There are different types of sensor cables: Thermofuser Digital Cable, Analog Cable, F.O. Linear Heat Detector and Microsensors Cable Detector.

In this document we will focus on the most used: Thermofuser Digital Cable and F.O. Linear Heat detector. The following are the main technical differences between the two types:

	THERMOFUSER DIGITAL CABLE (PROTECTOWIRE).	F.O. LINEAR HEAT DETECTOR (AP SENSING).
Possibility of programming different alarm criteria.	No. It is only triggered by the maximum temperature that is preset on the polymer that builds it.	Yes. Up to 5 alarm criteria per zone: maximum alarm, 3 temperature gradients and differential with average temperature.
Possibility of 1 single cable perform different alarm zones.	No.	Yes. Up to 256 per channel.
Possibility to program pre-alarms in the different areas.	Yes. Installing two cables with different shooting temperatures in parallel.	Yes.
Location of the alarm point.	Yes. Installing a special control unit.	Yes. Spatial resolution up to 0.5 m. (programmable).
Possibility to perform an installation with cable redundancy.	Yes. Installing two cables in parallel.	Yes. Giving the control unit at least two channels.
Possibility of ModBus TCP/IP Communication.	No.	Yes.
Possibility to perform an installation with total redundancy.	Yes. Installing two cables in parallel with independent control modules.	Yes. Installing two control units.
Discrimination of alarms and breakdowns.	No. A short circuit is considered an alarm.	Yes.
The cable must be replaced in case of fire.	Yes.	No. If it hasn't been damaged enough.
Use of splice or end-of-line boxes.	Yes.	No.
Valid system to be installed in ATEX zones.	Yes. Installing galvanic insulators.	Yes. The control unit must be outside the ATEX zone.
Possibility to make splices.	Yes.	Yes.
Approvals	UL, FM.	EN54-22, EN54-5, UL, FM, ATEX.
Possibility of monitoring the fire.	No.	Yes.
Maximum sensor cable length with 1 single control unit.	2, 000 meters.	10 km.
Possibility of performing graphical representation.	No.	Yes.