# Sensor lead

ETF sensors are supplied with 2,5m of lead as standard, but other lengths can be supplied upon request.

Sensor tem	p. Lead type	Insulation	Max.temp.
Up to 70°C Up to 200°C Up to 280°C Up to 350°C	2x0,5mm Ni	PVC Silicone rubb Fiberglass Steelbraiding	300°C

<sup>1</sup>Briefly 250°C permissible

#### Resistance sensors

NTC and PTC sensors offer a high resistance compared to the lead, which therefore may be extended up to several hundred meters. The sensor lead should be kept away from high power cables and other electromagnetic fields, or the use of screened cable is recommended. Pt100, Pt1000 and Ni-100 sensors should have the lowest possible resistance, and three and four core cables can be used.

#### Thermoelements

These are furnished with heat resistant cable, which may be extended by means of "compensation cable" if need be. Use of other cable types will lead to measuring errors.

### Ordering code

The field of application and the type of thermostat determine the type of temperature sensor. The type designation of OJ themostats comprises a sensor code. The two central digits of the last four state the code, e.g. thermostat type ETT-49-1441. The bold-faced digits -44- state the code.

The type designation of ETF sensors partly states the mechanical type and partly the type of thermostat. The thermostat code must correspond to the thermostat sensor code:

Sensors with 3 digits: Digit 1 = mechanical type Digits 2 + 3 = type of thermostat.

Sensors with 4 digits: Digits 1 + 2 = mechanical type Digits 3 + 4 = type of thermostat or element.

Example: A sensor for a ventilation plant which is to be regulated by means of the abovementioned thermostat type ETT-49-1441, should be a sensor type ETF-144 (ETF-133/44/55).

#### N.B.

Upon request, several types with different temperature ranges may be furnished.

Product sheets of special types are forwarded upon request.



Temp.	Sensor	Designation
range	type	

# Sensor Floor Heating

Frost p	protection,	tubular	recep	tacle
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-20/+280°C -40/+120°C -20/+70°C -50/+70°C -40/+125°C -20/+70°C	NTC NTC NTC NTC PTC NTC	ETF-112 ETF-122 ETF-133/44/55 ETF-177/88 ETF-195 ETF-199

Material: Polyolefin, ETF-112 ceramics and stainless steel. Max. pressure 0,5 atm. Dimensions: O 6,5mm, L30mm.

# Sensor Ventilation

Frost and fire alarm		¥-
-20/+200°C -40/+120°C -20/+70°C -50/+70°C -40/+125°C -50/+165°C	NTC NTC NTC PTC Pt100	ETF-211 ETF-222 ETF-233/44/55 ETF-288 ETF-295 ETF-297

Material: Brass. Max. pressure 0,5 atm.

Dimensions: Ø6,5mm, L100mm.

Sensor Aggressive liquids Foodstuffs			
	-20/+200°C	NTC	ETF-311
	-40/+120°C	NTC	ETF-322
	-20/+70°C	NTC	ETF-333/44/55
	-50/+70°C	NTC	ETF-388
	-40/+125°C	PTC	ETF-395
	-50/+165°C	Pt100	ETF-397

Material: Stainless steel AISI 316. Max. pressure 6 atm. Dimensions: Ø6.5mm, L95mm, 1/4" pipe thread.

Sensor Non-aggressi	ve liquids	
-20/+200°C -40/+120°C -20/+70°C -40/+125°C -50/+165°C -50/+165°C	NTC NTC PTC Pt100 Pt1000	ETF-411 ETF-422 ETF-433/44/55 ETF-495 ETF-497 ETF-498

Material: Brass. Max. pressure 6 atm. Dimensions: Ø6,5mm, L100mm, 1/4" pipe thread.

Sensor Machine parts	3	And and a second
-20/+200°C -40/+120°C -20/+70°C -40/+125°C -50/+165°C -50/+165°C	NTC NTC PTC Pt100 Pt1000	ETF-511 ETF-522 ETF-533/44/55 ETF-595 ETF-597 ETF-598

Material: Brass. Max. pressure 0,5 atm. Dimensions: Ø6.5mm, L50mm.

Sensor Plant Pipes and machine par	ts	
-20/+200°C -40/+120°C -20/+70°C 0/+400°C -50/+70°C -40/+125°C -50/+165°C -50/+350°C	NTC NTC Fe-CuNi NTC PTC Pt100 Pt100	ETF-611 ETF-622 ETF-633/44/55 ETF-686 ETF-688 ETF-695 ETF-697 ETFH-697

Material: Copper. Dimensions: 8x12mm, hole Ø3,5mm.

ETF - 16..

ETF - 17.

ETF - 27.