### ACCURACY (continued)

#### Thermocouple (TC)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MEASUREMENT ACCURACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>K, J, T, E, L, U</td>
<td>± 0.5 °C or 0.08% [1]</td>
</tr>
<tr>
<td>N, C, D</td>
<td>± 1.0 °C or 0.08% [1]</td>
</tr>
<tr>
<td>S, B, R MoRe5-MoRe41</td>
<td>± 2.0 °C or 0.08% [1]</td>
</tr>
</tbody>
</table>

Influence of the internal reference junction:\n\[ Pt100 \pm (0.30 + 0.005 |t|) °C \]
\[ |t| = \text{value of temperature without regard to sign °C} \]

#### Voltage (mV)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MEASUREMENT ACCURACY</th>
<th>MEASUREMENT RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millivolt (mV)</td>
<td>± 20 µV or 0.08% [1]</td>
<td>(-10 to 100) mV</td>
</tr>
</tbody>
</table>

#### General Accuracy

- Influence of power supply: ± 0.01%/V deviation from 24 V [2]
- Load influence: ± 0.02%/100 Ω [2]

Temperature drift:
- Resistive thermometer (RTD):
  \[ T_d = \pm (15 \text{ ppm/°C} \times \text{range end value} + 50 \text{ ppm/°C} \times \text{measurement range}) \times \Delta\theta \]
- Resistive thermometer Pt100:
  \[ T_d = \pm (15 \text{ ppm/°C} \times (\text{range end value} + 200) + 50 \text{ ppm/°C} \times \text{measurement range}) \times \Delta\theta \]
- Thermocouple (TC):
  \[ T_d = \pm (50 \text{ ppm/°C} \times \text{range end value} + 50 \text{ ppm/°C} \times \text{measurement range}) \times \Delta\theta \]

\[ \Delta\theta = \text{Deviation of the ambient temperature according to the reference condition} \]

Long term stability: ≤ 0.1 °C/year [3] or ≤ 0.05%/year [1][3]

[1] % is related to the adjusted measurement range (the value to be applied is the greater)
[2] All data is related to a measurement end value of 20 mA
[3] Under reference conditions

### INSTALLATION CONDITIONS

#### Ambient Conditions

- Ambient temperature: (-40 to 85) °C [-40 to 185] °F
- Storage temperature: (-40 to 100) °C [-40 to 212] °F
- Climatic class: To EN 60 654-1, Class C
- Moisture condensation: Allowable
- Vibration protection: 4 g / (2 to 150) Hz according to IEC 60 068-2-6
- EMC immunity: Interference immunity and interference emission as per EN 61 326-1 (IEC 1326)