- Temperature range from -50 to +1100 °C
- With built-in measuring insert
- As single or double RTD temperature probes
- Available with transmitter

Push-in RTD temperature probes for standard applications are preferentially used for measuring temperatures in liquids and gases. The application areas are, among others, in the air condition-ing technology and refrigeration engineering as well as the HVAC and apparatus engineering sector.

The connection head is suitable for ambient temperatures up to +100 °C. In addition to the stan-dard connection head form B, design BUZ is also available.

The measuring insert is normally fitted with a Pt100 temperature sensor according to DIN EN 60751, Class B in 2-wire circuit; versions with Pt500 or Pt1000 temperature sensors can also be supplied, as well as 4-wire circuit connections. A transmitter can be optionally integrated into the connection head.

- SS housing, all-in design with anti-condensation function and good heat dissipation.
- Good measuring repeatability and anti-interference.
- M12 connector, easy and quick to use.

Applications
- Monitoring for long-distance temperature signal transmission.
- Signal transfer from PT sensor to 4-20mA.
- For industries in heating / ventilation / air conditioning / cooling / water power/ electricity, etc.
- For process in agriculture / green house / environmental engineering / food / pharmaceutical industry.
- Machinery manufacturing / storage tank / compressor / hydraulic equipment.
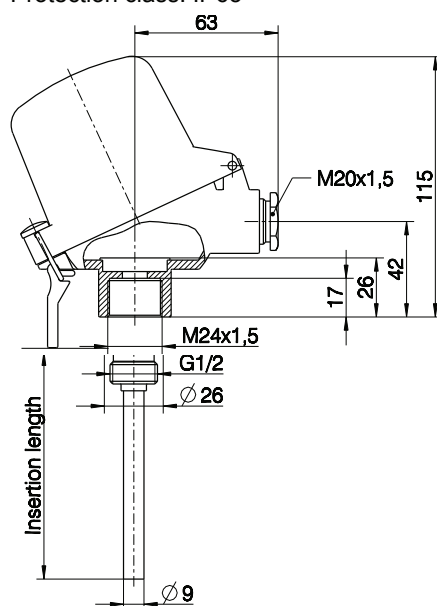
Technical data

Terminal head	Form B DIN EN 50446, die-cast aluminum, M 20x1.5; IP65, ambient temperature -40 to +100 °C
	Form A, die-cast aluminum, M 20x1.5; IP65, ambient temperature -40 to +100 °C
	Reduced ambient temperature when using transmitters
Protection tube	Stainless steel 1.4571, $\varnothing$ 6 mm, $\varnothing$ 8 m m , $\varnothing$ 1 2 m m , $\varnothing$ 1 6 m m
Measuring insert	Pt100 temperature sensor DIN EN 60751, cl. B, 2-wire circuit, built-in
Response times	$t_{0.5}$ = 5 s, $t_{0.9}$ = 14 s in water 0.4 m/s; $\varnothing$ 6 mm
Transmitter	Analog transmitter, output 4 to 20 mA
	Analog transmitter, output 0 to 10 V
	Programmable transmitter, output 4 to 20 mA/20 to 4 mA
Accessories	Process connection, tube screw connection $\varnothing$ 12 mm, $\varnothing$ 1 6 m m
	Process connection, sheet steel flange $\varnothing$ 1 6 m m

Dimensions

Type 13
Material: diecast light metal
Protection class: IP65

63

M20x1,5
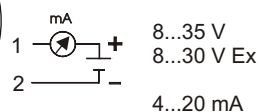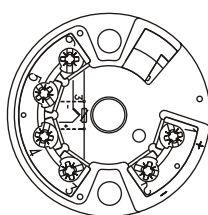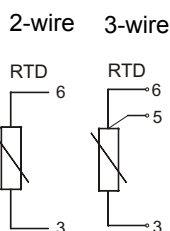
115

42

26

17

M24x1,5

G1/2

⌀26

Insertion length

⌀9

Electrical wiring(TB313)

Standard Type

Connection Diagram TC120 with Transmitter TB313

2-wire   3-wire

Part 1

RTD   6   RTD   6
                        5
3   3

mA

1   + 8...35 V
         8...30 V Ex
2   T −

4...20 mA

2-wire   3-wire

Part 2

RTD   6   RTD   6
                        5
3   3

mA

1   + 8...35 V
         8...30 V Ex
2   T −

4...20 mA