

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 ITK 6.3 Fieldbus Foundation registration and device description files may be downloaded from their website 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, tag or application information specified by the customer can be printed onto the instrument escutcheon that surrounds the display for no additional charge. Tag information can also be 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.

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, ITK 6.3 compliant.
- ◆ Compatible with most system hosts.
- ◆ Intrinsically safe ATEX, FM, cFM & IECEx certification.
- ◆ Entity Ex ia & Ex ic 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 (Limited by intrinsic safety parameters) |
| Current | 13mA |
| Compliant with Protocol | IEC61158-2 31.25kbits/s Voltage Mode FOUNDATION™ fieldbus, ITK 6.3 compliant. |
| 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 | | |
|------|--|--|--|

| 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

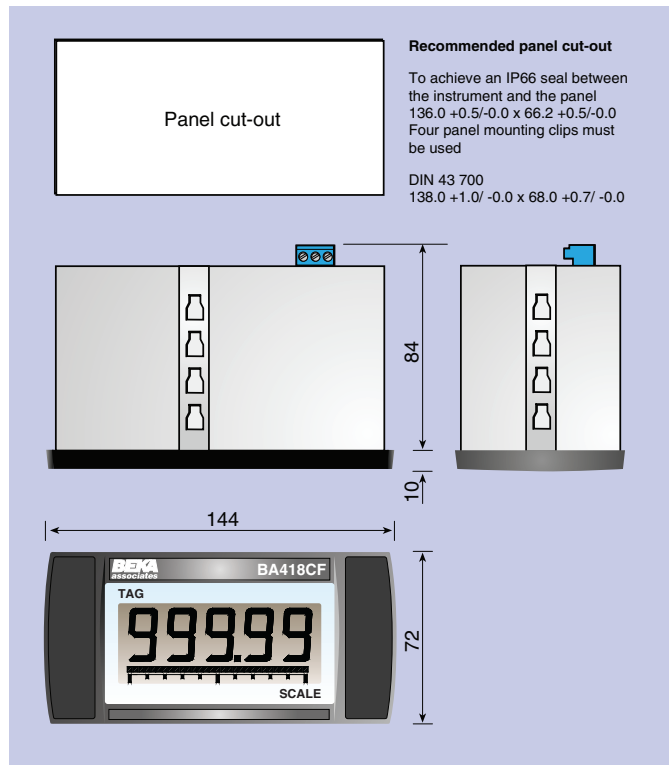
Environmental

| | |
|----------------|---|
| 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 | Complies with EMC Directive 2014/30/EU |

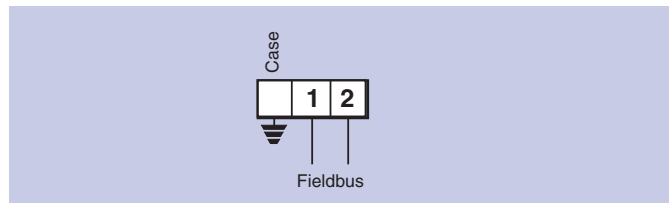
Mechanical

| | |
|-----------|---|
| Terminals | Removable with screw clamp for 0.5 to 1.5mm ² 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 |
| Escutcheon markings | |
| Scale | Legend |
| Tag | Legend |
| Tag strip | Legend |