

APEM

Switches &amp; Pilot Lights

Control Boxes

Emergency Stop Switches

Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays &amp; Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

X6

XA

XW








XN

SEMI

## SEMI S2 Compliant Switch Guards

## Switch Guards

Package Quantity: 1

Series	Description & Shape	SEMI S2	ISO 13850	Part No.	Applicable Switches (*1)	Remarks
ø16mm XA Series	ø16 mm EMO Switch Guard 	○	○	XA9Z-KG1	XA1E-BV3 XA1E-BV4 XA1E-LV3 XA1E-LV4	<ul style="list-style-type: none"> <li>SEMI S2 compliant (The combination of IDEC's emergency stop switches and EMO switch guards are approved by TÜV Rheinland for compliance with SEMI S2 standard.)</li> <li>ISO 13850 compliant.</li> </ul>
ø22mm HW/XW Series	ø22 mm EMO Switch Guard 	○	—	HW9Z-KG1	XW1E-BV4 XW1E-LV4 XW1E-TV4 HW1B-V3 HW1B-V4 HW1B-X4 HW1B-Y2 HW1E-BV4 HW1E-LV4	<ul style="list-style-type: none"> <li>SEMI S2-0703, 12.5.1 compliant.</li> <li>Widely used switch guard in many applications.</li> </ul>
	ø22 mm EMO Switch Guard 	○	—	HW9Z-KG2	XW1E-BV4 XW1E-LV4 XW1E-TV4 HW1B-V3 HW1B-V4 HW1B-X4 HW1B-Y2 HW1E-BV4 HW1E-LV4	<ul style="list-style-type: none"> <li>SEMI S2-0703, 12.5.1 compliant.</li> <li>SEMATECH Application Guide for SEMI S2-93, 12.4. compliant.</li> <li>The round shape is effective to prevent inadvertent operation from any direction.</li> </ul>
	ø22 mm EMO Switch Guard 	○	○	HW9Z-KG3	XW1E-BV4 XW1E-LV4 XW1E-TV4 HW1B-V3 HW1B-V4 HW1B-X4 HW1B-Y2	<ul style="list-style-type: none"> <li>SEMI S2 compliant (The combination of IDEC's emergency stop switches and EMO switch guards are approved by TÜV Rheinland for compliance with SEMI S2 standard.)</li> <li>ISO 13850 compliant.</li> <li>The smallest switch guard for ø22 series switches.</li> <li>Can be installed on FB control boxes.</li> </ul>
	ø22 mm EMO Switch Guard 	○	○	HW9Z-KG4	XW1E-BV4 XW1E-BV5 XW1E-LV4 XW1E-TV4 HW1B-V3 HW1B-V4 HW1B-X4 HW1B-Y2 HW1E-BV4 HW1E-LV4	<ul style="list-style-type: none"> <li>SEMI S2 compliant (The combination of IDEC's emergency stop switches and EMO switch guards are approved by TÜV Rheinland for compliance with SEMI S2 standard.)</li> <li>ISO 13850 compliant.</li> <li>SEMATECH Application Guide for SEMI S2-93, 12.4. compliant.</li> <li>Narrower than HW9ZKG5. Saves more space.</li> <li>Can be installed on FB control boxes.</li> <li>Available in white.</li> </ul>
	ø22 mm EMO Switch Guard 	○	○	HW9Z-KG5	XW1E-BV4 XW1E-LV4 XW1E-TV4 XW1E-BV5 HW1B-V3 HW1B-V4 HW1B-X4 HW1B-Y2 HW1E-BV4 HW1E-LV4	<ul style="list-style-type: none"> <li>SEMI S2 compliant (The combination of IDEC's emergency stop switches and EMO switch guards are approved by TÜV Rheinland for compliance with SEMI S2 standard.)</li> <li>ISO 13850 compliant.</li> <li>SEMATECH Application Guide for SEMI S2-93, 12.4. compliant.</li> <li>A nameplate can be installed.</li> <li>Available in white.</li> </ul> 

• Material: polyamide (PA6), degree of protection: IP65 (IEC 60529)

\*1) For details on applicable emergency stop switches, see [D-052](#).



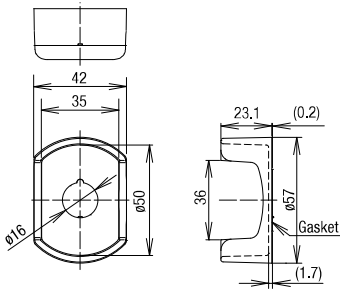
Download catalogs and CAD from <http://eu.idec.com/downloads>

SEMI S2 Compliant Switch Guards

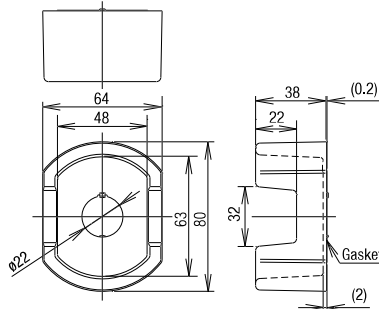
All dimensions in mm.

Dimensions

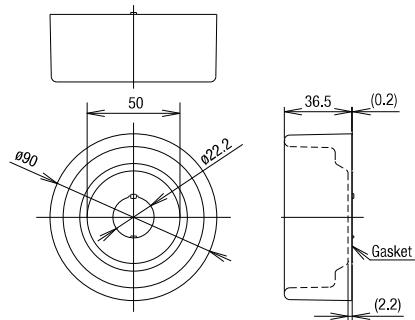
XA9Z-KG1



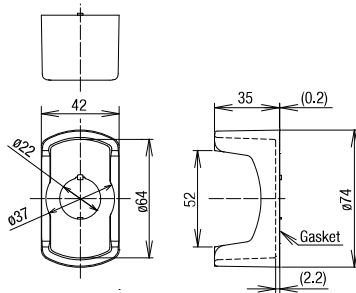
HW9Z-KG1



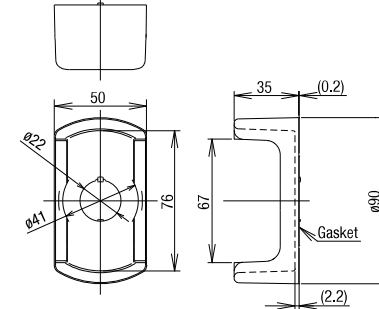
HW9Z-KG2



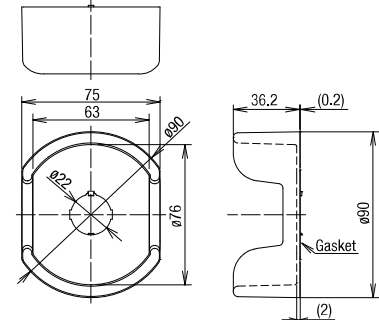
HW9Z-KG3



HW9Z-KG4



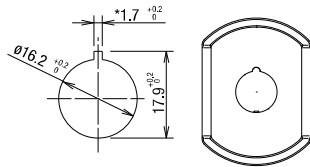
HW9Z-KG5



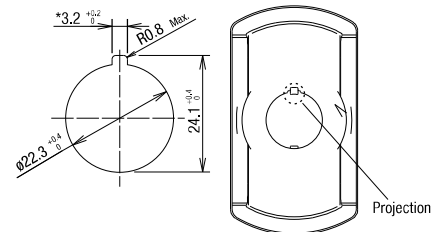
• Panel thickness: 1.2 to 4.0 mm  
(1.2 to 2.6 mm when using an HWAV nameplate)

Panel Cut-out

ø16mm



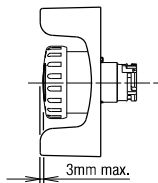
ø22mm



The \* 1.7<sup>+0.2</sup><sub>0</sub> recess is for preventing rotation and not necessary when anti-rotation is not used.

The \* 3.2<sup>+0.2</sup><sub>0</sub> recess is for preventing rotation and not necessary when anti-rotation is not used.

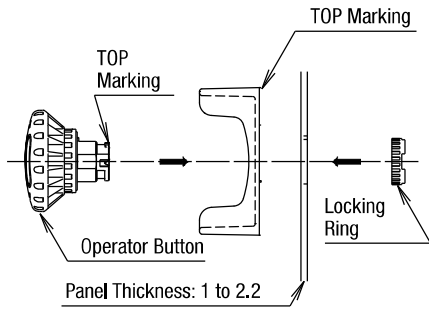
• When anti-rotation is not required or when the panel cut-out does not have anti-rotation recess, remove the projection using pliers.



Note: The height of the applicable switch and guard will be 3 mm or less as shown in the diagram on the right.

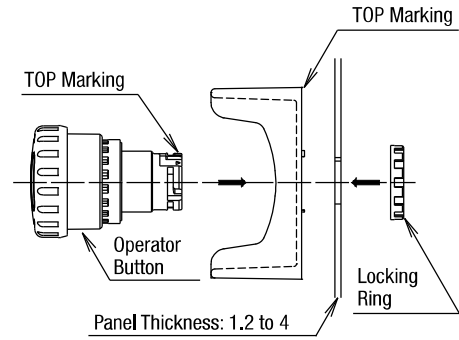
**Installation**

ø16 mm



To tighten the locking ring, use locking ring wrench MT-100 and tighten to a torque of 0.88 N-m.

ø22 mm

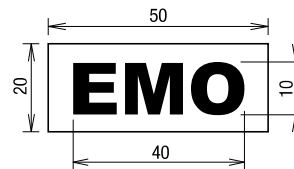


To tighten the locking ring, use locking ring wrench MW9Z-T1 and tighten to a torque of 2.0 N-m.

**EMO Sticker**



Part No.: HW9Z-EMO-NPP  
 Color: Yellow (red legend) Package  
 Quantity: 10



**Nameplate (for ø22 mm Emergency Stop Switches)**

Name	Legend	Part No.	Remarks
For ø40mm Mushroom	EMERGENCY OFF	HWAV-74-Y	<ul style="list-style-type: none"> <li>Nameplate color: yellow</li> <li>Legend color: black</li> </ul>

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