

**Thank you for choosing a NIVELCO instrument.  
We are sure that you will be satisfied throughout its use!**

## 1. GENERAL INTRODUCTION, OPERATION

NIVOFLIP MAK-100-□ type magnetic level switches are suitable for level switching of various liquids. MAK-100 type magnetic level switches are used for magnetic-lamella bypass level indicator (named NIVOFLIP) as an optional level switch.

### OPERATION PRINCIPLE:

Mounted on suitable connection flanges on the side of the tank the liquid level in the bypass tube and the tank is equal. In the stainless steel bypass tube a magnetic float tracks the level of the liquid. In the float a permanent magnet is incorporated, which operates the MAK-100 type adjustable positioned magnetic level switch through the stainless steel side of the tube, and provides non-contact signal transfer to the microswitch.

Electronic connection is performed with cable gland, wired with a maximal 2.5 mm<sup>2</sup> cross sectioned cable. Installation of the level switch is made by 2 pieces of hose clamps. Position of the switch can be changed to adjust the needed switching level. The level switches are available in normal and Ex versions.

## 2. TECHNICAL DATA

TYPE	MAK-100-0	MAK-100-6
Medium temperature	max. +130 °C	See: Temperature data for Ex versions table
Ambient temperature	-20°C...+80°C	
Material of the switch-housing	Paint coated aluminium cast	
Switch	1 microswitch, with NO / NC contacts	
Switch rating	250V AC12 2.5 A 220V DC13 0.3 A	Only Ex ia certified and approved contact isolator should be used for supply!
Electrical connections	cable gland: M20x1.5 terminal for max. 2.5 mm <sup>2</sup> wire cross section	
Mechanical protection	IP 65	
Electrical protection	Class I.	
Ex marking	–	⊕ II 1G
Mass	1.5 kg	

# NIVOFLIP

MAGNETIC LEVEL SWITCH

USER'S MANUAL  
FOR MAK - 100 - □



NIVELCO

Manufacturer:

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## 2.1 GENERAL DATA

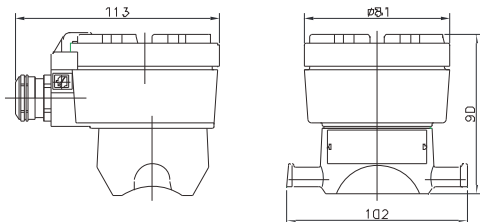
Temperature classes			
Class	T6	T5	T4
Max. medium temperature	+80°C	+95°C	+130°C
Ambient temperature	-20°C...+60°C	-20°C...+70°C	-20°C...+80°C

## 2.3 ORDER CODE

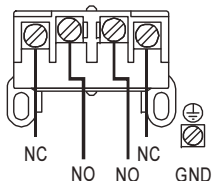
NIVOFLIP M A K - 100 -

Ex marking	Code
None	0
Ex II 1G	6

## 2.4 DIMENSIONS



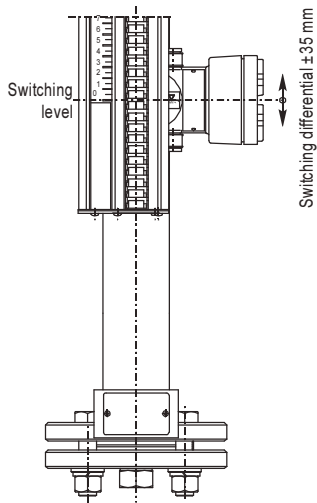
## 3. WIRING



## 2.2 ACCESSORIES

- Users manual
- Warranty card
- Declaration of Conformity
- 2 pcs. Hose clamps

## 2.5 MOUNTING



## 4. CONDITIONS OF EX APPLICATIONS

The housing of the instrument should be grounded by its grounding screw to the EP system.  
Only Ex ia certified and approved contact isolator should be used for supply!

## 5. MAINTENANCE

The instrument do not require maintenance, but the instrument (depending on the application) may need to be checked or cleaned regularly.

## 6. STORAGE

Ambient temperature: -25...max:+80°C,  
see: " Temperature data for Ex versions table"

Relative humidity: max. 98% non-condensing!

## 7. WARRANTY

NIVELCO provides warranty of 3 (three) years in compliance with details described in the Warranty Card.

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NIVELCO reserves the right to change technical data without notice!