



Note on instructions

When working in hazardous areas, the safety of personnel and equipment depends on compliance with the relevant safety regulations. The people in charge of installation and maintenance bear a special responsibility. It is essential that they have an exact knowledge of the applicable rules and regulations.

The instructions provide a summary of the most important safety measures and must be read by everyone working with the product so that they will be familiar with the correct handling of the product.

The instructions have to be kept for future reference and must be available throughout the expected life of the product.

Description

The junction box with cable gland is designed for combining with various function modules. Selection chart, see page 3.

Two screws are used to connect the junction box to the respective function module.

The junction box allows a conductor to be connected, which can be assembled either to order or by the customer.

Explosion protection

Ex protection type

Function module with junction box

Ex II 2G

Ex de IIC T6 Gb

Ex II 2D

Ex tb IIIC T80 °C Db IP66

Certification

Function module with junction box

PTB 11 ATEX 1010 X

IECEX PTB 11.0025X

Ambient temperature ranges

-55 °C to +40 °C/+50 °C/+60 °C
(-67 °F to 104 °F/+122 °F/140 °F)

Depends on the function module; observe the specifications on the type label

Approved for zones

1, 2 and 21, 22

Technical data

Protection class

Function module with junction box and actuating element: Up to IP 66/IP 67

Weight

Approx. 40 g (0.09 lb)

Electrical parameters

See operational instruction of the respective function module

Cable gland clamping range

- 4 to 9 mm (0.16 to 0.35 in)
- 5 to 10 mm (0.2 to 0.39 in)

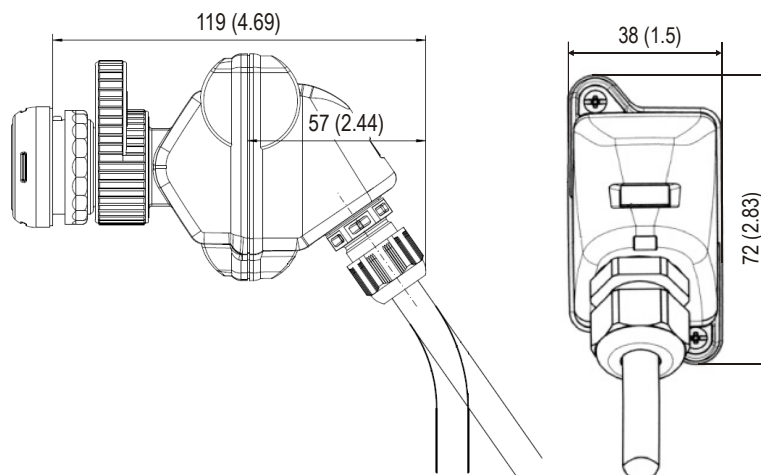
Enclosure material / manufacturing process

Thermoplastic / injection moulding

Mounting

Screwed to the function module

Dimensions in mm (in)



Note

Observe the minimum bending radii of the inserted cables.

Safety Instructions

Junction box, function module, and the corresponding actuating element may be used only within the specified ambient and operating temperature range.

Utilization in areas other than those specified or the modification of the product by anyone other than the manufacturer is not permitted and will exempt BARTEC from liability for defects and any further liability.

Incorrect installation can cause malfunctioning and the loss of explosion protection.

The generally applicable statutory rules and other binding directives relating to workplace safety, accident prevention and environmental protection must be observed.

Before commissioning or restarting operation, check compliance with the applicable laws and directives.

The junction box may be used only if it is in a clean and undamaged condition. It is not permissible to modify the junction box in any way.

Marking

Particularly important points in these instructions are marked with a symbol:

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

i Note

Important instructions and information on effective, economical and environmentally compatible handling.

Standards conformed to

IEC 60079-0:2007
EN 60079-0:2009
IEC/EN 60079-1:2007
IEC 60079-7:2006
EN 60079-7:2007
IEC 60079-31:2008
EN 60079-31:2009
DIN EN 60068-2-27:2009, 30 G, 18 ms

Assembly, Installation, and Commissioning

⚠ WARNING

Risk of injury due to incorrect proceedings.

- Only authorized and qualified personnel may do any of the assembly, disassembly, installation and commissioning work.
- Install the junction box as a stationary unit and protected it against the risk of mechanical damage as well as the risk of electrostatic charge.
- Install cable firmly.
- Use suitable tools.
- The temperature range of the conductor could reduce the temperature range of the product. Example: Conductor, -20 °C (-4 °F), → max. ambient temperature of the product, -20 °C (-4 °F).

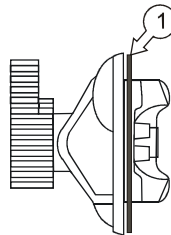
Assembly/disassembly

i Note

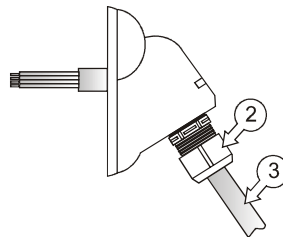
The switch module in the sketch serves as an example of all function modules.

Mounting the junction box:

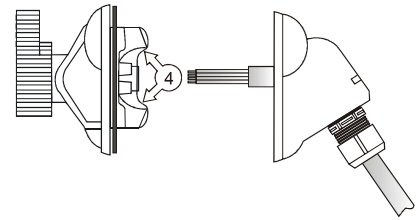
- Make sure the junction box and the sealings to be fitted are intact (no cracks).



- Put the sealing (1) with the round side facing downwards into the circumferential groove.
- Strip approx. 40 mm (1.575 in) from the length of the conductor and remove approx. 6 mm (0.236 in) conductor insulation from the cores.



- Open the cap nut (2) far enough to allow the conductor to be inserted.
- Feed the conductor (3) into the cable gland on the junction box until there is sufficient length available for preparing the conductor connection.
- Close the cap nut (2).

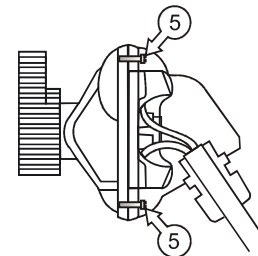


- Connecting the conductor (4).

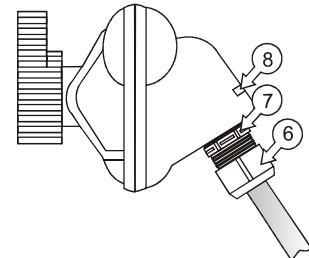
i Note

The conductor connection and the terminal assignment for the individual function modules are described in the operating instructions for each function module.

- Push the junction box firmly onto the function module.



- Tight the screws (5) with a torque of 0.5-0.6 Nm.



- Tighten the cap nut (6) with a torque of 1.3 Nm. (fixing nut (7), max. torque 0.6 Nm).
- Open the clip to take out the label (8), write on it and put it back in again.

Commissioning

Before commissioning, check that:

- The entire device has been installed in compliance with regulations.
- The entire device is not damaged.
- The connection has been established properly.

Transport, Storage

NOTICE

Junction box damage through incorrect transport or incorrect storage.

- Transport and storage is permissible in original packaging only.

