

High-temperature Sensors

Sensors resistant to high temperatures are not directly comparable with conventional sensors. The hotter the ambient operating temperature, the more unusual the solutions developed. During almost 50 years of the company's history, Klaschka has acquired a great deal of experience, which continues to influence many of its developments.

In the industrial field, sensors are normally used at temperatures below +75 °C, or up to +100 °C at the most. Conventional sensors cannot be used at temperatures above these limits.

The higher the temperature the more we have to adopt unconventional techniques. This applies not only to the components used, but just as much to production processes and, not least, to the technology of the sensor itself.

Consider Inductive Proximity Switches: at temperatures above +150°C, for example, it is no longer possible to use the conventional solution with all the components together in a single housing, because there are hardly any active components that can withstand these temperatures, and those available are prohibitively expensive.

This problem can be overcome by separating the coil, which generates the electromagnetic field, from the rest of the electronics. Only the coil is installed in the hot zone. The oscillator, evaluation electronics and output stage are located somewhere cooler and a temperature-resistant lead connects the two parts of the device.

High-temperature Sensors are generally customer and application-specific.



“hot” environment

“cold” environment



Proximity Switch AFO



Additional Device ZFN



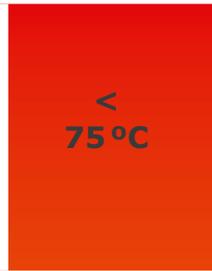
Painting (automotive)



Pressure die-casting



Hot-rolling



All Metal Sensors up to +85 degrees



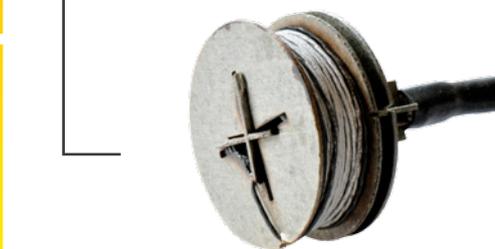
Hall Sensor up to +100 degrees



Proximity Switch up to +200 degrees



Electrodynamic Sensor up to +350 degrees



Proximity Switch up to +600 degrees