



NIVOPRESS

NPP 424-1, NPP424-2, NPM 421

Tensometric hydrostatic liquid level sensors/probes

Application:

- level measurement in boreholes and wells
- level measurement in water reservoirs and vessels
- level measurement of wastewater (NPP424-2, NPM421)
- managing of wastewater pumping



NIVOPRESS submersible tensometric probes are designated for continuous measuring of levels of liquid. The level probe is thermally compensated and placed in the housing made of a stainless steel used in food industry. Sealing of the probe is ensured by three different sealing methods. The end of the submersible transmitter/probe NPP424-1 is cone-shaped, what enables easier installation and removal of the probe to/from narrow boreholes. The capillary in the supply cable assures elimination of atmospheric pressure changes. The NPM421-1 version is suitable also for use in significantly turbid liquids (e.g. waste - water) and in the extreme conditions. The level transmitter should be connected to hanging rope or pole with the inner screw-thread G1". Complete series of transmitters/probes has external electric calibration option, no HART-modem nor is notebook required, etc. The outlet is standard current loop 4 ... 20 mA. Line shield eliminates the difference in potentials between the ground protection and the area around the transmitter/probe.

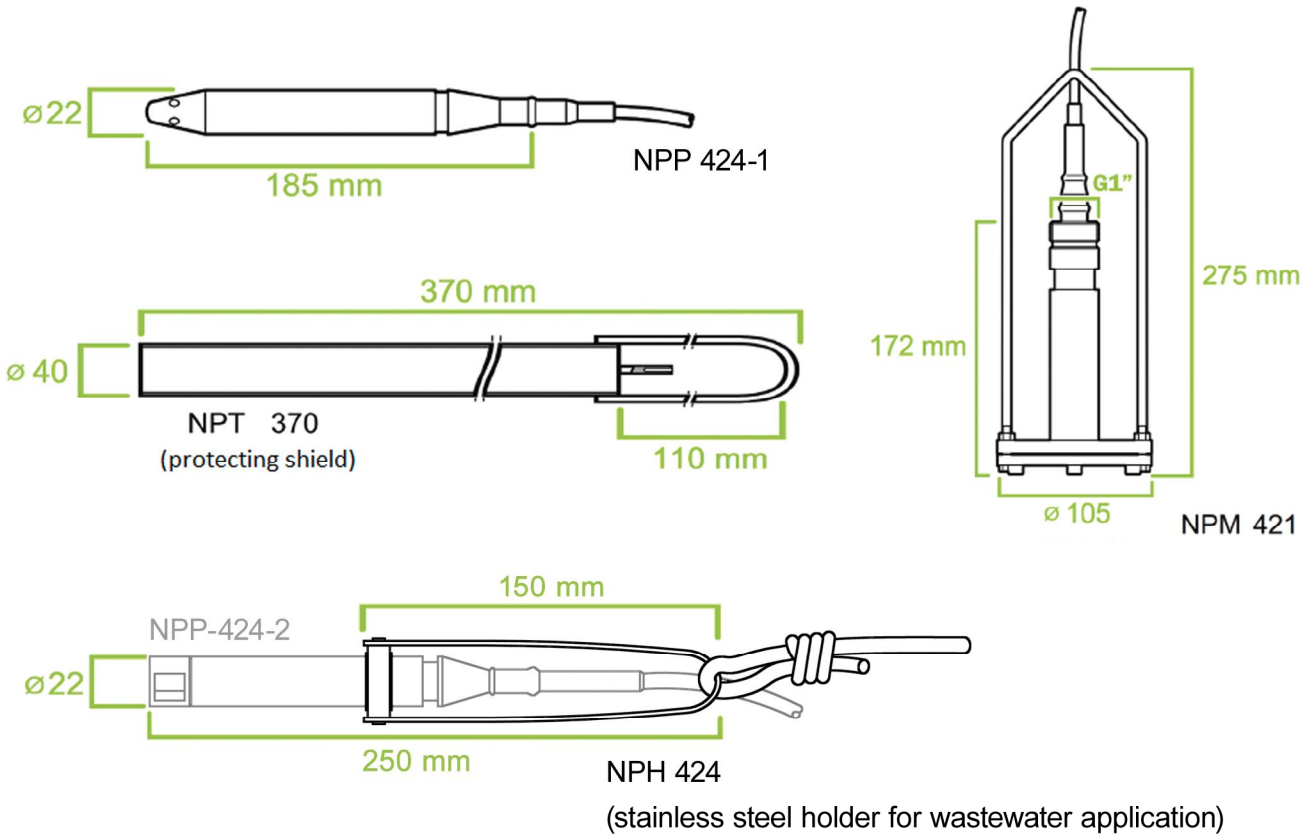
Technical data:

NPP424-1, NPP424-2

NPM421

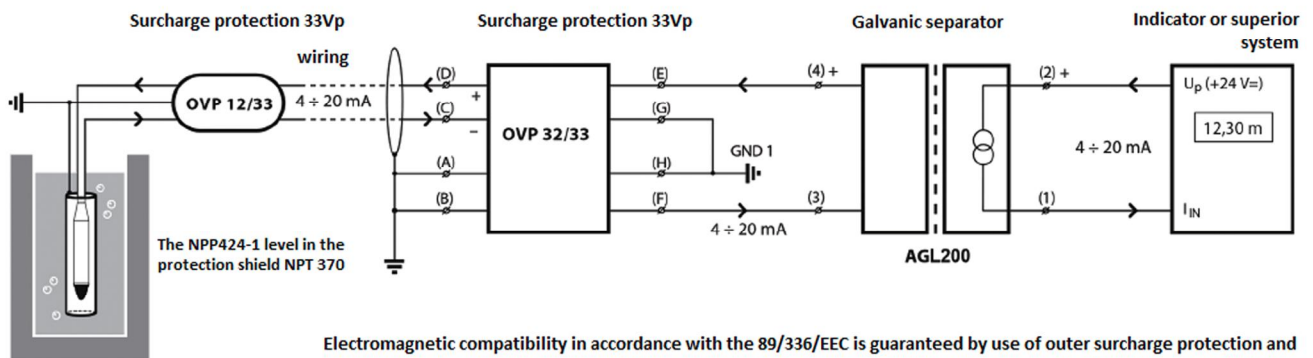
Measuring range:	1...100 m w.h. (water column)	1...20 m w.h.
Overload allowed:	Up to 5 m w.h. 500%, to 10m w.h. 300%, to 20m w.h. 200%, over 20 m w.h. 40%	
Zero error:	0,1 mA max	0,15 mA max
Process temperature:	-10...+60 °C	0...+40 °C
Output:	4 20 mA, external calibration is possible even during its operation.	
Power supply:	9...30 V DC	
Measurement error:	Typ. 0.5 %, max. 1% of the measurement scope	
Temperature error / linearity:	< 0.2% / better than 0.2%	
Inner surcharge protection:	II. st. 39V / 600W / 1ms	
Cable with breathing capillary:	Fix mounting, ø 7 mm; cable coating DESMOPAM – 588, polyurethane, capillary ø 1 mm	
Insulation voltage / coating:	max 500 V=	
Ingress protection:	IP 68	
Mechanical dimensions:	Ø22 x 185 mm	Ø105/ Ø34 x 275 mm
Standard measuring ranges:	0-1, 0-2, 0-5, 0-10, 0-20 m, 0-50 m, 0-100 m w.h. (water column)	
Other measuring ranges:	Upon request, any in the interval 1 20 w.h. with 0.1 m step	

Mechanical dimensions:



Example of connection:

Measuring of the water level in the gauge via the two-wire tensometric submersible level with the surcharge protection on both sides and with the galvanic signal separation $4 \div 20$ mA



Electromagnetic compatibility in accordance with the 89/336/EEC is guaranteed by use of outer surcharge protection and the NPT 370 shield.