

# Series MHZ2/MHZJ2/MHK2/MHKL2/MHC2/MHT2 Auto Switch Installation Example and Mounting Position

Various auto switch applications are possible through different combinations of auto switch quantities and detecting positions.

## 1) Detection when Gripping Exterior of Workpiece

Detection example		1. Confirmation of fingers in reset position	2. Confirmation of workpiece held	3. Confirmation of workpiece released
<b>Position to be detected</b>		Position of fingers fully opened	Position when gripping workpiece	Position of fingers fully closed
<b>Operation of auto switch</b>		Switch turned on when fingers return. (Light ON)	Switch turned on when gripping a workpiece. (Light ON)	When a workpiece is held (Normal operation): Switch to turn OFF (Light not illuminating) When a workpiece is not held (Abnormal operation): Switch to turn ON (Light illuminating)
<b>Detection combinations</b>	One auto switch	●	●	●
	Two auto switches	●—●	●—●	●—●
<b>How to determine auto switch installation position</b>		<b>Step 1)</b> Fully open the fingers.	<b>Step 1)</b> Position fingers for gripping a workpiece.	<b>Step 1)</b> Fully close the fingers.
At no pressure or low pressure, connect the switch to a power supply, and follow the directions.		<b>Step 2)</b> Insert the auto switch into the switch installation groove in the direction shown in the following drawing.		
		<p><b>Step 3)</b> Slide the auto switch in the direction of the arrow until the indicator light illuminates.</p> <p><b>Step 4)</b> Slide the auto switch further in the direction of the arrow until the indicator light goes out.</p> <p><b>Step 5)</b> Move the auto switch in the opposite direction and fasten it at a position 0.3 to 0.5 mm beyond the position where the indicator light illuminates.</p>	<p><b>Step 3)</b> Slide the auto switch in the direction of the arrow until the light illuminates and fasten it at a position 0.3 to 0.5 mm in the direction of the arrow beyond the position where the indicator light illuminates.</p> <p><b>Step 4)</b> Slide the auto switch further in the direction of the arrow until the indicator light goes out.</p> <p><b>Step 5)</b> Move the auto switch in the opposite direction 0.3 to 0.5 mm in the direction indicated by the arrow from its location when the indicator light comes on again.</p>	

Note 1) It is recommended that gripping of a workpiece be performed close to the center of the finger stroke.  
Note 2) When holding a workpiece close at the end of open/close stroke of fingers, detecting performance of the combinations listed in the above table may be limited, depending on the hysteresis of an auto switch, etc.

Various auto switch applications are possible through different combinations of auto switch quantities and detecting positions.

## 2) Detection when Gripping Interior of Workpiece

Detection example		1. Confirmation of fingers in reset position	2. Confirmation of workpiece held	3. Confirmation of workpiece released
<b>Position to be detected</b>		Position of fingers fully closed	Position when gripping	Position of fingers fully opened
<b>Operation of auto switch</b>		Switch turned ON when fingers return. (Light ON)	Switch turned ON when gripping a workpiece. (Light ON)	When a workpiece is held (Normal operation): Switch to turn OFF (Light not illuminating) When a workpiece is not held (Abnormal operation): Switch to turn ON (Light illuminating)
<b>Detection combinations</b>	One auto switch	●	●	●
	Two auto switches	●—●	●—●	●—●
<b>How to determine auto switch installation position</b>		<b>Step 1)</b> Fully close the fingers.	<b>Step 1)</b> Position fingers for gripping a workpiece.	<b>Step 1)</b> Fully open the fingers.
At no pressure or low pressure, connect the switch to a power supply, and follow the directions.		<b>Step 2)</b> Insert the auto switch into the switch installation groove in the direction shown in the following drawing.		
		<p><b>Step 3)</b> Move the auto switch in the direction of the arrow and fasten it at a position 0.3 to 0.5 mm beyond the position where the indicator light illuminates.</p> <p><b>Step 4)</b> Slide the auto switch further in the direction of the arrow until the indicator light goes out.</p> <p><b>Step 5)</b> Move the auto switch in the opposite direction 0.3 to 0.5 mm in the direction indicated by the arrow from its location when the indicator light comes on again.</p>	<p><b>Step 3)</b> Slide the auto switch in the direction of the arrow until the indicator light illuminates.</p> <p><b>Step 4)</b> Slide the auto switch further in the direction of the arrow until the indicator light goes out.</p> <p><b>Step 5)</b> Move the auto switch in the opposite direction 0.3 to 0.5 mm in the direction indicated by the arrow from its location when the indicator light comes on again.</p>	

Note 1) It is recommended that gripping of a workpiece be performed close to the center of the finger stroke.  
Note 2) When holding a workpiece close at the end of open/close stroke of fingers, detecting performance of the combinations listed in the above table may be limited, depending on the hysteresis of an auto switch, etc.

MHZ
MHF
MHL
MHR
MHK
MHS
MHC
MHT
MHY
MHW
MRHQ
Misc.
D-
20-