ALMEG CONTROLS

ATP Series

Almeg Temperature Probe

Custom rigid direct-immersion configuration

Operating principle

The ATP Series measures process temperature with a Pt100 resistance temperature detector (RTD) hermetically sealed inside the 316 stainless steel probe. The element's electrical resistance changes with temperature, providing a stable, repeatable signal for industrial process measurement where accuracy matters.

Technical specifications

Probe construction	Rigid direct-immersion probe, 316 stainless steel 3/8 in. OD, custom lengths up to 48 in. (1219 mm)
Standard output	Pt100 3-wire RTD resistance output
Optional output	CSA-approved, head-mounted 4-20 mA transmitter 2-wire, loop-powered
Connection head	Aluminum, NEMA 4X / IP65 1/2 in. NPT conduit entry
Process connection	1/2 in. or 3/4 in. NPT male compression fitting with metal ferrule Optional Tri-Clamp® fitting Custom fittings available on request.
Maximum temperature	80°C standard (176°F) 120°C with extension (248°F)

NPT compression fitting installation

Set the probe insertion depth during initial installation. Tightening the compression fitting locks the metal ferrule permanently at that depth.

Applications

Cooling towers, chillers, heat exchangers, water reservoirs, basins, wells, large storage tanks and environmental monitoring.

How to order

ATP Series / Custom rigid direct-immersion configuration

Order code format

ATP-[FITTING]-L[LENGTH]-[OUTPUT]-[TEMP]

01 Process fitting

N12 | 1/2 in. NPT male compression fitting
N34 | 3/4 in. NPT male compression fitting
TC | Tri-Clamp®. Specify the connection size separately.
CF | Custom fitting. Supply the connection details for quotation.

02 Probe length

L followed by the requested probe length in inches, up to 48 in. (1219 mm).
Use a decimal for fractional lengths, such as L24.5 for 24-1/2 in.

03 Output

RTD | Pt100 3-wire RTD resistance output
TX | Head-mounted 2-wire loop-powered 4-20 mA transmitter

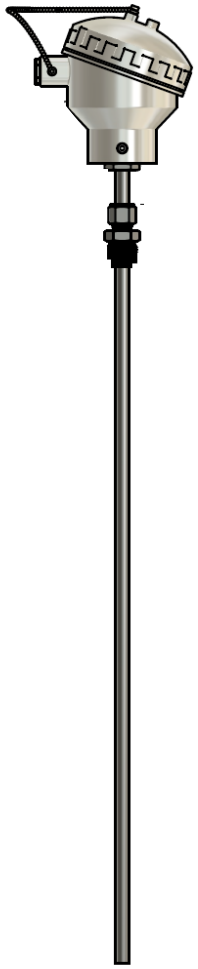
04 Temperature configuration

S | Standard, maximum 80°C (176°F)
E | With extension, maximum 120°C (248°F)

With option TX, specify both settings when ordering
Range: temperatures at 4 mA and 20 mA. Stay within the probe rating.
Sensor burnout: select upscale (23 mA) or downscale (3.5 mA).

Probe assembly

Threaded configuration



Example order codes

ATP-N12-L24-RTD-S
1/2 in. NPT compression fitting, 24 in. probe, Pt100 3-wire output, standard.

ATP-TC-L36-TX-E
Tri-Clamp® fitting, 36 in. probe, 4-20 mA transmitter, with extension.
Specify clamp size, 0 to +100°C (4 to 20 mA), and upscale burnout.

Transmitter specifications

Supply voltage	8.0 to 30 VDC, 2-wire loop power	**Warm-up time**	5 min.
Power dissipation	25 mW to 0.7 W	**Max. loop load**	(V supply - 8.0) / 0.023 Ω
Response time	0.33 to 60 s, programmable	**Load stability**	< ±0.01% of span per 100 Ω
Voltage drop	8.0 VDC		

Span means the configured temperature range.