

NIVOPRESS N

HYDROSTATIC LEVEL TRANSMITTER



- ♦ 4 ... 20 mA output
- ♦ Wide range of measurement
- ♦ Level gauge for wells, basins reservoirs
- Also for mildly aggressive mediums
- ♦ Internal or flush diaphragm
- ♦ Accuracy 0,25% or 0,5%
- **♦** Surge and polarity protection

ABOUT NIVOPRESS

NIVOPRESS N submersible hydrostatic level transmitter consists of a special breathing cable (containing capillary tube and stress resistant inlet) and a probe. There are two different designs of the stainless steel probe: with ceramic flush diaphragm and stainless steel diaphragm behind a plastic protection cap.

The level metering is based on the measuring of the pressure difference between the hydrostatic pressure of the liquid head over the diaphragm and the actual atmospheric pressure. This pressure difference is converted into 4 ... 20 mA current in the 2-wire version and 0 ... 10 V DC voltage in the 4 - wire version.

Easy installation and wiring is ensured by the use of the complete set of accessories.

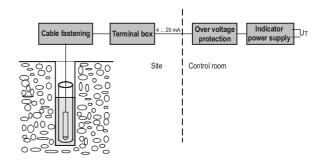
For outdoor measurements the application of over voltage protection (OVP) is suggested.

To ease installation the use of terminal box (with or without OVP) is recommended serving as terminal for the wires and for the breathing tube.

APPLICATION

NIVOPRESS NPK-200 hydrostatic level transmitters are applicable to clean liquids in bore holes and is especially recommended for monitoring and controlling submersible pumps.

NIVOPRESS NCK-200 type units with ceramic flush diaphragm are for level measurement of tanks and reservoirs and also suitable for contaminated liquids.



CE







TRANSMITTER PROBE

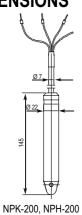
	TYPE	NPK-200	NCK-200	NCH-200	NPH-200	
Range		0 200 m water head	0 20 m water head		0 200 m water head	
		ln :	In accordance with the order code			
	n pressure as olied range	3 x	20 x (h≤ 3 m wh.) 10 x (> 3 m wh.)		3 x	
Output si	gnal	2-wire. 4 .	20 mA	3-wire 010	0V (0V≤80mV)	
Power su	ıpply	9 30 V DC	12 30	V DC	1830 VDC	
		$R_s = \frac{(U_s - U_{min})}{0,02A}$		≥ 5 kOhm		
Power consumption		_		< 6 mA		
Accuracy		± 0,5 %	± 0,2	5 %	± 0,5 %	
Temperature coefficient		≤ ± 0,1 % / 10K		≤ ± 0,2 %/ 10 K		
Temperature range		$\leq \pm 0.1 \% / 10 K$ $\leq \pm 0.2 \% / 10 K$ - 10 °C+60 °C for special order +75 °C				
Tempera	ture of storage	-10 °C +50 °C				
Ingress protection		IP 68				
Electric protection		Class III				
Electric connection		Shielded, breathing cable Ø 7 mm				
Cable cross section		0,34 mm ²				
Cable ler	ngth	0 300 m in accord		dance with the order code		
Dimensio	n	Ø22 x145 mm	Ø 40 x 150 mm		Ø 22x145 mm	
Mass		probe: 0,2kg	probe:	0,4 kg	Probe: 0,2 kg	
IVIASS		Cable: ~ 0,06 kg/m				
Material of wetted parts	Diaphragm	1.4404	Al ₂ O ₃ o	eramic	1.4404	
	Housing	1.4571	1.4	404	1.4571	
	Cable coat	Polyurethane	Polyethylene		Polyurethane	
	Gasket	VITON (FKM)				
	Protection cap	ABS			ABS	

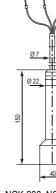
ACCESSORIES

CABLE TERMINAL BOX	NAA-101	NAA-101			
Dimension	139 x 119	139 x 119 x 70 mm			
Ingress protection	IP	IP 65			
Ambient temperature	−40 °C .	−40 °C +65 °C			
Material	Polyca	Polycarbonate			
Conduit	ASM 16 (cable outer dia	ASM 16 (cable outer diameter. Ø5 Ø10 mm)			
Electric connection	Terminal screw (cross section max. 2,5 mm²)				
CABLE TERMINAL BOX WITH SURGE PROTECTION NAA-102 *					
General data	Same as with NAA-101				
Electric data	Same as with OVP				
CABLE FASTENING	NAA-103 /NAA-105				
Maximum cable length	150 m	/ 100 m			
Ambient temperature	-10 °C	-10 °C + 45 °C			
Dimension	110 x 1	110 x 110 mm			
SURGE PROTECTION	OVP12/33 *	OVP32/33 *			
Version	Open air	DIN 35 mm rail mounted			
Dimension	72 x 42 x 19 mm	62 x 65 x 18 mm			
Ingress protection	IP 54	IP 20			
Wire		max. 2,5 mm ²			
Voltage clipping		3 V			
Pulse power		/ / 1 ms			
Input resistance	13 ohm				
Leakage current	≤ 10 μA				

For 4 ... 20 mA loop powered units only

DIMENSIONS

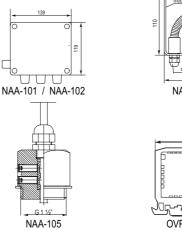




|< 40 +| NCK-200, NCH-200

NIVOPRESS N

ACCESSORIES



62	
	[
070	
	Ļ
OVP 32 / 33	

ORDER CODE (Not all combinations possible)

ACCURACY	CODE	OUTPUT	CODE
Capacitance	С	2-wire 4 20 mA	K
Piezoresistive	Р	3-wire. 0 10 V DC	Н

^{*} Special ranges or models with engineering unit of bar also available

RANGE.*	CODE
1 m wh.	1
2 m wh.	2
5 m wh.	3
10 m wh.	4
20 m wh.	5
50 m wh.	6
100 m wh.	7
200 m wh.	8

CABLE LENGTH	CODE		CABLE LENGTH	Co	DE
0 m	0		0 m	0)
10 m	1		1 m	1	
20 m	2		2 m	2	!
30 m	3 ∈	3 m	3		
40 m	4	up to 100 m	4 m	4	
50 m	5	Q	5 m	5	;
60 m	6	ᆿ	6 m	6	i
70 m	7		7 m	7	,
80 m	8		8 m	8	;
90 m	9		9 m	9)
100 m	Α		0 m	0)
200 m	В	m 0	10 m	1	
300 m	С	over 100 m		:	
		906	90 m	9	1