

BALLUFF



Operating instructions
(Safety-related part IECEx)
For inductive sensors NAMUR

UK

BES M12ME-GNX40B-S04G-EEX
BES M18ME1-GNX80B-S04G-EEX
BES M30ME1-GNX15B-S04G-EEX
BES Q40KFU-GNX20B-S92G-EEX
BES Q40KFU-GNX35F-S92G-EEX

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Function and features

- Use in hazardous areas according to the following classification

Table 1:

Order no.	Classification	Operating temperature range Ta
BES M12ME-GNX40B-S04G-EEX BES M18ME1-GNX80B-S04G-EEX	Ex ia IIC T6 Ga Ex ia IIIC T90°C Da	-20°C up to +70°
BES M30ME1-GNX15B-S04G-EEX	Ex ia IIC T6 Gb Ex ia IIB T6 Ga Ex ia IIIC T90°C Da	-20°C up to +70°
BES Q40KFU-GNX20B-S92G-EEX BES Q40KFU-GNX35F-S92G-EEX	Ex ia IIB T6 Gb Ex ia IIIC T90°C Da	-20°C up to +70°

- The requirements of the IEC60079-0:2011, IEC60079-11:2011, IEC60079-26:2006 +Corr 2009 standards are met.
- IEC type test certificate

IECEx BVS 11.0021X

Installation / Set-up

The units should only be mounted, connected and set up by qualified staff. The qualified staff must have knowledge of protection classes, regulations and provisions for apparatus in hazardous areas.

Check whether the classification (see Table 1 above and marking on the unit) is suitable for the application.

- Connection only to intrinsically safe certified circuits or evaluation amplifiers which do not exceed the following maximum values of the units:

$U_i = 15V, I_i = 50mA, P_i = 120mW$

- Permissible operating temperature of the application (referred to the maximum power which can be supplied):

-20°C up to +70°C

- Maximum effective internal inductance (Li) and capacitance (Ci):

Order no.	Internal inductance total (μH)	Internal capacitance total (nF)
BES M12ME-GNX40B-S04G-EEX	115	210
BES M18ME1-GNX80B-S04G-EEX	190	200
BES M30ME1-GNX15B-S04G-EEX	210	230
BES Q40KFU-GNX20B-S92G-EEX	450	250
BES Q40KFU-GNX35F-S92G-EEX	710	220

UK

Installation remarks / Mounting

- Adhere to the respective national regulations and provisions.
- Avoid electrostatic charging on plastic units and cables.
- To avoid electrostatic charging steps must be taken to ensure the equalisation of potential of metal parts (plug housing, fixing elements, etc.).
- Protect unit and cable efficiently against destruction.
- The units are not suitable for installation in the partition between different zones.
- The unit must conform to the corresponding installation regulations.
- When used in zone 0, the sockets must be protected against intensive electrostatic charging.
- The wiring is indicated in the technical data sheet or on the type label.

Special conditions for safe operation

- Always refer to the operating instructions as space restrictions may not allow all markings to be applied to the unit.

Maintenance / Repair

The unit must not be modified nor can it be repaired. In case of a fault please contact the manufacturer.

If needed, you can obtain the data sheet or the type test certificate from the manufacturer (see cover sheet).

You can find the IECEx online certificate at www.iecex.com.