



## Level Transmitter HNT 1200

Magnetostrictive

### Description:

The level transmitter HNT 1200 is a float-based sensor for highly accurate measuring of fluid levels.

The sensor is available with rod lengths from 250 .. 730 mm. Rod lengths of up to 2500 mm are possible.

HYDAC offers the HNT 1200 in a pressure-resistant stainless steel housing for in-tank installation. Depending on the application, several different floats are available, e.g. stainless steel for aggressive media or plastic.

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

### Technical data:

Input data							
Measuring ranges	mm	178	208	298	338	448	658
Rod length <sup>1)</sup>	mm	250	280	370	410	520	730
Max. speed of change in fluid level	No restrictions						
Mechanical connection	G ¾ A ISO 1179-2						
Tightening torque, recommended	30 Nm						
Parts in contact with fluid	Rod: Stainless steel (1.4301 / 1.4571) Float: PP (polypropylene) 0.6 kg/dm <sup>3</sup> Seal: Seal ring DIN 3869-27-FKM						
Fluids <sup>2)</sup>	Hydraulic oils, cooling lubricants						
Output data							
Analogue output, permitted load resistance	4 .. 20 mA, load resist.: max. 500 Ω 0 .. 10 V, load resist.: min. 1 kΩ						
Accuracy <sup>3)</sup>	≤ ± 1 % FS						
Temperature coefficient	≤ ± 0.01 % FS / °C						
Non-linearity	≤ ± 1 % FS						
Repeatability	≤ ± 1 % FS						
Environmental conditions							
Ambient temperature range	-25 .. +85 °C						
Storage temperature range	-40 .. +100 °C						
Fluid temperature range <sup>4)</sup>	-40 .. +120 °C / -25 .. +120 °C						
Max. tank pressure	3 bar (short-term 10 bar, t < 1 min)						
CE mark	EN 61000-6-1 / 2 / 3 / 4						
Vibration resistance acc. to DIN EN 60068-2-6	7.5 mm (5 .. 8.2 Hz) 2.0 g (8.2 .. 150 Hz)						
Shock resistance acc. to DIN EN 60068-2-27 (11 ms)	20 g						
Protection class acc. to DIN EN 60529 <sup>5)</sup>	IP 67						
Other data							
Supply voltage (U <sub>B</sub> )	9 .. 36 V DC						
Residual ripple supply voltage	≤ 250 mV <sub>SS</sub>						
Current consumption (without output)	≤ 100 mA						
Weight	Depending on length: 425 g (250 mm); 570 g (730 mm)						

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

**FS (Full Scale)** = relative to complete measuring range

<sup>1)</sup> Other rod lengths on request

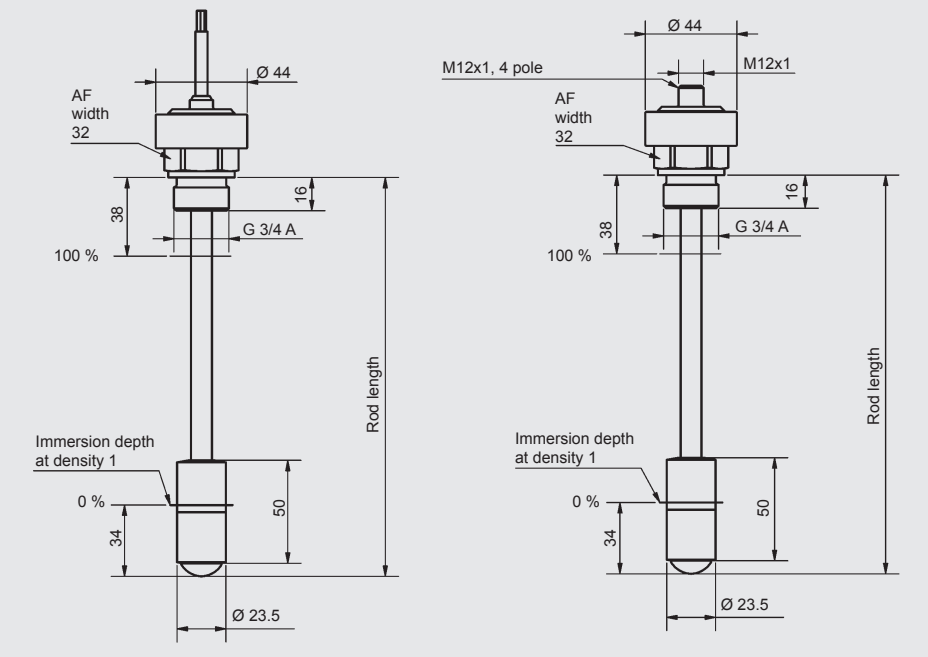
<sup>2)</sup> Other fluids on request

<sup>3)</sup> Specified at calm, non-turbulent fluid

<sup>4)</sup> -25 °C with FKM seal, -40 °C on request

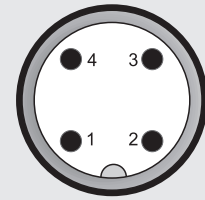
<sup>5)</sup> With mounted mating connector in corresponding protection class

## Dimensions:



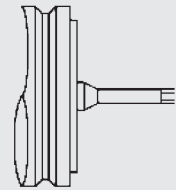
## Pin connections:

M12x1, 4 pole



Pin	HNT 1226
1	+U <sub>B</sub>
2	n.c.
3	0 V
4	Signal

Cable outlet



## Model code:

**HNT 1 2 2 X - X - XXXX - 000**

### Mechanical connection

2 = G 3/4 A ISO 1179-2

### Electrical connection

1 = jacketed cable, 2 m

6 = male M12x1, 4 pole

### Output signal

B = 0 .. 10 V, 3-conductor

C = 4 .. 20 mA, 3-conductor

### Rod length (physical) in mm

0250; 0280; 0370; 0410; 0520; 0730

### Modification number

000 = standard

### Accessories:

Appropriate accessories, such as mating connectors, can be found in the Accessories brochure.

Lead	HNT 1221
brown	+U <sub>B</sub>
white	0 V
green	Signal

## Note:

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

### HYDAC ELECTRONIC GMBH

Hauptstraße 27, 66128 Saarbrücken

Germany

Telephone +49 (0)6897 509-01

Fax +49 (0)6897 509-1726

E-mail: [electronic@hydac.com](mailto:electronic@hydac.com)

Internet: [www.hydac.com](http://www.hydac.com)