CleanSwitch Lock
Contact-free switch with digital input for standard and integration for Feller, Hager, Gira and Jung switch systems

Translation of the original instructions

General

Safety instructions

The device may only be installed and commissioned by trained and qualified personnel. The device may only be opened and repaired by the manufacturer. The device may only be connected to a protection low-voltage system with safe electrical separation. Always consider the safety functions of your application as a whole, never just in relation to one individual section of the system. The installer is responsible for carrying out a risk assessment and installing the detector and the system correctly. Avoid touching any electronic components.

Mounting

Standard example

1 Top

Insert the seal as marked.

Mounting option 2 screws

2 Recommended mounting distance between CleanSwitch (horizontal and vertical)

88 mm

Min. 70 mm

3 Attach the cover at the top.

Press until it clicks!

4 Dismantling
**3 Configuration**

**Factory settings**
- Detection range 0.1 – 0.5 m
- Colour brightness

**DIP switches**

1-3 Optical feedback

<table>
<thead>
<tr>
<th>ON</th>
<th>ON</th>
<th>ON</th>
<th>OFF</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
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4 Mode setting

<table>
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**4 Electric connections and operating principles**

**Stripping length** min. 8.5 mm (solid wire or flexible wire)

**Lock input**
- **OFF**
- **ON**

**Activation**
- **–**
- **Pulse/Toggle**
- **Pulse**
- **Pulse**

**Mode**
- **OFF**
- **ON – Pulse (0.3 s)**
- **OFF**
- **OFF**

**Relay output**
- **OFF**
- **ON**
- **ON**
- **OFF**

**LED**
- refer to chapter 3
- refer to chapter 3

*Note: When the lock input is active, the sensor lights or flashes red 3 times, independent of the setting of the DIP switches (chapter 3).
Installation example

**WC**

1. Mode Pulse
2. Mode Toggle
3. Mode Pulse

**Clean room**

4. Mode Pulse
5. Mode Pulse
6. Mode Pulse

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Open = 0 V DC Pulse  
Open = +12–24 V DC Pulse  
Supply = 12–24 V AC

CleanSwitch Lock Modus: Pulse
CleanSwitch Modus: Toggle
CleanSwitch Lock Modus: Pulse

External control system

Negative logic

Negative logic
### Technical data

<table>
<thead>
<tr>
<th>Technology</th>
<th>Microwave Doppler Radar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>24.125 GHz</td>
</tr>
<tr>
<td>Detection range</td>
<td>0.1 – 0.5 m</td>
</tr>
</tbody>
</table>
| Detection mode   | Pulse mode: The sensor detects during hand movement  
                          Toggle mode: First movement on/second movement off |
| Detection speed  | Min: 5 Hz or ± 3 cm/s  
                          Max: 200 Hz or ± 1.2 m/s |
| Supply voltage / Input | 12-24 VAC ± 10% (50-60 Hz)  
                          12-24 VDC + 20%/– 10% |
| Max. power consumption | < 1 W (with optical feedback) |
| Output           | Relay with NO contact (potential-free)  
                          Max. switching voltage/switching current (DC): 1 A up to 30 V, 0.5 A up to 60 V  
                          Max. switching voltage/switching current (AC): 1 A up to 50 V  
                          Max. switching capacity: 30 W (DC)/50 VA (AC) |
| Output hold time | "Relay hold time": 0.3 s  
                          "LED hold time": 2 s |
| Storage/operating temperature | – 20 to + 60°C |
| Protection class | Standard: IP65 (fixed with 4 screws, smooth surface)  
                          Feller / Hager / Gira / Jung: IP20 |
| Dimensions (mm)  | Standard / Feller: 88 x 88 x 38 mm (L x W x D)  
                          Hager: 92 x 92 x 38 mm (L x W x D)  
                          Gira / Jung: 80 x 80 x 42 mm (L x W x D) |
| Weight           | 55 g                    |
| Materials        | Standard / Feller: ASA / PC  
                          Hager / Gira / Jung: Duroplast / ASA / PC |

**Note:** According to the VAH List, CleanSwitch is resistant to surface disinfectants in hospitals.

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### EU Declaration of Conformity

See attachment

### WEEE

Devices with this symbol must be treated separately during disposal. This must be done in accordance with the laws of the respective countries for environmentally sound disposal, processing and recycling of electrical and electronic equipment.

### FCC approval

This device meets the requirements of Part 15 of the FCC regulations and the RSS-210 standard of Industry Canada.  
**Warning:** Changes or modifications made to this device may void the FCC authorisation to operate this device.

### Contact

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Made in China / Designed in Switzerland