The **BA418CF-F Fieldbus Indicator** is a cost-effective intrinsically safe panel mounting instrument that displays a single fieldbus process variable in a hazardous area. Housed in a robust panel mounting enclosure with an IP66 front, the instrument has a large, high contrast five digit display and a horizontal bargraph. The BA418CF-F indicator uses the same technology and compliments the well established BEKA eight variable fieldbus displays that are now in worldwide use.

Powered by the fieldbus the BA418CF-F only requires a 2-wire connection to the intrinsically safe fieldbus segment, no additional power supply is required. Compatibility with most FOUNDATION™ fieldbus hosts is ensured by the use of a single *Input Selector* function block, which is supported by nearly all systems. Please contact the BEKA sales office for the latest compatibility information. The instrument has been registered by The Fieldbus Foundation and Device Description Files may be downloaded from their web site or from www.beka.co.uk.

The **liquid crystal display** has large characters and is designed to provide maximum contrast and a wide viewing angle, thus enabling the BA418CF-F indicator to be easily read in most lighting conditions. Five digits, with four decimal points and a negative sign, may be configured to display any value between -99999 and 99999. The 31 segment horizontal bargraph, which provides a bold analogue indication of the fieldbus variable, may be conditioned to any starting and finishing values within the range of the fieldbus variable.

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 BA418CF-F indicator is installed.

ATEX intrinsic safety certification allows the BA418CF-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 Ex ia and Ex ic entity input safety parameters also allow connection to most non-FISCO intrinsically safe systems. A BA418CF-F indicator may therefore be connected to almost any intrinsically safe 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.

The **FOUNDATION™ fieldbus Interface Guide** contains commissioning information for the BA418CF-F indicator. A copy may be requested from the BEKA sales office or from the BEKA web site at www.beka.co.uk

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

For field mounting applications see the BA414DF-F datasheet. This instrument has a similar electrical specification but is housed in an IP66 field mounting enclosure.

SPECIFICATION

Display

Type	Liquid crystal 5 digit 20mm high (-99999 to 99999)
Variables	31 segment bargraph Single

Fieldbus communication

Voltage	9 to 32V (Limited by intrinsic safety parameters)
Current	13mA
Compliant with Protocol	IEC61158-2 31.25kbits/s Voltage Mode FOUNDATION™ fieldbus
Function block	1 x IS (input selector)

Intrinsic safety

Europe ATEX

Code	Group II Category 1G Ex ia IIC T4 Ga FISCO field device Ex ia IIC T4 Ga Group II Category 3G Ex ic IIC T4 Gc Ta = -40°C to 70°C		
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Input parameters	FISCO	Ex ia entity	Ex ic entity
Ui	17.5V	22.0V	32V
Ii	380mA	250mA	125mA
Pi	5.32W	1.2W	1W

Location Zone 0, 1 or 2

Cert. No. ITS06ATEX25314X

USA FM

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

Canada cFM

File 3027031C

International IECEx

Code As ATEX code shown above
Cert. No. IECEx ITS 06 0013X

Brazil INMETRO NCC 12.0873X

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

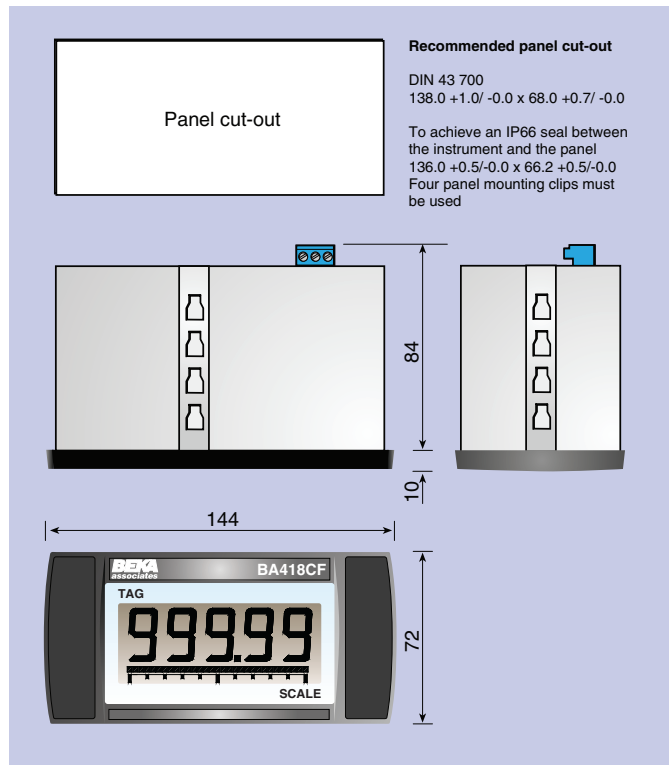
EMC In accordance with EU Directive 2004/108/EC

Mechanical

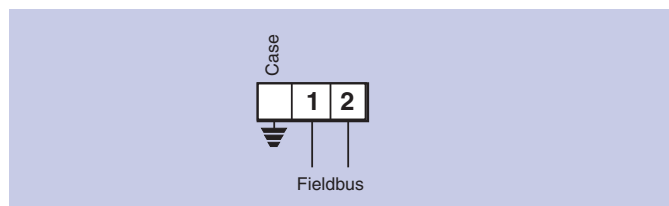
Terminals Removable with screw clamp for 0.5 to 1.5mm² cable.

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 instrument
FOUNDATION™ Fieldbus interface guide.	May be downloaded from www.beka.co.uk

HOW TO ORDER

Model number	Please specify BA418CF-F
Accessories	Please specify if required
Certification	INMETRO
Escutcheon markings	
Scale	Legend
Tag	Legend
Tag strip	Legend