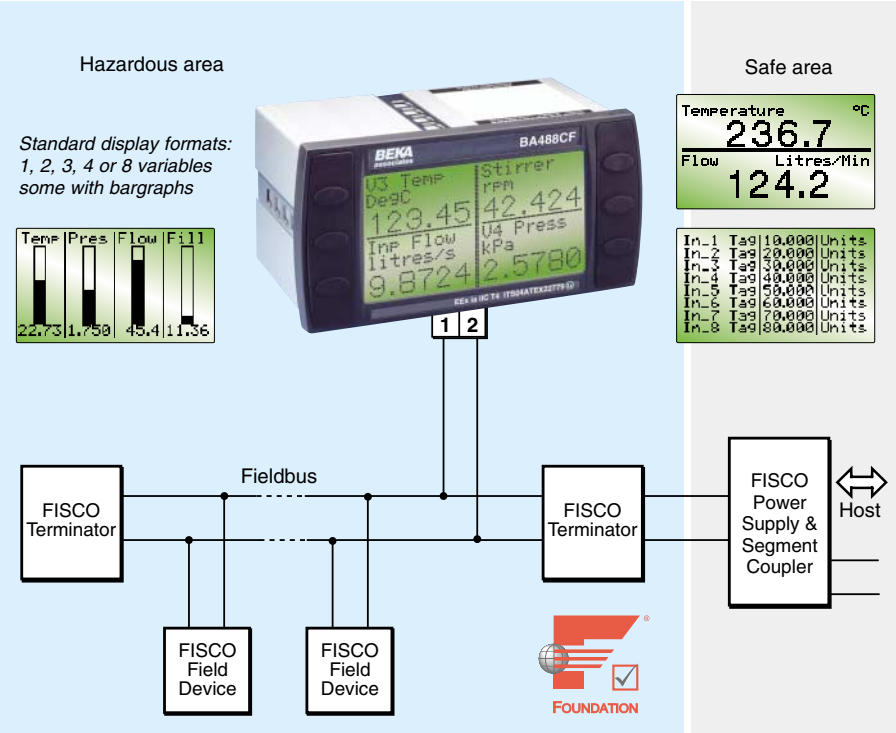


BA488CF-F

FOUNDATION™ fieldbus Fieldbus Indicator 8 variables

Intrinsically safe for use in all gas hazardous areas

- **FOUNDATION™ fieldbus protocol**
- **Compatible with most system hosts**
- **High contrast display with backlight**
- **Intrinsically safe ATEX, FM & IECEx certification FISCO compliant**
- **Six optional local alarm outputs**
- **IP66 front panel**
- **3 year guarantee**

The BA488CF-F Fieldbus Display is an intrinsically safe instrument that can display up to eight fieldbus process variables. Eleven selectable standard screen formats contain one, two, three, four or eight variables, with units of measurement, tag descriptions and bargraphs on some screens.

Selectable function blocks allow the BA488CF-F fieldbus display to be used with all common system hosts. Configuration files may be downloaded from the Foundation fieldbus or the BEKA websites

Powered by the fieldbus the BA488CF-F only requires a 2-wire connection, no additional power supply Zener barriers or galvanic isolators are required. The high contrast 86 x 45mm liquid crystal display incorporates a green backlight that is also powered from the fieldbus enabling the display to be read in all lighting conditions from full sunlight to total darkness.

Simple commissioning results from the use of standard display formats. Apart from loading the BA488CF-F configuration files onto the system host and selecting the fieldbus variables to be displayed, no programming is required. Configuration of the BA488CF-F Fieldbus Display is performed via the fieldbus and the instrument front panel push buttons.

ATEX, FM & IECEx intrinsic safety certification allows the BA488CF-F to be installed in gas hazardous areas worldwide. The two fieldbus terminals comply with the Fieldbus Intrinsic Safety Concept (FISCO) simplifying system design and documentation, although connection to non-FISCO intrinsically safe segments is possible using the entity concept. This allows a BA488CF-F to be directly connected to almost any hazardous fieldbus providing the segment can supply the 25mA consumed by the display.

Six optional local alarm outputs may be linked to any of the displayed variables. Each isolated single pole solid state output may be conditioned as a combined high and low alarm, or as just a high or low alarm. All the outputs comply with the requirements for *simple apparatus* allowing them to switch any certified intrinsically safe load such as a sounder, lamp or solenoid valve. Alarm configuration and the alarm set point adjustment is performed via the BA488CF-F front panel push buttons, as the local alarms are not accessible from the fieldbus system host.

Comprehensive documentation includes a FOUNDATION™ fieldbus Interface Guide.

For field mounting applications see the BA484DF-F datasheet. This instrument has a similar electrical specification but is housed in a robust IP66 GRP enclosure suitable for external mounting.

BEKA associates

BEKA associates Ltd. Old Charlton Rd. Hitchin, Hertfordshire, SG5 2DA, U.K.
Tel. (01462) 438301 Fax (01462) 453971
e-mail sales@beka.co.uk www.beka.co.uk

SPECIFICATION

Display

Type	120 x 64 pixel liquid crystal
Size	86.5mm x 45mm
Backlight	Powered from fieldbus
Screens	
Standard format	1, 2, 3, 4 or 8 variables plus bargraph can include: units of measurement tag information

Controls

Front panel	Six push buttons scroll the indicator display between screens when the BA488CF-F is configured to display more variables than fit onto a single screen. Also used to configure optional local alarms.

Fieldbus communication

Voltage	9 to 32V (Limited by intrinsic safety parameters)
Current	25mA
Compliant with	IEC61158—2 Clauses 11 and 22
Protocol	FOUNDATION™ fieldbus
Function blocks	
FOUNDATION fieldbus™	1 x MAO (Multiple Analogue Output) or 2 x IS (Input Selector) — Selectable on-site

Intrinsic safety

Europe ATEX

Code	Group II Category 1G Ex ia IIC T4
Cert. No.	ITS04ATEX22779
Intrinsic safety parameters	Ui = 17.5V Ii = 380mA Pi = 5.32W — FISCO compliant
Location	Zone 0, 1 or 2

USA FM

Standard	3610 Entity
Code	CL I; Div 1; GP A, B, C & D T4 @ 60˚C
File No	3022546
Standard	3611 Nonincendive
Code	CL I; Div 2; GP A, B, C & D T4 @ 60˚C
File No	3022546

International IECEx

Standard	IEC60079-11:1999
Code	Ex ia IIC T4 Ta = -40 to 60˚C
Cert. No.	IECEx ITS 05.0007

Environmental

Operating temp	-20 to +60˚C (certified for use at -40˚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
Immunity	BS EN 61326:1998 Operates normally with conducted 3Vrms interference between 0.15kHz and 80MHz, or radiated 10V/m interference between 80MHz and 1GHz.
Emissions	CISPR 16-1/2 Class A

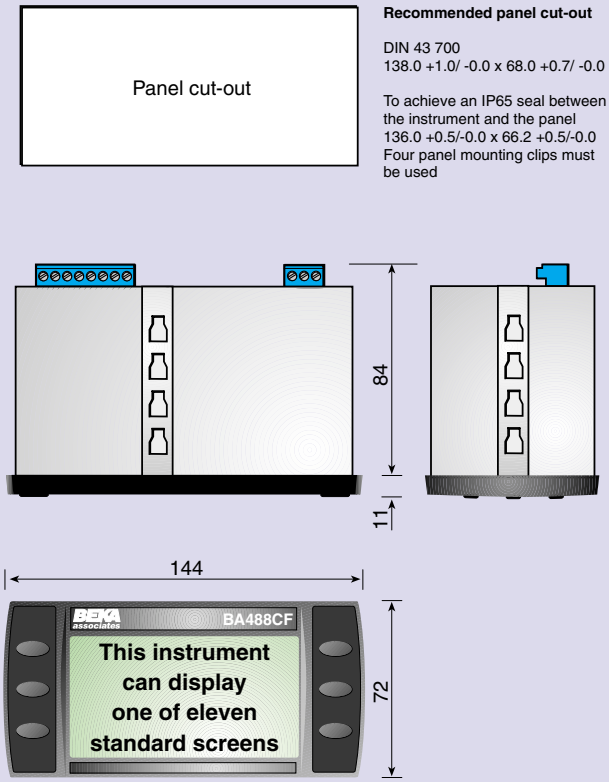
Mechanical

Terminals	Removable with screw clamp for 0.5 to 1.5mm² cable.
Weight	0.7kg

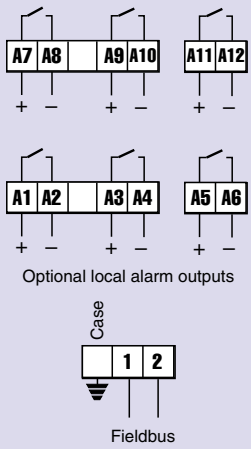
Accessories

Alarms	Six galvanically isolated outputs which may be linked to displayed variables. Each alarm is configurable from instrument push buttons as: combined high and low alarm high or low alarm ***Note:*** *Alarms are not accessible from the fieldbus system host*
Contacts	Isolated single pole solid state switch certified as simple apparatus. Ron less than 5Ω + 0.7V Roff greater than 1MΩ
Intrinsic safety parameters	Ui = 28Vdc Ii = 200mA Pi = 0.84W

DIMENSIONS (mm)



TERMINAL CONNECTIONS



Tag number	Thermally printed strip on rear of instrument.
FOUNDATION™ fieldbus interface guide	May be downloaded from *www.beka.co.uk*

HOW TO ORDER

	Please specify
Model number	BA488CF-F
Accessories	**Please specify if required**
Six alarms	Alarms
Tag strip	Legend