Switches for Detection

- **Human Vision Components (HVC)**
  - BST
    - HVC incorporates ten different image sensing functions, for example face recognition in a small board. Choose between wide-angle and long-distance types depending on detection distance or range needs. Evaluation software and development tools can be downloaded from the website.

- **Environment Sensor**
  - 2JClIE
    - Senses ambient environmental information such as temperature, humidity, illumination, barometric pressure, and noise. A multi-function subminiature sensor capable of wireless communication. Available in three types.

- **Photomicro Sensor**
  - EE-SX
    - Transmissive (SMD type)
      - Wide product lineup with detection distance (slot width) ranging from 2 to 5 mm. Compact and space-saving. Photo-IC type is also available.
  - EE-SX
    - Transmissive (Connector type)

- **Light convergent Reflective Sensor**
  - BSW-LB
    - Reliable detection of shiny, black or transparent objects. Unaffected by backgrounds. The 24 VDC power supply voltage type and digital output type are idea for integration into devices.

Switches for Operation

- **Basic Switch**
  - V/SS
    - A wide choice of product variations ranging from 0.1 A micro-load type to a 21 A switching type. V/SS series is also available with a heat-resistant type.
  - D2F-5
    - A 5 A switching type is added to D2F ultra subminiature basic switches. Contributes to further miniaturization and thinning of devices.

- **Rocker Switch**
  - A8GS
    - Smallest class in the industry. With reset function triggered with external signals. Lineup of double-pole types for switching ON/OFF both micro-loads and high-capacity loads.

- **Touch Sensor**
  - W7ED
    - Capacitive sensors can be turned ON/OFF with just a light touch. Four types are available depending on the electrode shape or the presence or absence of an FG terminal.

- **MEMS Thermal Sensor**
  - D6T
    - Measures the temperature of people and objects in a non-contact manner. New lineup of a 200°C high-temperature detection type and a high-resolution type with 32 × 32 elements.

- **3D TOF Sensor Module**
  - BSL
    - Real-time 3D sensing of distance to humans or objects. High ambient light immunity and flexible assembly.

- **Sensor Evaluation Board**
  - 2JClIE-EV
    - Easy evaluation of OMRON sensors (light convergent reflective sensor, MEMS flow sensor and MEMS non-contact thermal sensor). Available with three types that support Raspberry Pi*1 and Arduino*2 platforms.
    
*1. Raspberry Pi is a registered trademark of the Raspberry Pi Foundation. 
*2. Arduino is a registered trademark of Audino LLC and Arduino SRL.

Switches for Setting

- **DIP Switch**
  - A6H/A6HF/A6HR
    - Half-pitch side and piano types are also available.
  - A6KS/A6KSV/A6RS
    - Rotary type surface mounting. Top/side-actuated models available.

- **Thumbwheel Switch**
  - A7□ Series
    - Available in a wide range of shapes, terminals, and mounting types for everything from miniatures to large devices. There are also span units with-engraved characters or symbols that can be used for indicating units, such as time and length.

Learn more at "https://components.omron.com/"
### Relay

**Mechanical Relay**

<table>
<thead>
<tr>
<th>Signal Relay</th>
<th>PCB Power Relay</th>
<th>MOS FET Relay</th>
</tr>
</thead>
<tbody>
<tr>
<td>G6S</td>
<td>G2RL/G2RL-E2</td>
<td>G2VM-61VY/35VYY</td>
</tr>
<tr>
<td>Miniature double-pole relay with switching current of 2 A. Lineup of products compatible with both surface mounting (inner L bending, outer L bending and through-hole mounting. Also available with 1-winding and 2-winding latching types.</td>
<td>Lineup of single-pole relays with high switching current of 10 A, 16 A, etc. Enables 100,000 operations durability at high-capacity 23 A switching.</td>
<td>SDPR special package. A general purpose type that can be used for various applications. Lineup of 60 V and 350 V load voltage types.</td>
</tr>
<tr>
<td>G6K</td>
<td>G6DN</td>
<td>G3VM-61VR/101HR2</td>
</tr>
<tr>
<td>A double-pole 1 A switching relay with low profile and world's smallest class mounting area. Delivers high-sensitivity with a power consumption of approximately 100 mW.</td>
<td>A single-pole 5 A switching power relay with ultra-thin size of just 5 mm. Achieves low power consumption of approx. 110 mW. Lineup of a long-life type (-L) with an electrical durability of 100,000 operations.</td>
<td>Delivers high-capacity switching and low on-resistance comparable to miniature mechanical relays. Lineup of 1.4 A and 3 A continuous load current types.</td>
</tr>
<tr>
<td>G6K-RF</td>
<td>G9KA</td>
<td>G3VM-EM□□□□□□□□□□□□□</td>
</tr>
<tr>
<td>A surface-mount type miniature relay that supports high frequencies of 1 GHz, 3 GHz (T) and 8 GHz (V). The 1 GHz type is also available with through-hole mounted products. Characteristic impedance is 50 Ω.</td>
<td>High power and high temperature type. Power relay with 800 VAC 200 A breaking and ultra-low contact resistance.</td>
<td>MOS FET relay in module package with SPDT (1C).</td>
</tr>
</tbody>
</table>

**Connector**

### Board to FPC/FFC

<table>
<thead>
<tr>
<th>FPC/FFC Connector</th>
<th>Flexible Flat Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>XF2M/XF3M</td>
<td>XY3F</td>
</tr>
<tr>
<td>A rotary backlock mechanism provides improved insertion of FPC/FFC cables. XF3M features an improved sure-lock feel. Available with 0.5-mm and 1.0-mm pitch types.</td>
<td>Purchaseable in units of 100 pcs. 0.5 mm pitch between conductors. Gold-plated type with FFC thickness of 0.3 mm. Lineup of three cable lengths (insulation lengths): 50/100/300 mm.</td>
</tr>
</tbody>
</table>

### Board to Wire

<table>
<thead>
<tr>
<th>MIL Connector</th>
<th>PCB Terminal Blocks</th>
<th>Half-Pitch SMT Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>XG4M-U</td>
<td>XW4M/XW4N</td>
<td>XH5-N</td>
</tr>
<tr>
<td>An original type connector that locks on the harness side. Connection and disconnection with one hand, saving space.</td>
<td>3.5 mm-pitch push-in terminal block PCB connectors to greatly improve the efficiency of connector inserting &amp; removing and cable wiring.</td>
<td>Surface-mount type connectors with 1.27 mm pitch. A wide variety of board-to-board and board-to-wire connections.</td>
</tr>
<tr>
<td>XG5N</td>
<td></td>
<td>XH3/XH4</td>
</tr>
<tr>
<td>Discrete wire crimp sockets for trouble-free discrete wire termination. Also available with a locking type (-L) that can be inserted and removed with just one hand.</td>
<td></td>
<td>1.27 mm pitch board-to-board connector. Stacking heights supported in the range of 5 to 20 mm at 1-mm increments. Lineup of surface-mounting/DIP terminals.</td>
</tr>
</tbody>
</table>

### External Connection

<table>
<thead>
<tr>
<th>D-sub Connector</th>
<th>Round Water-Resistant Connector</th>
<th>Easy-wire Connectors for Industrial Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>XM□□□□□□□□□□□□□□□□□</td>
<td>XS5/XS52/XS3</td>
<td>XN2</td>
</tr>
<tr>
<td>D-sub connector series. A wide range of accessories such as hood.</td>
<td>P6T protective structure. Ideal for waterproof connections between sensors/actuators and control panels. Also available with smart click types that enable mating in approximately 1/8th of a turn.</td>
<td>Easy-wire connectors with e-CON specifications; ideal for connecting sensors. No special tools required for wiring and repairing.</td>
</tr>
</tbody>
</table>

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