

Plug Sensor

Resistance Thermometer for screwing in



Description

This model of resistance thermometer is designed for rough industrial applications. Due to the low weight and the special mounting of the RTD this sensor is suitable for application where high vibrations can happen.

For rough environmental conditions the electrical contacts are gold plated. This ensures a high reliability of the measured temperature values.

tecsis offers models made of brass and of stainless steel (316Ti) ex stock with the Junior Power Timer connector.

The standard sensors are platinum sensors with a nominal resistance of 100 or 1000 ohm (PT100 or PT1000). Also NTC's, KTY's or nickel sensors can be built-in. The standard plug connectors allow a quick installation of the sensor. The ingress protection, when the plug is connected, corresponds to IP66/67 (depends on the connector).

Customer specific solutions regarding the sensor or the geometry are available on request.

Typical applications are temperature measurements in engines, compressors or gearboxes.

Features

- Suitable for applications with high vibrations
- several electrical connectors
- 2-wire technique
- Ingress protection up to IP66/67, when connected
- application specific sensor elements and geometries

Measuring Range

- -50°C ... +200°C
- -50°C ... +200°C (on request)
- -40°C ... +130°C (when using a NTC)

Applications

- Compressors
- Engines
- Gearboxes
- Refrigeration technology

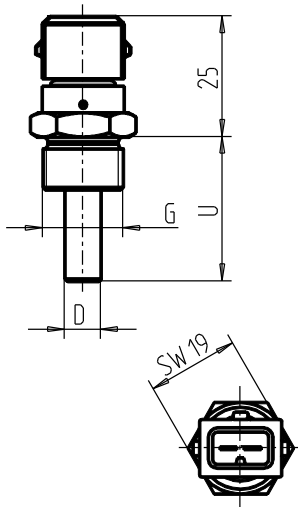
Model: TEC11

Technical data

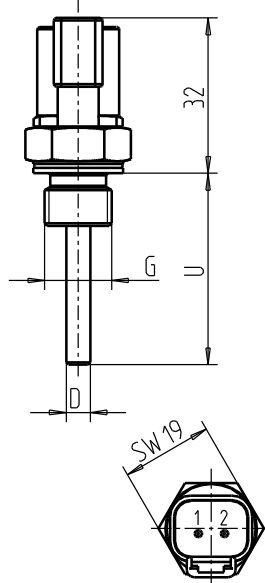
	Plug Sensor
Model	TEC11 -> 2-wire
Sensor	PT100 class B (alternative: class A or 1/3DIN) PT1000 class B (alternative: class A or 1/3DIN) Optional other sensors: NTC 5kOhm, NTC 10kOhm KTY, Ni1000, etc.
Process connection	G1/4 G3/8 G1/2 M12x1,5 M14x1,5 M14x1,5 DIN 3852-E 1/4NPT Others on request
Stem diameter	7,5mm 5mm Others on request (e.g.: 7,5mm tapered to 4mm)
Insertion length	28mm, 30mm, 40mm, 50mm, 60mm Others on request
Material	Brass Stainless steel 1.4305 / Stainless steel 1.4571 (316 Ti) Other materials or coatings on request
Temperature range	PTC: -50°C ... + 200°C (-50°C ... +300°C on request) NTC: -40°C ... + 130°C KTY: depending on the sensor
Electrical connection	plug connector, AMP Junior Power Timer FAST-ON flat connector 4,8x0,8mm FAST-ON flat connector 6,3x0,8mm M12x1, circular connector Deutsch connector DT04 Bayonet connector, DIN 72585
Protection class	IP66/67 acc. to DIN EN 60529 / IEC 529 , when connected FAST-ON flat connector: depends on the mating connector
Response time	t _{0,5} : <2,5s (brass) t _{0,5} : <3s (stainless steel)
Vibration resistance	Up to 10g, depends on the geometry, material and medium
Shock resistance	Up to 500g, depends on the geometry, material and medium
Maximum pressure	Up to 600 bar, depends on the geometry, material and medium
Ambient temperature	-40°C ... + 150°C -40°C ... + 140°C (Bayonet connector, DIN 72585) -40°C ... + 100°C (M12x1, circular connector)

Dimensions

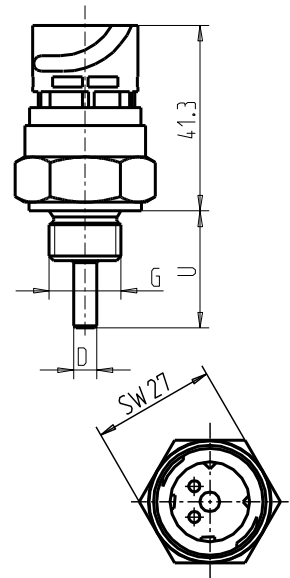
**Plug connector,
AMP Junior Power Timer**



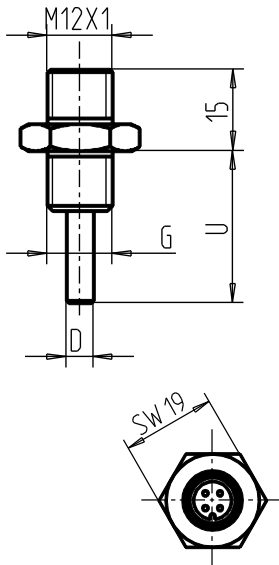
**Deutsch connector
DT04-2P**



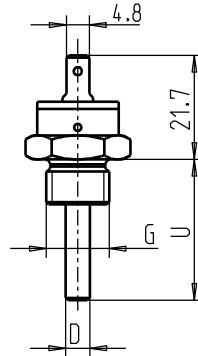
**Bayonet connector
DIN 72585**



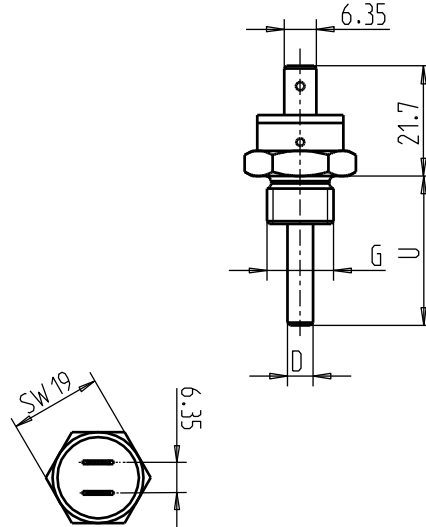
M12x1, circular connector



**FAST-ON flat connector
4,8x0,8mm**



**FAST-ON flat connector
6,3x0,8mm**



Accessory: conjunction box, 6-parts EZE53X060001 for Junior Power Timer Connector



Subject to technical modifications