



INSTRUCTION SHEET (ORIGINAL) **GRIP SWTICH HOUSING** HE9Z-GSH51

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 NOTE

In this operation instruction sheet, safety precautions are categorized in order of importance to Warning and Caution.

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.



HE9Z-GSH51

2 Specifications and Ratings

Applicable Standards	UL50 (UL Recognition)
	IEC60529/EN60529
Operating Temperature	-25 to + 60°C (no freezing)
Pollution Degree	3
Electric Shock Protection	Class II (IEC61140)
Degree of Protection	IP65
	NEMA Type 4X Indoor use only
	(when using the HE5B-M2P*)

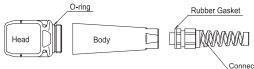
Application

- ·Housing to install the HE5B enabling switch for use as a 3-position grip
- ·Housing to install the AB6M or AS6M switch for use as a hand-held switch.

3 Unpacking

Before starting the installation of the grip-switch housing, confirm that no parts are missing and that no damages have been caused during transportation.

The package contains: A head, a body, a connector, and an instruction sheet

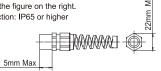


Connector (one connector is supplied with the grip-switch housing)

•Recommended Connector Type: SKINTOP-BS-M16×1.5 (LAPP, Germany)

When using other connectors:

- ·DimensionsSee the figure on the right.
- *Degree of Protection: IP65 or higher



4. Assembling

Applicable Switches

· HE5B enabling switch (IP65 type)

Note: The following switches (not enabling switches) can also be used with the HE9Z-GSH51 grip-switch housing for a hand-held switch.

- · AB6M Pushbutton Switch (IP65 type)(except AB6M-V)
- · AS6M Selector Switch (IP65 type)
- · AS6M Key Selector Switch (IP65 type)

Applicable cable outside diameter: 4.5 to 10 mm

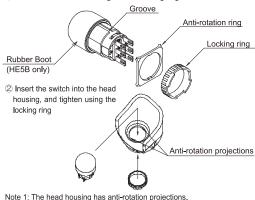
Applicable wire size : 0.5 mm² maximum×1 pc.

Note: Comply with IEC60204-1 when wiring.

☐Assembling

Assemble the switch and the HE9Z-GSH51 housing according to the following instructions ① to ⑤.

①Remove the anti-rotation-ring and the locking ring from the switch



When assembling, align the grooves on the switch with the projections Note 2: Anti-rotation ring is not necessary when installing the switch on the grip-switch housing.

Note 3: Recommended tightening torque of the locking ring:

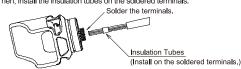
HE5B enabling switch: 0.29 to 0.49 Nm Other switches : 0.68 to 0.88 Nm

Tighten the locking ring using the ring wrench (Type No.: MT-001).

3 Insert the cable into the connector and the body.

Wire stripping length Wire length: 50 to 70mm

4 First, install the insulation tubes on wires, and solder the terminals Then, install the insulation tubes on the soldered terminals.

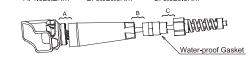


Note:Solder the terminal at a temperature of 260°C or less within 3 seconds. (Use non-corrosive liquid rosin as soldering flux.

Sn-Ag-Cu type is recommended when using lead-free solder.)

 \bigcirc Tighten the housings in the order of A→B→C.

· Recommended tightening torque: (See the figure on the under.) B: 3.0±0.3Nm C: 3.0±0.3Nm A: 1 0+0 2Nm

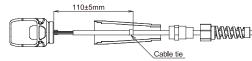


Note: When using other connectors, refer to the tightening torque of the

Note: Do not twist or pull the cable with an excessive force, otherwise the switch may be damaged. The water-proof gasket in the connector, when tightened on a cable of ø7 mm and larger diameter, prevents the cable inside the connector from being pulled out, protecting the switch. Taking the anti-pulling measure shown below is recommended for cables of less than ø7 mm diameter

· For cable of less than ø7 mm diameter

Note: Install the cable tie on the cable as shown in the figure. Make sure that the cable tie does not interfere with the water-proof gasket.



□ Disassembling

Turn off the power before starting disassembling. Unscrew the switch and housing in the order of C \rightarrow B \rightarrow A (see the figure on the right). Because the water-proof gasket tightens the cable, carefully pull out the gasket using pincers, so that unscrewing the part B does not cause the cable to twist. damaging the switch. When reassembling, make sure that thewater-proof gasket is installed in place.

5 Notes for Operation

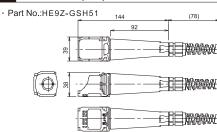
№ WARNING

- Read this instruction sheet to make sure of correct operation before starting installation, wiring, operation, maintenance, and inspection. Also, keep this instruction sheet at the end user.
- Turn off the power to the grip-switch housing before starting installation, wiring, maintenance, and inspection of the enabling switch. Failure to turn power off may cause electrical shocks or fire hazard.
- Use wires of proper size to meet voltage and current requirements. Using improper wires may cause fire hazard due to abnormal heat generation.
- Do not disassemble or modify the switch. Also do not attempt to disable the grip switch function, otherwise a failure or an accident will result

/ CAUTION

- · Use the applicable switches only. Usage of unauthorized switches is not included in the warranty.
- Follow the instruction of this sheet when assembling the housing and switch.
- When assembling and disassembling, unscrew the housing in the specified order. Otherwise the wire and switch may be damaged.
- When assembling and disassembling, make sure that no parts are damaged, and that no foreign object enters inside.
- Do not disassemble the housing during operation. When tampering is anticipated, provide a tamper-evident measure (when someone attempts disassembling, the trace is left on the product).
- Do not twist or pull the cable with an excessive force, otherwise the wire and switch may be damaged.
- Do not apply an excessive shock such as by dropping. When an excessive shock has been applied, confirm normal operation before usage.
- When assembling, make sure that no foreign objects enter inside.
- Do not maintain the HE5B constantly in the enabling position by taping down the button part or by other means.
- Do not remove the rubber boot from the HE5B or apply a strong force on the rubber boot in an unintended direction. Otherwise waterproof performance may be impaired.
- The button unit of AB6M Pushbutton Switch may come off if the grip switch is dropped. Reinstall the button unit only if it is not damaged and operates normally. Make sure to turn off the power before reinstalling the button unit, because the contact turns on while it is installed on the grip switch. Replace with a new button unit when losing or damaging the button unit. Part No. AB6M-BK1- (: button color)

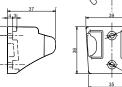
6 Dimensions (mm)



· Part No.:HE9Z-GH1 Option (separate order) (Mounting bracket: (for hanging the grip-switch housing)



· Part No.:HE9Z-GH5 □ Body material/color Blank: PA66 / Black W · PRT / White



☐ Mounting Hole layout (mm)



Mounting screw:

M3 Phillips pan head screw×2

·Mounting screw length: [When M3 nut is used]

Mounting panel thickness + M3 nut thickness

+ washer thickness + 4mm minimum [When M3 nut is not used] Mounting panel thickness +

washer thickness+ 4mm minimum * The total thickness of mounting screw head and

washer must be 3mm maximum. * Use a washer with a diameter of 6.5mm maximum.

·Recommended screw tighteting torque: 0.5 to 0.8 N·m

/ CAUTION

Install mounting bracket and grip switch holder in the direction as shown above.

7 Precaution for Disposal

Dispose of GRIP-SWITCH HOUSING HE9Z-GSH51 as an industrial waste. DECLATION OF CONFORMITY

We, IDEC CORPORATION, 6-64, Nishimiyahara 2-chome Yodogawa-ku, Osaka 532-0004. Japan declare under our sole responsibility that the product: Description: Grip Switch Housing

Model No: HE9Z-GSH51

to which this declaration relates is in conformity with the EC Directive on the following standard(s) or other normative document(s). In case of alteration of the product, not agreed upon by us, this declaration will lose its validity. Applicable EC Directive: LOW Voltage Directive (2006/95/EC) Applicable Standard(s): EN60529

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