

UHZ301 Digital Float Level Transmitter

- ▶ 4 digit LED digital display
- ▶ All-metal housing
- ▶ PNP/NPN programmable
- ▶ 3-wire 4...20mA; 3-wire 0...5V programmable
- ▶ Rotatable indicator
- ▶ Stainless steel wetted parts

With liquid level fluctuation, a magnetic float triggers the switch inside tube, which changes the number of connected resistors. This changing of resistance is converted to standard electrical signal output. All-metal housing with highlight LED display, dual-key design, user friendly menu, multiple process connections, 330° rotatable indicator.

Specifications

Measuring Range (Rod length L)	250mm/ 500mm/ 750mm/ 1000mm/1250mm/1500mm/2000mm
Applicable Medium	Corrosive liquids compatible with 304 stainless steel
Pressure Rating	20bar
Medium Density	$\geq 0.7\text{g/cm}^3$
Power Supply	12...30Vdc
Current Consumption	$\leq 30\text{mA}$ (power supply 24Vdc, no-load)
Switching Output	
Output	Push-pull (compatible with PNP/NPN); NC/NO configurable
S1,S2 Output Current	$< 500\text{mA}$
Voltage Drop	$< 1\text{V}$
Current Analog Output	
Output	3-wire 4...20mA
Load RA (Ω)	$RA \leq 500\Omega$
Voltage Analog Output	
Output	3-wire 0...5V
Load RA (Ω)	$RA > 10\text{K}\Omega$
Linearity	$\leq \pm 1.5\%$ of F.S.
Wiring Protection	Reverse polarity, overvoltage and short-circuit
Display	
Design	Red 4-bit 8mm high brightness 7-segment digital LED
Display Range	-1999...9999
Temperature	
Operating/Medium	-20...85°C
Storage	-20...+100°C
Material	
Display Head	Zinc alloy
Housing	304 stainless steel
Process Connection Tube/Float	304 stainless steel
Protection Class	IP67
Electrical Connection	M12×1 plug
Process Connection	G2 male thread

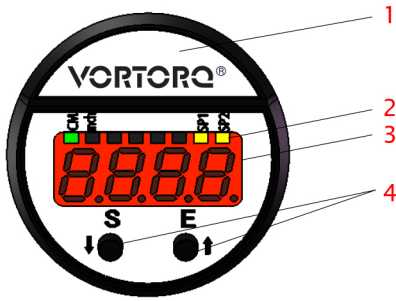


LEVEL

Applications

- ▶ Petrochemical
- ▶ Food/pharmaceutical industry
- ▶ Power plant
- ▶ Water treatment
- ▶ Boiler
- ▶ Papermaking

Set Panel



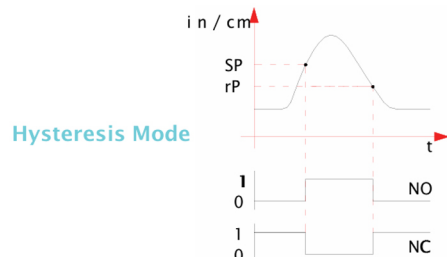
- 1 - LOGO
- 2 - 8 state lights
- 3 - 4-digit LED display window
- 4 - Keys

S + E	Press and hold for 2 seconds to enter setting status/confirm setting
S	Toggle menu item down / change a bit value
E	Toggle menu item up/toggle setting

Functional specifications

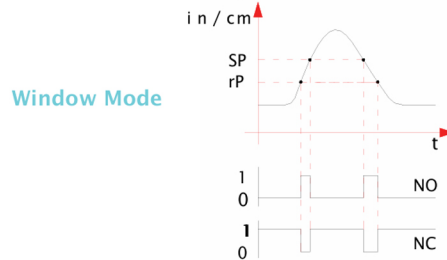
Hysteresis Mode

The hysteresis keeps the switching output stable if the measured value fluctuates around the setpoint. Output switches when rising measured value reaches set point (SP1); As measured value falls, the output switches back only if the reset point (rP1) is reached.



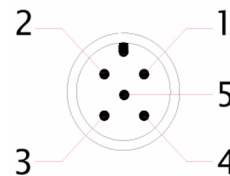
Window Mode

The window function allows the monitoring of a defined range. If the measured value is between set point (SP1) and reset point (rP1), the output is activated (NO), otherwise it is deactivated (NC)



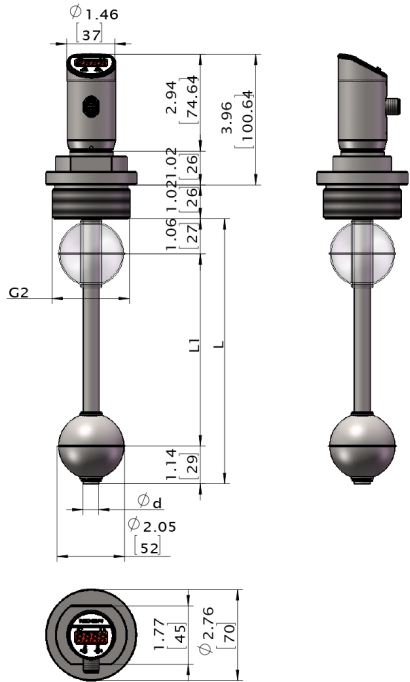
Wiring

Signal	Plug	Cable
U+	1	Brown
U-	3	Blue
Switching output S1	4	Black
Switching output S2	2	White
Analog output (Current or Voltage)	5	Gray



PNP output		NPN output	
2x PNP		2x NPN	
2x PNP + analog output		2x NPN + analog output	

Dimensions in inches (mm)



LEVEL

Model Number

UHZ :	Digital float level sensor
301 :	Serial Number
20 :	Two switch outputs
21 :	Two switch + current analog output (0...20/4...20mA)
22 :	Two switch + voltage analog output (0...5/1...5V)
F :	Flange connection
G :	G2 Male thread
N :	2"NPT Male thread

UHZ	301/	21	F	S	M1000	S	/
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S :	M12X1 Five-core plug
MXXX :	Probe length without thread
EXXX :	Probe length with thread
Note: M1000 means the probe is 1000mm long without threads; E1000 means the probe is 1000mm long with threads.	
S :	Ball float
C :	Cylindrical float
Reserved bit	

Sepecial Order

- ▶ Other special requirements related to electrical and mechanical connections proposed by users
- ▶ Guide rods in other materials or sizes