Pressalis

Datasheet

Submersible level transmitters

LT20

Low-power level probe with voltage output



Stainless probe for battery loggers: 3 to 5 V supply, 2.7 mA maximum, low-voltage or ratiometric output.

Depth range	Output	Supply	Accuracy
0 to 1 m up to 0 to 50 m	**Low-voltage or ratiometric**	**3 to 5 V DC, 2.7 mA maximum**	**±0.5 or ±1 % of span**

Overview

LT20 is a low-power submersible level sensor for battery-powered loggers and telemetry units. It runs from 3 to 5 V DC and draws no more than 2.7 mA, which suits hosts that switch the sensor on only to take a reading. The probe is 304 stainless steel, 28 mm in diameter and 125 mm long, with an IP68 cable outlet.

Output is a low-voltage signal sized for the analog input of a logger or microcontroller: 0.25 to 1.25 V, 0.25 to 2.25 V or 0.5 to 2.5 V, or a ratiometric signal of 10 to 90 % of the supply. Three wires carry supply, ground and signal, so the probe needs no separate loop supply.

It goes on remote boreholes, reservoirs, irrigation ponds, river and channel gauging points and tanks with no mains power. Listed media are water, gasoline and diesel. Ranges run from 0 to 1 m up to 0 to 50 m, accuracy is ±0.5 % or ±1 % of span, and operating temperature is -10 to 85 °C with no freezing.

Specifications

Measurement

Measurement	Hydrostatic level, submersible
Depth range	0 to 1 m up to 0 to 50 m water column
Accuracy	±0.5 % or ±1 % of span
Reference temperature	25 °C

Medium and environment

Media	Water, gasoline, diesel
Medium compatibility	Liquids compatible with 304 stainless steel
Operating temperature	-10 to 85 °C, no freezing

Electrical

Output	0.25 to 1.25 V, 0.25 to 2.25 V, 0.5 to 2.5 V, or 10 to 90 % of supply (ratiometric)
Supply	3 to 5 V DC
Current consumption	2.7 mA or less
Wiring	Three-wire
Electrical connection	Cable outlet
Protection	IP68

Mechanical

Probe material	304 stainless steel
Probe size	28 mm diameter, 125 mm long
Mounting	Suspended on its cable, no process thread

Common configurations

Any combination from the ordering code can be quoted. Other ranges and connections on request.

Depth range	Output	Accuracy	Order code
0 to 5 m	0.5 to 2.5 V	±0.5 % of span	**LT20-W5-L25-A05**
0 to 10 m	0.5 to 2.5 V	±0.5 % of span	**LT20-W10-L25-A05**
0 to 10 m	Ratiometric, 10 to 90 %	±0.5 % of span	**LT20-W10-R-A05**
0 to 20 m	0.25 to 2.25 V	±0.5 % of span	**LT20-W20-L22-A05**
0 to 2 m	0.25 to 1.25 V	±1 % of span	**LT20-W2-L12-A1**
0 to 50 m	Ratiometric, 10 to 90 %	±1 % of span	**LT20-W50-R-A1**

Ordering code

One code from each group, in this order. Example: **LT20-W1-L12-A05**. Send the code and the quantity to **contact@pressalis.com** for a quote.

LT20	-	W1	-	L12	-	A05
Model		Depth range		Output		Accuracy

Depth range

W1	0 to 1 m water column
W2	0 to 2 m water column
W5	0 to 5 m water column
W10	0 to 10 m water column
W20	0 to 20 m water column
W30	0 to 30 m water column
W50	0 to 50 m water column
X	Other range, state in the request

Output

L12	0.25 to 1.25 V, 3 to 5 V DC supply
L22	0.25 to 2.25 V, 3 to 5 V DC supply
L25	0.5 to 2.5 V, 3 to 5 V DC supply
R	Ratiometric, 10 to 90 % of supply, 3 to 5 V DC

Accuracy

A05	±0.5 % of span
A1	±1 % of span