Wireless transmission of Two thermocouple outputs!

- Two outputs are transmitted at the same time.
- Thermocouple J or K is applicable.

**Transmitter**
- RS02T-018-J300 (J type)
- RS02T-018-K300 (K type)
- RS02T-018-K1000 (K type)

**Output Sensor**
- RS02E-018E-PU-02

RS02T/RS02E transmits two temperature signals at the same time and outputs them parallel.

### Application

- **Monitoring of the inside temperature of the mixer**
  - Temperature at the upper part and the lower part of the mixer are measured while the mixer turning.

- **Temperature management of the die**
  - Confirming whether the circulating water inside of the die is a proper temperature or not.

- **Confirmation of temperature in MC**
  - Confirming the temperature of the workpiece on the turntable while the table turning.
### Thermocouple / J type • K type

**Transmitter**

<table>
<thead>
<tr>
<th>Type code</th>
<th>J type</th>
<th>K type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RS02T-018-J300</td>
<td>RS02T-018-K300</td>
</tr>
</tbody>
</table>

- **Rated transmitting distance**: 1...4 mm
- **Center off-set**: ±2.5 mm
- **Input channel**: 2 (1CH, 2CH)
- **Applicable thermal sensor**
  - **J type**: Thermocouple per JIS, J or K
  - **K type**: Thermocouple per JIS, J or K
- **Measuring temperature range**
  - **J type**: RS02T-018-J300: 0...300 deg. C
  - **K type**: RS02T-018-K300: 0...300 deg. C, RS02T-018-K1000: 0...1000 deg. C
- **Compensated cold junction**: ≤±0.5 deg. C
- **Operating Temperature**: 0...+80 deg. C
- **Protection class**: IP 67
- **Cable**: Compensation lead wire(JIS) phi 0.9 mm x 2 All heat-resistant vinyl (90 deg. C)
- **Material Housing**: Nickel plated brass
- **Active surface**: Nylon 12

**Notes**

- Please use thermocouple J or K type that meets JIS.
- Temperature range is allowed
  - RS02T-018-J300: 0...300°C
  - RS02T-018-K300: 0...300°C
  - RS02T-018-K1000: 0...1000°C
- Output is current source, connect the load between output and GND.

**Output Sensor**

<table>
<thead>
<tr>
<th>Type code</th>
<th>RS02E-018E-PU-02</th>
</tr>
</thead>
</table>

- **Supply voltage**: 24V DC ± 5 % (include ripple)
- **Current consumption**: ≤150 mA
- **Output**: 4...20 mA × 2 ch (current source)
- **Load resistance**: ≤400 Ω
- **Response speed**: ≤0.5 sec.
- **Linearity**: ≤±0.8 % FSR
- **LED**: INZONE (data valid)
- **Operating Temperature**: 0...+80 deg. C
- **Protection class**: IP 67
- **Cable**: PUR, φ 5 mm /4 x 0.25 mm²
- **Material Housing**: Nickel plated brass
- **Active surface**: Nylon 12

**Mounting**

In order to avoid influence of surrounding metal or mutual interference between parallel-mounted sensors, keep a minimum free zone as described below;

**Typical Transmitting Diagram** (supply voltage at 24V / non-flush mount)

```
<table>
<thead>
<tr>
<th>X: center offset (mm)</th>
<th>Y: Operating distance (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
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<td>6</td>
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</tr>
<tr>
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<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
```

- **Distance (M18)**: 1...4 mm

**Influence of surrounding metal**

<table>
<thead>
<tr>
<th>Type code</th>
<th>A(mm)</th>
<th>B(mm)</th>
<th>C(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS02T-018-J300</td>
<td>20</td>
<td>15</td>
<td>110</td>
</tr>
<tr>
<td>RS02T-018-K300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS02T-018-K1000</td>
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</tr>
<tr>
<td>RS02E-018-PU-__</td>
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</tbody>
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- Wireless Power Supply by B & PLUS K.K.

**Mail**: b-plus-usa@b-plus-kk.com
**Web**: http://www.b-plus-kk.com

* Contents is subject to change without notice.