Temperature and humidity

Screw-In RTD and Thermocouple Temperature Sensor, Pt100 or Pt1000, Optional 4–20mA

Model DW-RTD

Head-type screw-in temperature sensor with a Pt100 or Pt1000 RTD or a thermocouple, an optional 4–20 mA head-mounted transmitter, a 304 or 316L stainless steel probe of 20 to 1000 mm and threaded, clamp or flange connections, for liquids and gases in pipes and vessels.



Sensing element
Pt100, Pt1000 or thermocouple

Output
RTD/TC direct or 4–20 mA

Temperature range
−50 to +250 °C

Features

- Pt100 or Pt1000 RTD (dual Pt100 optional), or thermocouple types B, E, J, K, N, R, S and T
- Optional head-mounted 4–20 mA two-wire transmitter
- Mineral-insulated measuring insert: quick response, bendable, vibration resistant
- Reliable sealing under vacuum and overpressure
- Probe Ø4, 6 or 8 mm and 20 to 1000 mm long, in 304 or 316L stainless steel
- Aluminium terminal head with M20×1.5 cable gland, IP65

Applications

Air conditioning and refrigeration, HVAC, Apparatus engineering, Liquids and gases in process pipes and vessels

Specifications

Performance

Sensing element	Pt100 / Pt1000 / Cu50 RTD (dual Pt100 optional); thermocouple type B, E, J, K, N, R, S or T

Temperature range	−50 to +250 °C (standard screw-in probe)
Accuracy	Class A: ±(0.15 + 0.002|t|) °C; Class B: ±(0.3 + 0.005|t|) °C (IEC 751)
Pt100 R(100 °C)/R(0 °C)	1.3851
Measuring current	< 2 mA

Output

Output signal	RTD or thermocouple direct, or 4–20 mA two-wire via head-mounted transmitter

Electrical

Supply voltage	12–40 V DC (with transmitter)
Load resistance	RL ≤ (U − 12) / 0.021 Ω (transmitter)
Response time	90% of final value in 1 s (transmitter)
Temperature drift	0.02% FS/°C (standard); 0.0075% FS/°C (isolated) (transmitter)
Wiring	2-wire or 3-wire RTD connection

Mechanical

Process connection	M20×1.5, M27×2, M14×1.5, G1/4, G1/2, G3/4, NPT1/4, NPT1/2, NPT3/4, G1/2 sleeve, 2" clamp, others
Installation method	Flange, clamp, direct insertion or screw base
Probe diameter	Ø4, Ø6 or Ø8 mm; Ø8–Ø16 mm with detachable sleeve; others
Probe length	20 to 1000 mm, others on request
Material	304 or 316L stainless steel (probe and connection)
Terminal head	Aluminium alloy, M20×1.5 cable gland, IP65
Cold-end length	0, 50 or 100 mm, or to order

Environmental

Ambient temperature	−40 to +80 °C (transmitter)
Storage temperature	−40 to +100 °C (transmitter)
Vibration resistance	4 g, 2–150 Hz (transmitter)

Ordering and support

Pricing, samples, lead time and custom versions: xyx@gzdwin.com, +86 181 0280 8901.

Guangzhou Dwin Technology Co., Ltd., 4th Floor, Building 2, No. 4, Xingye Street, Xiaowu, Nansha District, Guangzhou, China. Specifications are typical values and may change without notice; confirm critical values with DWIN before design-in. Revision 2026-11.