

## Sensor Elements with Stranded Wire Extensions

Temperature range -65 °C to +260 °C

- Excellent long term stability and low drift
- High accuracy and interchangeability
- High vibration and shock resistance
- Broad range of applications

Sensor elements with lead extensions helps to reduced development times in your processes. Elements with stranded wire extensions are available in standard lengths and can be customized to your optimum length for larger requests.

Nominal Resistance $R_0$ [ $\Omega$ ] (Element)	Tolerance (Element)	Type	Lead Length LL (mm)	Order Number	Packaging
Pt100	F 0.3 (B)	M222	200	5157701	Plastic bag
Pt1000	F 0.3 (B)	M222	200	5157679	Plastic bag

### Temperature Range of Tolerance Class

Tolerance Class F 0.3 (B) -65 °C to +260 °C

### Temperature Coefficient

TCR = 3850 ppm/K

### Response Time

Water ( $v = 0.4$  m/s)  $t_{0.5} = 0.05$  s  
 $t_{0.9} = 0.15$  s  
 Air ( $v = 2$  m/s)  $t_{0.5} = 3$  s  
 $t_{0.9} = 10$  s

### Measuring Current

Pt100  $\Omega$ : 0.3 to 1 mA  
 Pt1000  $\Omega$ : 0.1 to 0.3 mA  
 (self-heating has to be considered)

### Long-Term Stability of the Sensor Element

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.  
 Typical drift of  $R(0$  °C) is 0.04 % after 1000 hours at +500 °C.

### Self-Heating of the Sensor Element

0.4 K/mW at 0 °C

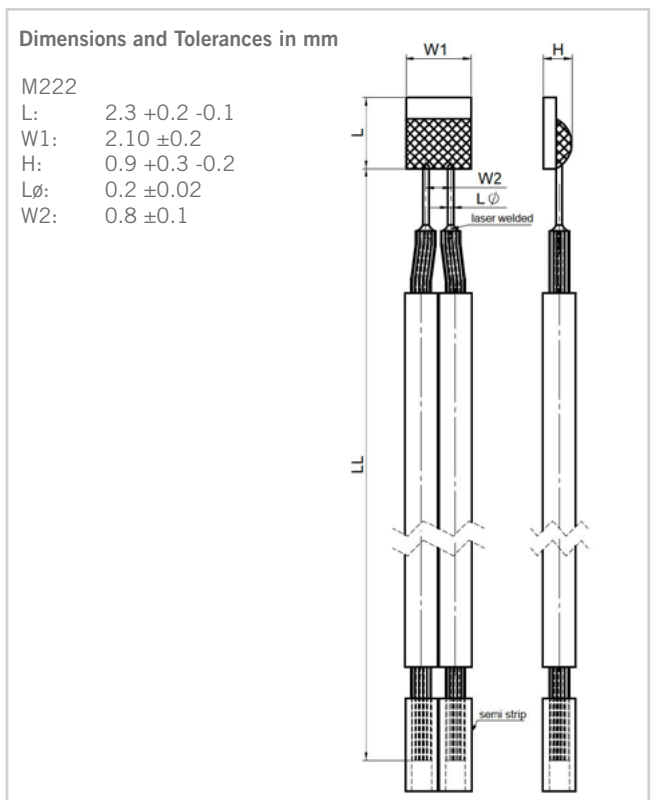


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## Sensor Elements with Stranded Wire Extensions

Temperature range -65 °C to +260 °C

### Connection Technology

Crimping, Welding, Soft Soldering, Brazing, Clamping

### Wire

Stranded wire: PTFE isolated, 24 AWG (0.24 mm<sup>2</sup>)

Ni coated Cu

### Wire Resistance

0.081 Ω/m (0.025 Ω/ft)

### Pull Force

M222: 9 N

### Customized Options available for High Volume Applications

- Extension length
- Sensor element: size and resistance
- Lead wire material

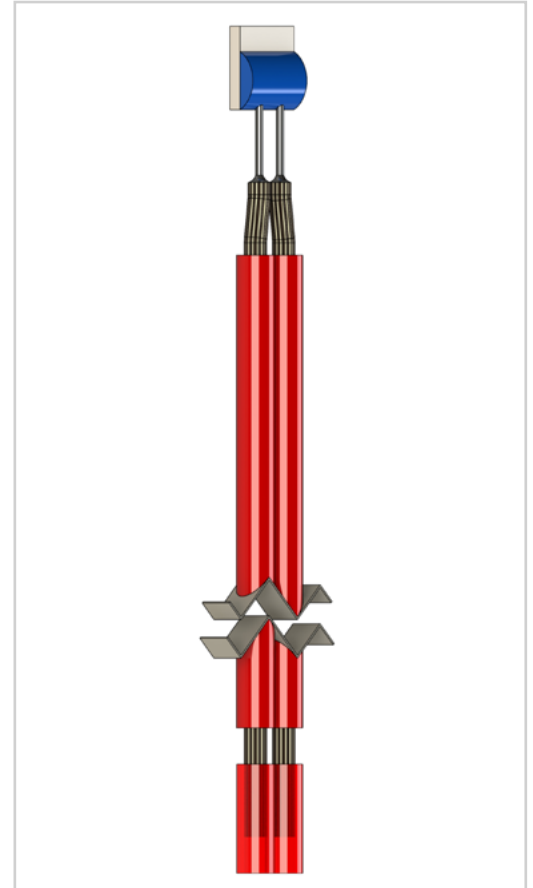


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