

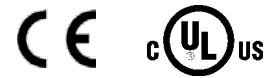


## Enclosures for HW, TW & XW 22mm Switches & Pilot Devices

- Features**
- Three compact sizes (mm): 76 x 76, 140 x 76 and 200 x 76
  - Available in 1, 2, 3, 4 or 5 mounting hole configurations
  - Easy installation: panel, wall or frame mountable
  - Polycarbonate enclosure cover and base, stainless steel screws
  - UL Listed, RoHS Compliant
  - IP65 and Nema Type 4X rated (when installed with IP65 or Nema Type 4X unit)
  - Class II electric shock protection (when installed with applicable unit)
  - Ideal for high temperatures (-25 to 60°C) & corrosive environments



Switches & pilot devices are sold separately.



### Specifications

|                                                |                                                                                                                                               |                               |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| <b>Operating Conditions</b>                    | Ambient temperature                                                                                                                           | -25 to +60°C (no freezing)    |
|                                                | Relative humidity                                                                                                                             | 45 to 85%RH (no condensation) |
|                                                | Storage temperature                                                                                                                           | -40 to +80°C (no freezing)    |
|                                                | Degree of pollution                                                                                                                           | 3                             |
| <b>Degree of Protection</b>                    | IP65 (when IP65 switches & pilot devices are installed)<br>NEMA Type 4X Indoor Use Only (when Type 4X switches & pilot devices are installed) |                               |
| <b>Electric Shock Protection</b>               | Class II (when class II switches & pilot devices are installed)                                                                               |                               |
| <b>Material</b>                                | Cover and base                                                                                                                                | Polycarbonate                 |
|                                                | Cover mounting screws                                                                                                                         | Stainless steel               |
| <b>Applicable Switches &amp; Pilot Devices</b> | HW, TW and XW series switches, pilot devices & accessories (see note below)                                                                   |                               |
| <b>Weight (approx.)</b>                        | 76mm type: 125g (FB1W-111Z)<br>140mm type: 184g (FB2W-211Z)<br>200mm type: 243g (FB3W-311Z)                                                   |                               |

Note: Choose switches, pilot devices and accessories that match the mounting hole centers, effective depth behind the cover, and the thickness of the cover where switches and pilot devices are installed (3 mm). Enclosures with 30 or 36mm mounting hole centers may limit the knob orientation of selector switches because the contact blocks can be mounted in one direction only on these mounting centers.

### Enclosure Part Numbers

| Size (mm)       | Description              | Part Number | Distance Between Hole Centers (mm) |
|-----------------|--------------------------|-------------|------------------------------------|
| 76 x 76 x 59.5  | Enclosure 1 hole, Yellow | FB1W-111Y   | -                                  |
|                 | Enclosure 1 hole, Beige  | FB1W-111Z   | -                                  |
| 140 x 76 x 59.5 | Enclosure 2 hole, Beige  | FB2W-211Z   | 50                                 |
|                 | Enclosure 3 hole, Beige  | FB2W-312Z   | 30                                 |
| 200 x 76 x 59.5 | Enclosure 3 hole, Beige  | FB3W-311Z   | 50                                 |
|                 | Enclosure 4 hole, Beige  | FB3W-413Z   | 36                                 |
|                 | Enclosure 5 hole, Beige  | FB3W-512Z   | 30                                 |

### Accessories

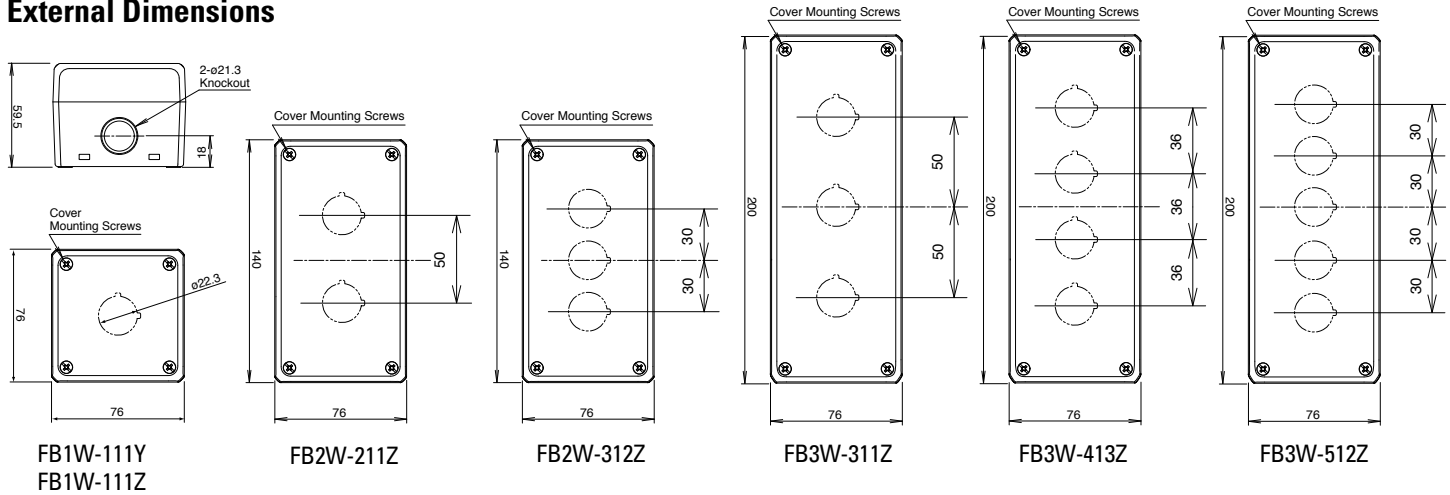
| Description         | Part Number |
|---------------------|-------------|
| Plug Adaptor 13.5mm | HW9Z-PG135  |
| Mounting Bracket    | FB9Z-PK1    |

Note: Connectors and nuts are not supplied with accessories.

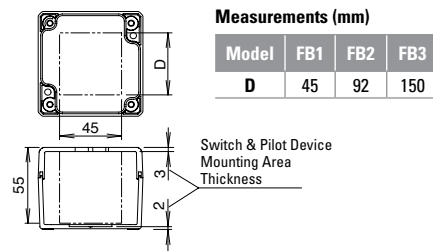
### Switch & Pilot Device Accessories

| Series               | Description                 | Part Number                              |
|----------------------|-----------------------------|------------------------------------------|
| HW Series            | Nameplate                   | HWAM, HWAQ, HWAS, HWAV                   |
|                      | Marking plate for nameplate | HWNP                                     |
|                      | Anti-rotation ring          | HW9Z-RL                                  |
|                      | EMO switch guard            | HW9Z-KG1, HW9Z-KG2<br>HW9Z-KG3, HW9Z-KG4 |
|                      | Switch cover                | HW9Z-K1, HW9Z-K11                        |
|                      | Pushbutton clear boot       | OC-31, OC-32                             |
|                      | Padlock cover               | HW9Z-KL1                                 |
| XW Series<br>E-Stops | Nameplate                   | HWAV                                     |
|                      | EMO switch guard            | HW9Z-KG1, HW9Z-KG2<br>HW9Z-KG3, HW9Z-KG4 |
|                      | Anti-rotation ring          | HW9Z-RL                                  |
| TW Series            | Nameplate                   | NWA, NWAQ, NWAAS, NWAAL-0, NWAQL-0, NWAV |
|                      | Anti-rotation ring          | OGL-31                                   |
|                      | Metal button guard          | OLW-C                                    |
|                      | Pushbutton clear boot       | OC-31, OC-32                             |
|                      | Button cover                | OCW-11                                   |
| Padlock cover        | HW9Z-KL1                    |                                          |

## External Dimensions



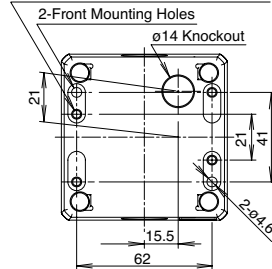
## Internal Dimensions



## External Back Dimensions

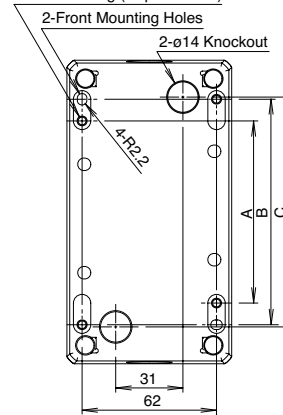
76mm (FB1)

4-M4 Tapped Holes for Rear Mounting (Depth: 10 mm)



140 and 200mm (FB2/FB3)

4-M4 Tapped Screw Holes for Rear Mounting (Depth: 10mm)

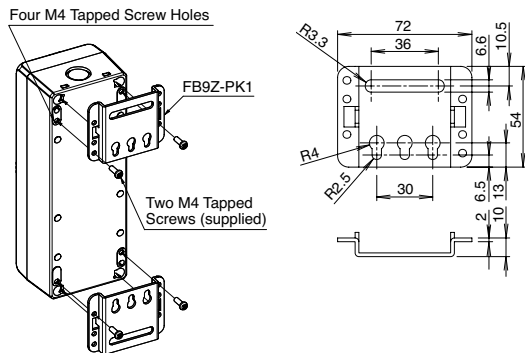


Measurements (mm)

| Model | FB2 | FB3 |
|-------|-----|-----|
| A     | 84  | 144 |
| B     | 104 | 164 |
| C     | 106 | 166 |

## Mounting

FB9Z-PK1 Frame Mounting Adapter



All dimensions are in mm.

## Mounting Hole Dimensions

| Model | FB1 | FB2                   | FB3                      | FB2/FB3               |
|-------|-----|-----------------------|--------------------------|-----------------------|
|       |     | 50mm Mounting Centers | 36/50mm Mounting Centers | 30mm Mounting Centers |
| Shape |     |                       |                          |                       |

