

The **BA418CF Fieldbus Indicator** is a new 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 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 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 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 indicator is installed.

ATEX intrinsic safety certification allows the BA418CF 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 BA418CF 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 which already includes Australia and New Zealand. All approvals incorporate FISCO certification.

The **FOUNDATION fieldbus™ Interface Guide** contains commissioning information for the BA418CF 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 application information thermally printed onto the rear panel adjacent to the terminals.

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

BA418CF

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 & IECEx certification
- ◆ Entity parameters & FISCO compliant
- ◆ 144 x 72mm DIN enclosure
- ◆ IP66 front
- ◆ 3 year guarantee



BEKA associates

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SPECIFICATION

Display

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

Fieldbus communication

Voltage	9 to 32V
Current	13mA
Compliant with	IEC61158—2 Clauses 11 and 22
Protocol	FOUNDATION fieldbus™
Function block	1 x IS (input selector)

Intrinsic safety

Europe ATEX

Standard	EN50020:2002
Code	Group II Category 2G EEx ia IIC T4 Tamb = -40 to 70°C

Input parameters

Entity	U _i = 22V I _i = 250mA P _i = 1.2W
FISCO	U _i = 17.5V I _i = 380mA P _i = 5.32W

Location Zone 0, 1 or 2

Cert. No. ITS06ATEX25314

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

Standard	IEC60079-11:1999
Code	Ex ia IIC T4 Ta = -40 to 70°C

Cert. No. IECEx ITS 06 0013X

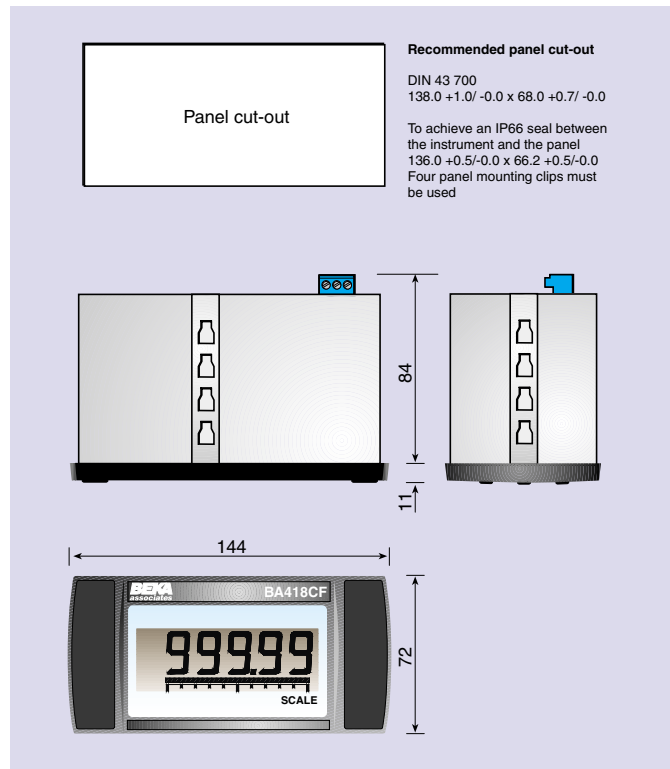
Environmental

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 89/336/EEC
Immunity	BS EN 61326:1998 Operates normally with conducted 3Vrms between 0.15kHz and 80MHz. radiated 10V/m between 80MHz and 1GHz.
Emissions	CISPR16-1/2 Class A

Mechanical

Terminals	Removable with screw clamp for 0.5 to 1.5mm ² cable.
Weight	0.7kg

DIMENSIONS (mm)

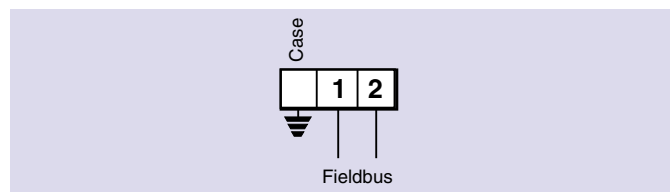


Recommended panel cut-out

DIN 43 700
138.0 +1.0/-0.0 x 68.0 +0.7/-0.0

To achieve an IP66 seal between the instrument and the panel 136.0 +0.5/-0.0 x 66.2 +0.5/-0.0 Four panel mounting clips must be used

TERMINAL CONNECTIONS



Accessories

Scale legend	Units of measurement marked onto display escutcheon.
Tag strip	Thermally printed legend on rear of instrument
Fieldbus interface guide	May be downloaded from www.beka.co.uk

HOW TO ORDER

Model number	Please specify BA418CF
Accessories	Please specify if required
Scale marking on escutcheon.	Legend
Tag strip	Legend