



## **Table of contents**

	Page
Safety notes/ Technical support	2
Overview/ Technical Data	3
Electrical installation	4
Commissioning	7

Subject to technical change.

We assume no liability for typing errors.







## Safety notes / Technical support

## **Notes**

- Installation, maintenance and commissioning must be carried out only by gualified technical personnel.
- The product must be used only in the manner outlined in this instruction manual.

# Special attention must be paid to warnings and notes as follows:



### WARNING

Relates to a caution symbol on the product and means, that a failure to observe the necessary precautions can result in death, serious injury and/ or considerable material damage.

### **WARNING**



Relates to a caution symbol on the product and means, that a failure to observe the necessary precautions can result in death, serious injury and/ or considerable material damage.

This symbol is used, when there is no corresponding caution symbol on the product.

### **CAUTION**

A failure to observe the necessary precautions can result in considerable material damage.

## Safety symbols

In	manual	and	or
	produ	ıct	

Description



CAUTION: refer to related documents (manual) for details.



Earth (ground) Terminal



**Protective Conductor Terminal** 

# Technical support

Please contact your local supplier (see www.uwt.de for address). Otherwise you can contact:

UWT GmbH Tel. 0049 (0)831 57123-0 Westendstr. 5 Fax. 0049 (0)831 76879

87488 Betzigau info@uwt.de Germany www.uwt.de





# Level monitoring system

## **NT 4700**

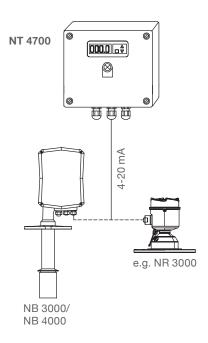




## **Overview / Technical Data**

## Level display for one silo

- Evaluation of the analogue 4-20 mA signal of any sensor
- LED-Display in percentage, height, volume or weight (implements NT 4900)
- Version for Nivobob NB 3000/ NB 4000 implements start button and indicator lamp when sensor weight is in the upper position
- Simple operation



## **Technical data**

Dimensions         182 x 180 x 90 mm (W x H x D)           Mounting         Wall mounting           Material         Polycarbonat           Ingress protection         IP65           Ambient temperature         0 +50°C           Power supply         NT 4700-1/ NT 4700-2: NT 4700-6: 115 V 50/ 60 Hz NT 4700-6: 115 V 50/ 60 Hz NT 4700-3/ NT 4700-4: 24 V DC           NB 3000/ NB 4000: 230 V 50/ 60 Hz or 115 V 50/ 60 Hz or 24 V DC, connection is made on site           Power consumption         NT 4700: or by NT 4700-4 or by NT 4700-6           Power consumption         NT 4700: connected level sensor: see documentation of the respective sensor	roommour aata			
Material         Polycarbonat           Ingress protection         IP65           Ambient temperature         0 +50°C           Power supply         NT 4700-1/ NT 4700-2: 230 V 50/ 60 Hz NT 4700-6: 115 V 50/ 60 Hz NT 4700-6: 115 V 50/ 60 Hz NT 4700-3/ NT 4700-4: 24 V DC           NB 3000/ NB 4000: 230 V 50/ 60 Hz or 115 V 50/ 60 Hz or 24 V DC, connection is made on site           2-wire 4-20 mA: supplied by NT 4700-2 (integrated power converter 24 V DC) or by NT 4700-4 or by NT 4700-6           Power consumption         NT 4700: 10 VA	Dimensions	182 x 180 x 90 mm (W x H x D)		
Ingress protection IP65  Ambient temperature 0 +50°C  Power supply NT 4700-1/ NT 4700-2: 230 V 50/ 60 Hz NT 4700-5/ NT 4700-6: 115 V 50/ 60 Hz NT 4700-3/ NT 4700-4: 24 V DC  NB 3000/ NB 4000: 230 V 50/ 60 Hz or 115 V 50/ 60 Hz or 24 V DC, connection is made on site  2-wire 4-20 mA: supplied by NT 4700-2 (integrated power converter 24 V DC) or by NT 4700-4 or by NT 4700-6  Power consumption NT 4700: 10 VA	Mountng	Wall mounting		
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		2-wire 4-20 mA :	, , , , , , , , , , , , , , , , , , , ,	
·	Power consumption			





## **Electrical installation**



# Safety Instructions

Handling	In case of improper handling or handling malpractice, the electric safety of the device cannot be guaranteed.		
Installation regulations	The local regulations or VDE 0100 (Regulations of German Electrotechnical Engineers) must be observed.		
Fuse	Use a fuse as stated in the connection diagrams.		
RCCB protection	In case of a fault, the supply voltage must be automatically switched off by a RCCB protection switch to protect against indirect contact with dangerous voltages.		
Power supply switch	A voltage disconnection switch must be provided near the device.		
Wiring diagram	The electrical connections are made in accordance with the wiring diagram.		
Supply voltage	Compare the supply voltage applied with the specifications given on the name plate before switching the device on.		
Cable gland	Make sure that the screwed cable gland safely seals the cable and that it is tight (danger of water intrusion).  Cable glands that are not used have to be sealed with a blanking element.		
Field wiring cables	All field wirings must have insulation suitable for at least 250 V AC. The temperature rating must be at least 80°C (176°F).		
Installation in Hazardous Locations			



## Level monitoring system

### NT 4700

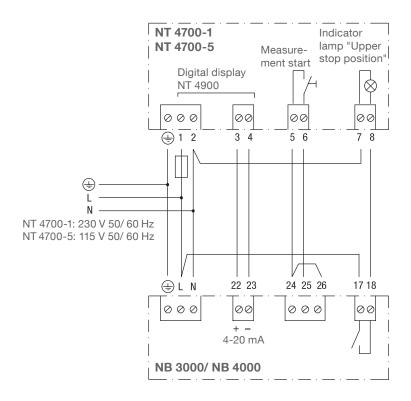
Technical information / Instruction manual



## **Electrical installation**

## NT 4700-1/ NT 4700-5

230 V/ 115 V version for connecting a Nivobob NB 3000/ NB 4000



0.14 .. 2.5 mm<sup>2</sup> (AWG 26 .. 14)

Fuse: max. 2 A

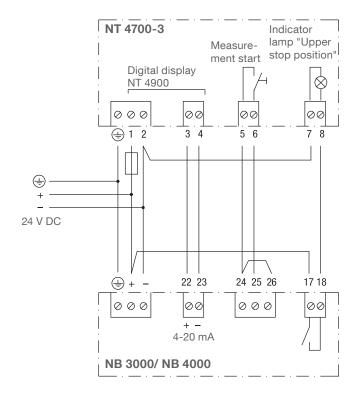
Indicator lamp "Upper stop position": for NB 4000 only possible if the option pos.25 "Relais output" was selected with NB 4000.

If measurement interruption during filling is required:
Remove the wire from terminal
24 - 26 and connect to filling
nozzle (see manual NB 3000/
NB 4000).

Relais on terminal 17 - 18 is factory provided to state "Upper stop position". Thus no change is required to be done.

## NT 4700-3

24 V DC version for connecting a Nivobob NB 3000/ NB 4000



0.14 .. 2.5 mm<sup>2</sup> (AWG 26 .. 14)

Fuse: max. 2 A

Indicator lamp "Upper stop position": for NB 4000 only possible if the option pos.25 "Relais output" was selected with NB 4000.

If measurement interruption during filling is required:
Remove the wire from terminal
24 - 26 and connect to filling
nozzle (see manual NB 3000/
NB 4000).

Relais on terminal 17 - 18 is factory provided to state "Upper stop position". Thus no change is required to be done.



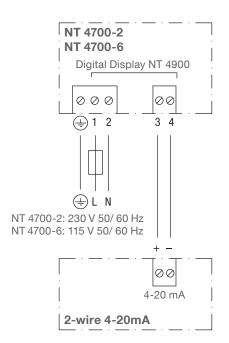




## **Electrical installation**

## NT 4700-2/ NT 4700-6

230 V/ 115 V version for connecting a 2-wire 4-20 mA (e.g. NR 3000)

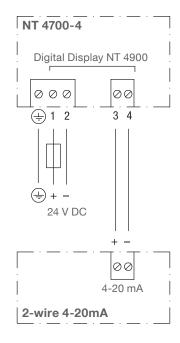


0.14 .. 2.5 mm<sup>2</sup> (AWG 26 .. 14)

Fuse: max. 2 A

## NT 4700-4

24 V DC version for connecting a 2-wire 4-20mA (e.g. NR 3000)



0.14 .. 2.5 mm<sup>2</sup> (AWG 26 .. 14)

Fuse: max. 2 A





## Commissioning

# Commissioning

## Programming:

• NB 3000/ NB 4000: see respective Instruction Manual. Only the parameters of the Quickstart Menue need to be

programmed

2-wire 4-20 mA: see respective Instruction Manual
 Digital Display NT 4900: see respective Instruction Manual

#### Note

An error or a required maintenance can be seen on the Digital Display NT 4900 by a untypical negative measurement value. This requires that the NT 4900 is programmed to 4-20 mA and the connected sensor provides less than 4 mA in case of error/maintenance (NB 3000/ NB 4000 are facory preset to give 0 mA).