

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.

tec sis 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 connections
- 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

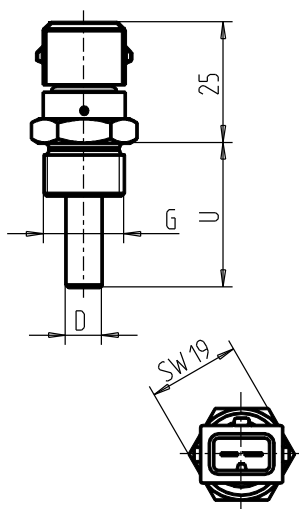
- Compressors
- Engines
- Gearboxes
- Refrigeration technology

Technical data

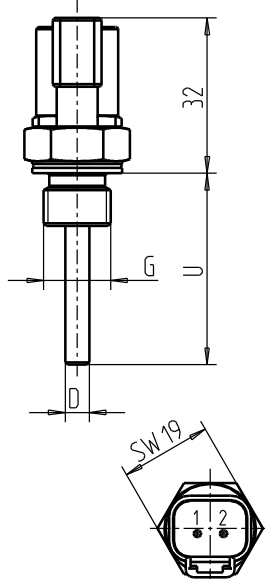
| | Plug Sensor |
|-----------------------|---|
| Model | TEC11 -> 2-wire |
| Sensor | PT100 class B (alternative: class A or 1/3DIN) PT1000 class B (alternative: class A or 1/3DIN) Optional other sensors: NTC 5kOhm, NTC 10kOhm KTY, Ni1000, etc. |
| Process connection | G1/4 G3/8 G1/2 M12x1,5 M14x1,5 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

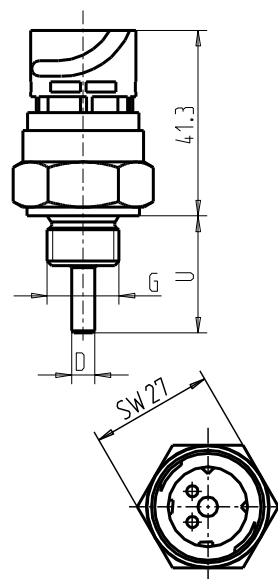
**Plug connector,
AMP Junior Power Timer**



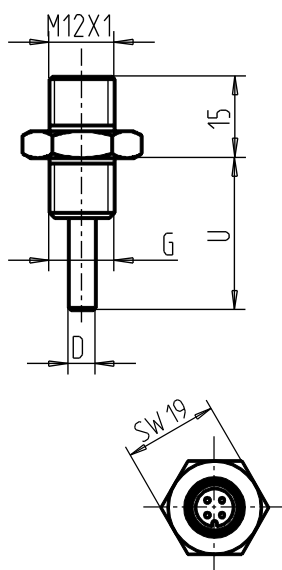
**Deutsch connector
DT04-2P**



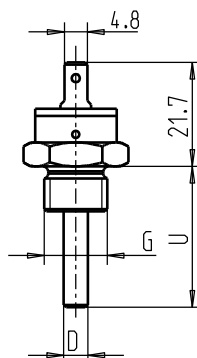
**Bayonet connector
DIN 72585**



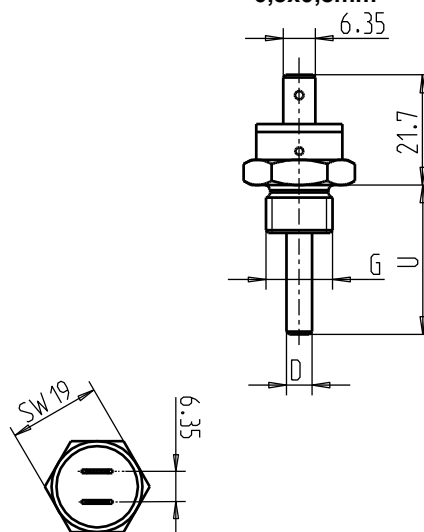
M12x1, circular connector



**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