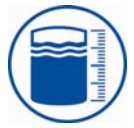


# Level module for installation in level probes - type nm -



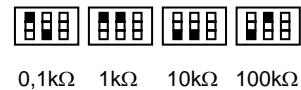
- FOR INSTALLATION IN LEVEL PROBES NKS
- CONNECTION WITH PLC POSSIBLE
- SENSITIVITY ADJUSTABLE  
0,1 kΩ....100 kΩ
- LOW INSTALLATION COSTS

## DESCRIPTION

The encapsulated level module **nm** is used to evaluate single levels in the conductive level probes. It is directly installed into the connection head of the level probes. Level indication "full" is generated by contact of the probe with the conducting medium between probe and ground (metall connection), resulting in a conducting circuit, converted in a DC-switch signal. Level indication "empty" is generated when the probe is not covered any more by the medium. This signal can be directly evaluated and processed by a PLC-system. The direct mounting of the modules in the connection head means cost reduction because of easy electrical installation and mounting as well as excellent EMC performance. Therefore additional devices for cabinet assemblies are not necessary.

COMMISSIONING OF LEVEL MODULE			CONNECTION DIAGRAM LEVEL MODULE NM	
1. Cover sensor with medium to be sensed.			<p>GND (sensor)    electrode (sensor)    active output    power supply 16...36V DC</p> <p>LED</p> <p>fitting holes</p> <p>DIP-jumper</p>	
2. Set sensitivity DIP-switch to „0,1kΩ“.				
3. If sensor LED „Probe“ fails to be activated, set positions 1kΩ, 10kΩ, 100kΩ in sequence (see figs.) until sensor LED „Probe“ is activated.				
4. Jumper must always be set for one function in each case.				
-- „full“: sensor immersed            ⇒ output active				
-- „empty“: sensor non-immersed    ⇒ output active				
TECHNICAL DATA				
Housing	plastics	∅ 43,5 x 10,7 mm		
Temperature	ambient temp.	-10...+60 °C		
	operational temp.	-10...+60 °C		
	storage temp.	-20...+60 °C		
	rel. humidity	0...95 % without dew		
Input	electrode	max. volt. 1 V AC/ 6kHz		
Sensitivity	4 steps adjustable	0,1kΩ, 1kΩ, 10kΩ, 100kΩ		
Output	active output	16...36 V DC – 2 V regarding power supply, 0,05 A short-circuit proof		
	switch output	transistor output		
Function	full/empty signal	selectable		
Time delay	fixed	0,5 s		
Power supply		16...36 V DC		
ELECTRICAL CONNECTION				
Cable gland	1 =	GND (sensor)		
	2 =	electrode (sensor)		
	3 =	active output		
	4 =	plus-Voltage supply		
	5 =	minus-Voltage supply		
M12-round socket	1 =	+		
	3 =	-		
	4 =	active output		
GND and Minus voltage supply are connected.				
CE-conformance: acc. to EMC-guidelines				

Setting probe sensitivity (DIP-switches 1 + 2)



Setting function full / empty (DIP-switch 3)

