

# Level switch

## Nivotemp 61-0-WW

The ingress of water or condensation water in hydraulic or lubrication systems will result in premature aging of the oil and the changes in the lubricating properties can increase wear on bearings and other parts. It's therefore important to quickly drain the separated free water from systems where oil with good demulsibility.

A quite reliable physical measurement method to detect water is interface measurement, as it is independent of changing chemical properties of the oil such as conductivity or capacity.

This style Nivotemp 61-0 is equipped with an additional speciality float which is balanced to only become buoyant in water.

The contact tube on the Nivotemp is extended to extend into a small recess in the bottom of the tank. The free water can collect in this recess and will lift the float and trigger a contact at a volume of approx. 8 oz.

Depending on the operating mode required of the respective system, the water can now be drained or an alarm can be triggered.

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Level / water monitoring combo

Reliable, physical measuring process

Easy installation

Independent of oil chemistry

Collecting basin available as ready to install accessory

Up to four adjustable level contacts

Connector standard

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## Technical Data

### Base unit

Operating pressure	max. 145 psi
Operating temperature	max. 176 °F
Fluid density	min. 0.029 lb/in <sup>3</sup>
Oil density	max. 0.031 lb/in <sup>3</sup>

### Material/Version

Float SK 610 (level)	Hard PU
Float WW (water alarm)	PPH
Switching tube	MS
Flange	PA 6
Weight at L=19.7"	1.7 lb

### Includes:

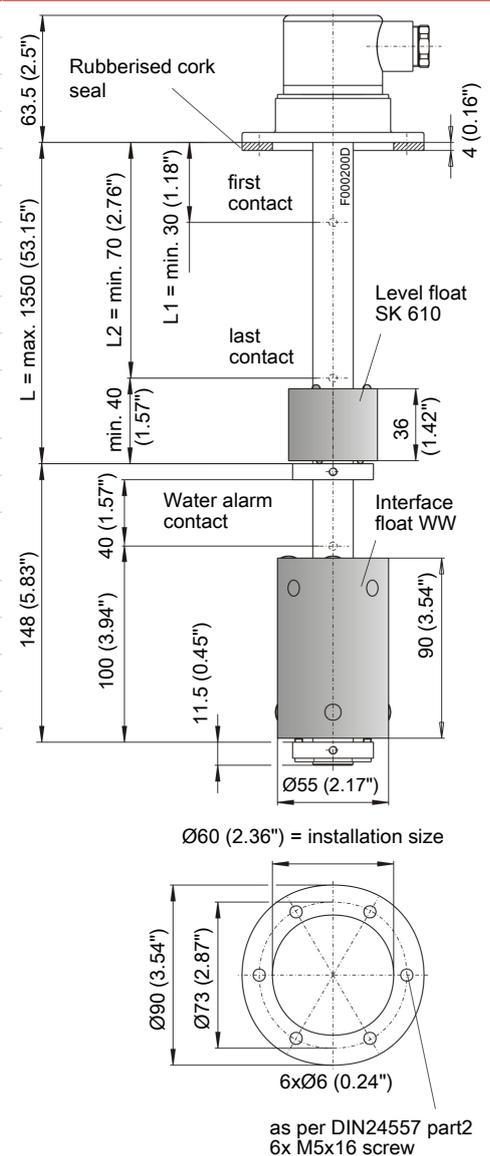
Mounting screws (quantity 6) and rubberised cork seal.

Level contacts	K10	W11	-	-
<b>Water alarm contacts</b>	-	-	<b>K6</b>	<b>W7</b>
Function	NC/NO*	Changeover contact	NC/NO*	Changeover contact
Voltage max.	230 V AC/DC	48 V AC/DC	230 V AC/DC	230 V AC/DC
Max. switching current	0.5 A	0.5 A	1 A	1 A
Contact load max.	10 VA	20 VA	50 VA	40 VA
Min. contact spacing	1.6"	1.6"	fixed	fixed

\*NC= NC contact/NO = NO contact

All data with empty tank

### Dimensions (mm)



## Standard pin assignment

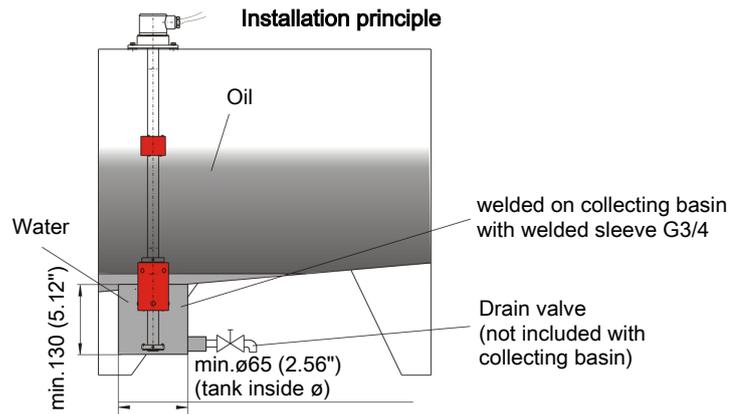
Connector	S6	C6F circular connector	2xM12 plug A coded
Dimensions			
Number of poles	6-pin + PE	6-pin + PE	4 pin/4 pin
DIN EN	175201-804	175301-804	61076-2-101
Voltage max.	230 V AC/DC*	230 V AC/DC*	24 V DC
IP rating	IP65	IP65	IP67**
Cable fitting	M20x1.5	PG 11	PG7**
Max. Number of contacts	4xK10 + 1xK6 2xW11 + 1xK6 3xK10 + 1xW7 1xW11 + 1xW7	4xK10 + 1xK6 2xW11 + 1xK6 3xK10 + 1xW7 1xW11 + 1xW7	2xK10 + 1xK6 1xW11 + 1xK6 2xK10 + 1xW7 1xW11 + 1xW7

\*max. 48 V AC/V DC for change-over contact. \*\*with IP 67 cable box attached. Other connectors available upon request.

## Installation examples

The Nivotemp 61-0-WW installs in the tank so the bottom part with the interface float is inside a collecting basin which is also installed under the bottom of the tank (see installation principle).

The size of the collecting basin must be of the specified minimum size. In this installation example with a cylinder size of  $\varnothing 2.56''$  and a height of 5.12", the interface float would activate the water alarm contact at a water volume of approx. 8 oz.



## Ordering instructions

Base version (without level and water alarm contacts)

Item no.	Description	Plug	Total length
10 30 099	Nivotemp 61-0-WW-S6-Level contacts/water alarm contact	S6	L (max. 1350 mm/2.17")
10 30 799	Nivotemp 61-0-WW-2xM12-Level contacts/water alarm contact	2xM12	L (max. 1350 mm/2.17")
10 30 899	Nivotemp 61-0-WW-C6F-Level contacts/water alarm contact	C6F	L (max. 1350 mm/2.17")

Item no.	Description	Number of contacts	Type	Spacing
18 89 999	Level contact K10	See plug connection table	NC/NO	L1 (, L2, L3, L4)
18 90 999	Level contact W11	See plug connection table	Changeover contact	L1 (, L2, L3, L4)
18 50 999	Water alarm contact K6	1	NC/NO	solid
18 49 999	Water alarm contact W7	1	Changeover contact	solid

### Accessories:

Item no.	Description
10 30 0991	Collecting basin (with G3/4 connection, including plug), dimensions $\varnothing 70/2.6 (2.76''/0.1'')$ x height = 133 mm (5.24")

### Ordering example:

You need: Nivotemp (base): Plug: Type S6; length L= 580 mm (23")  
 Level contacts: 1st Contact 100 mm (4") falling NC contact, 2nd contact 500 mm (20") falling NO contact  
 Water alarm contact: 1 as NC contact

Order: Item no.: 10 30 099, Nivotemp 61-0-WW-S6-2xK10-1xK6, L= 580  
 Item no.: 18 89 999, 2 x level contacts K10, L1=100 NC, L2 = 500 NO  
 Item no.: 18 50 999, 1 x Water alarm contact K6 as NC