



Electronic Level Transmitter HNT 1000

Description:

The level transmitter HNT 1000 is a float-based sensor for highly accurate analog recording of fluid levels.

The sensor is available in probe lengths from 7.87 to 98.4". HYDAC offers the HNT 1000 in a pressure-resistant stainless steel housing for in-tank installation.

Depending on the application, a variety of different floats are available, e.g. stainless steel for aggressive media or plastic.

The output signals enable connection to all HYDAC ELECTRONIC GMBH measurement and control devices as well as connection to standard evaluation systems (e.g. PLC controls).

Special features:

- Probe lengths from 7.87 to 98.4"
- Process connection: G3/4 A threaded connection
- High degree of accuracy
- Very robust housing
- Highly resistant to shock and vibration
- Excellent EMC characteristics
- Various float variants available

Technical data:

Input data

Sensor type	magnetostrictive
Measuring ranges	7.01", 8.19", 11.73", 13.31", 17.64", 25.90"
Probe length ¹⁾	9.84", 11.02", 14.57", 16.14", 20.47", 28.74"
Max. speed of change in fluid level	No orientation restrictions

Output data

Output signal	4 .. 20 mA load \leq 500 Ω 0 .. 10 V load \geq 1 k Ω
Accuracy to DIN 16086 ²⁾	\leq 1 % FS
Non-linearity at max. setting to DIN 16086	\leq 1 % FS
Repeatability	\leq 1 % FS
Hysteresis	\leq 1 % FS
Rise time	\leq 30 ms

Environmental conditions

Max. tank pressure	43.5 psi (short-term 145 psi, t < 1 min)
Operating temperature range	-40 .. +185 °F
Storage temperature range	-40 .. +212 °F
Fluid temperature range	-40 .. +248 °F

CE mark

Vibration resistance to DIN EN 60068-2-6	7.5 mm (5 .. 8.2 Hz) 2.0 g (8.2 .. 150 Hz)
Shock resistance to DIN EN 60068-2-27	20 g (11ms)

Protection class to IEC 60529

IP67

Other data	
Supply voltage (U _B)	9 .. 36 V DC
Current consumption (without output)	\leq 100 mA
Residual ripple of supply voltage	\leq 250 mV
Fluids	Hydraulic oils, cooling lubricants

Parts in contact with medium	Stainless steel (1.4301 / 1.4571)
Float	PP (polypropylene); 0.6 kg/dm ³
Weight (dependent on probe and cable lengths)	\sim 1000 g

Note: Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection are provided.

FS (Full Scale) = relative to complete measuring range

¹⁾ Other probe lengths on request

²⁾ Specified for calm, non-turbulent fluid

