

The BA644DF-P PROFIBUS Indicator is a general purpose instrument that can display up to eight fieldbus process variables. A numeric annunciator on the left hand side of the screen shows which variable is being displayed. This version of the indicator supports PROFIBUS PA protocol; for FOUNDATION™ fieldbus systems an alternative version is available − please see the BA644DF-F FOUNDATION™ fieldbus datasheet.

Configuration as a fieldbus Node or Listener using the indicator's front panel push buttons allows the instrument to be tailored to suit local requirements. When configured as a Listener the BA644DF-P is not visible to the fieldbus host; may not be subject to a Node Licence Fee and is configured and controlled via the instrument's front panel push buttons.

As a fieldbus Node, the indicator is configured by the fieldbus host and the displayed variable is selected from the eight preconfigured variables using the indicator's front panel up and down buttons.

Powered by the fieldbus the BA644DF-P only requires a 2-wire connection to the fieldbus segment, no additional power supply is required. Compatibility with most Profibus hosts is assured by the use of eight Analogue Output and six Digital Input function blocks.

The liquid crystal display has large 20mm high digits providing maximum contrast and a wide viewing angle, allowing the BA644DF-P PROFIBUS 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 enclosure which is moulded in glass reinforced Polyester (GRP) has stainless steel fittings, silicone gaskets and an

armoured glass window. Its robust construction provides IP66 protection which has been independently assessed by Intertek Testing Services. A separate terminal compartment allows the instrument to be installed and terminated without exposing the indicator electronics. To further simplify wiring and subsequent inspection, the terminal cable entries and clamping screws are forward facing. The indicator may also be mounted onto a vertical or horizontal pipe using one of the accessory kits.

**Operator acknowledgements** may be returned to the fieldbus host when the BA644DF-P is configured as a fieldbus Node. Six Digital Input function blocks in the indicator which are supported by most Profibus hosts enable the status of the four front panel push buttons to be read.

A Comprehensive PROFIBUS interface guide contains commissioning information for the BA644DF-P. Copies may be requested from the BEKA sales office or downloaded from www.beka.co.uk

Units of measurement and the instrument's application or tag number can be economically marked onto the display escutcheon prior to despatch or after installation on-site. Alternatively, for customers who prefer a stainless steel label, the indicator can be supplied with a removable blank or custom etched stainless steel plate mounted on the front of the enclosure.

**For panel mounting** applications see the BA648CF-P PROFIBUS datasheet. This instrument has a similar electrical specification but is housed in a 144 x 72 panel mounting enclosure.

For use in hazardous areas the intrinsically safe BA444DF-P PROFIBUS and the Type n BA444NDF-P PROFIBUS indicators are available. These are similar to the BA644DF-P PROFIBUS indicator but have international certifications allowing installation in most gas and dust hazardous area.

# BA644DF-P

# PROFIBUS PA Fieldbus Indicator 8 variables

General purpose

- Large 5 digit display with bargraph.
- **♦ PROFIBUS PA protocol**
- Displays up to 8 fieldbus variables.
- Selectable Node or Listener modes.
- IP66 field mounting GRP enclosure.
- 3 year guarantee





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### SPECIFICATION

**Display** 

Type Liquid crystal

5 digit plus sign, 20mm high

(-99999 to 99999) 31 segment bargraph

Variables 8

**Controls** 

Front panel Four push buttons for selecting

displayed variable and configuration. May be used for returning operator acknowledgements when configured as a fieldbus node.

Fieldbus communication

Voltage 9 to 32V

Current 13mA

Compliant with IEC61158—2 Clauses 11 and 22

Protocol PROFIBUS PA

Profibus User

Organisation. Approval certificate Z01505

Function Fieldbus Node or Listener selected

via front panel push buttons.

Function blocks

Profibus-PA node 8 x AO; 6 x DI

Listener Captures data in DS-33 format

**Environmental** 

Operating temp -20 to +60°C

Storage temp -40 to +85°C

Humidity To 95% @ 40°C

Enclosure IP66

EMC In accordance with EU Directive

2004/108/EC

Mechanical

Terminals Screw clamp for 0.5 to 1.5mm<sup>2</sup>

cable.

Weight 1.6kg

**Accessories** 

Scale legend Units of measurement marked onto

display escutcheon.

Tag legend Tag number or application marked

onto display escutcheon.

Stainless legend

plate.

Stainless steel plate etched with tag number or application attached

to front of the instrument.

Pipe mounting kit BA392D or BA393

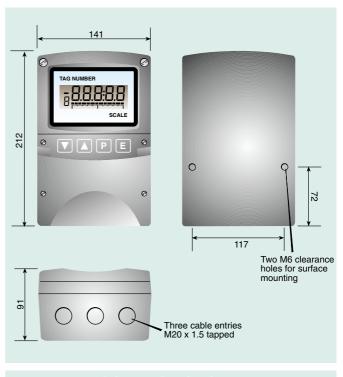
Profibus interface guide.

May be downloaded from www.beka.co.uk

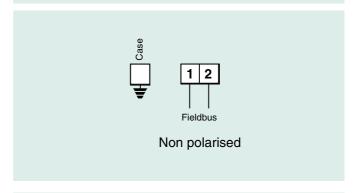
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# DIMENSIONS (mm)



## TERMINAL CONNECTIONS



### HOW TO ORDER

Please specify
Model number BA644DF-P PROFIBUS

Accessories Please specify if required

Escutcheon markings

Scale Scale legend Tag Tag legend

Stainless legend plate Legend

Pipe mounting kit BA392D or BA393