

INSTRUCTION SHEET

Explosion Proof Cover HS5E-K Series

Confirm that the delivered product is what you have ordered.
Read this instruction sheet to make sure of correct operation.
Make sure that the instruction sheet is kept by the end user.

SAFETY PRECAUTIONS

In this operating instruction sheet, safety precautions are categorized to Caution:

⚠ WARNING

Warning notices are used to emphasize that improper operation may cause severe personal injury or death.

⚠ CAUTION

Caution notices are used where inattention might cause personal injury or damage to equipment.

1 Type

HS9Z-BC51

2 Specifications and Ratings

Applicable model	HS5E-K key interlock switch
Weight(approximately)	100g

- Using the HS5E-K with the explosion-proof cover

Performance	Exia II BT6 (EB9Z-A1)
Operating Temperature	-20 to 60°C
Operating Humidity	45 to 85%RH
Dielectric strength	AC500V 1mA
Intrinsic safety and parameters	Channel Common Wiring: U _i = 13.2V , I _i = 227.2mA P _i = 750mW , L _i ≤ 80 μH , C _i ≤ 32nF

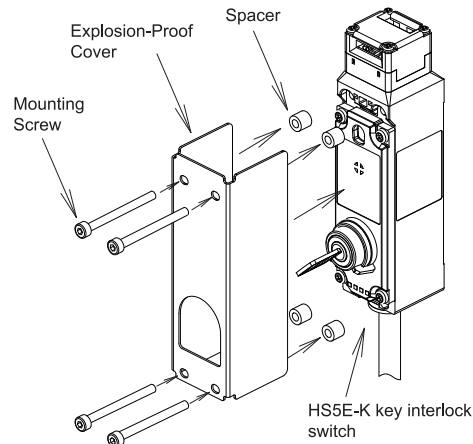
- Safety switch is not attached to the HS9Z-BC51.
- Refer to the specifications of the HS5E-K safety switch for the specifications of the safety switch used.

3 Mounting Examples

- Check that the package contains the following parts.

Parts	Q'ty
Explosion-proof cover	1
Spacer	4

- Using the explosion-proof cover, four spacers, and four screws, install the HS5E-K switch on the mounting frame and panel.



⚠ CAUTION

- When mounting, refer to the HS5E-K mounting hole layout.
- The mounting screw, spring lock washer and the nut must be provided by the user.
- Use a copper or steel screw.
- Recommended Screw Tightening Torque : 1.8 to 2.2 N · m
- *1: The above recommended tightening torques of the mounting screws are the values confirmed with hex socket head bolts. When other screws are used and tightened to a smaller torque, make sure that the screws do not come loose after mounting.

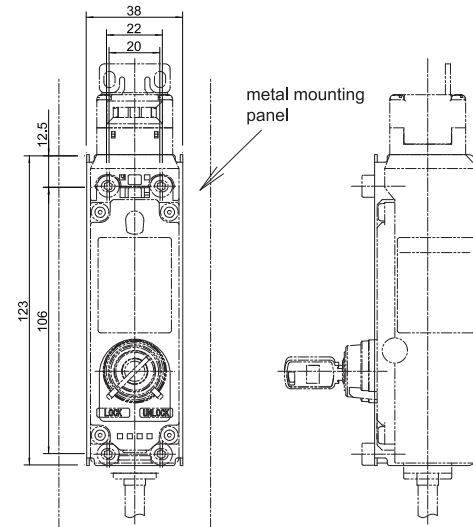
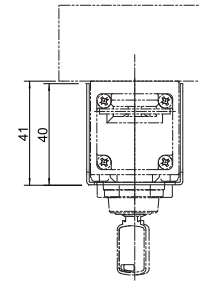
4 Precautions for Operation

⚠ WARNING

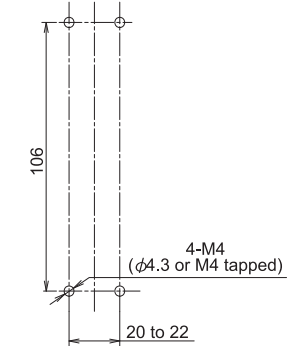
- By using the explosion-proof cover with the HS5E-K key interlock switch, (HS5E-K , optional) and connecting the EB3N safety relay barrier, the HS5E-K can be used as a intrinsically safe explosion-proof product. When using the explosion-proof cover, affix the nameplate for Exia IIBT6, supplied with the EB3N safety relay barrier, where it is easily visible.
- When using in an explosive atmosphere, see the EB3N safety relay instruction manual or the user's manual. (The manuals can be downloaded from IDEC website. <http://www.idec.com/japan/EB3N>)
- When using the HS5E-K with the explosion-proof cover as an intrinsically safe explosion-proof product, be sure to use a grounded metal mounting panel or a frame. Use a mounting panel or a frame, that covers all the mounting surface.
- When using the explosion-proof cover, HS5E-K with rear unlocking button type, and rear unlocking button kit for frame mounting together, do not open a hole larger than the specified size.
- When connecting the lead wire, connect using a junction box. See the instruction manual supplied with the EB3N safety relay barrier.
- The inductance and capacitance of the HS5E-K are 1.40 μH/m, 0.31nF/m (5m type). When connecting with the EB3N safety relay barrier, make sure that the intrinsically safe parameters are within L_i ≤ 80 μH, C_i ≤ 32nF.

5 Dimensions and Mounting (mm)

Dimensions



● Mounting hole layout



6 Precaution for Disposal

Dispose of the HS5E safety switch as an industrial waste.