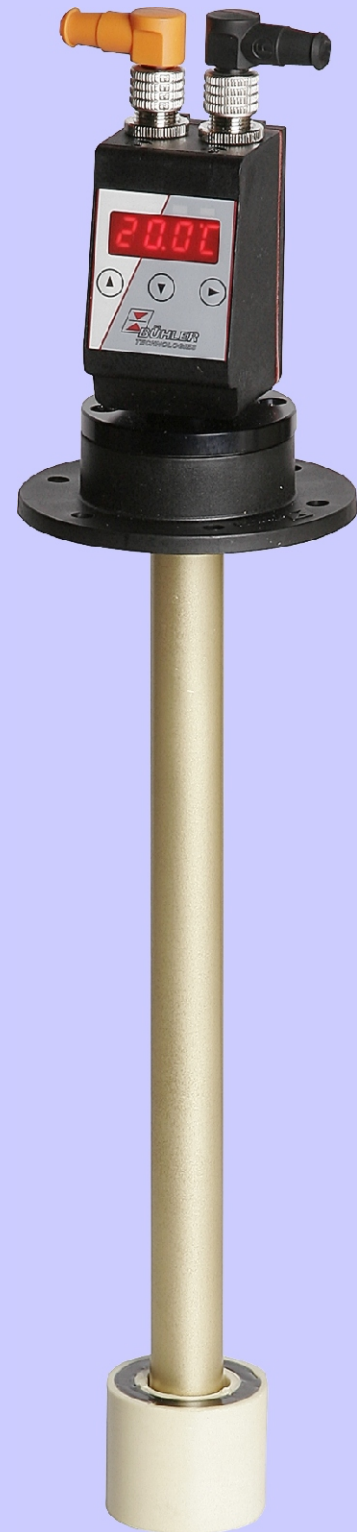


## *The new generation of level and temperature monitoring*

- Flange according to DIN 24557 / Part 2
- Combined, continuous monitoring of level and oil temperature
- Highly visible LED display shows the actual temperature in the basic mode, with status indicator of the switching outputs, able to rotate 270°
- Menu structure based on the VDMA guideline.
- 4 programmable outputs optional as level or temperature signal
- Continuous temperature signal (adjustable current or voltage) plus 2 or 4 programmable output
- Switching output adjustable as window or hysteresis
- Two switching outputs adjustable as frequency output (1 to 100 Hz)
- Min/Max memory, logbook function
- M12 connector base
- Reliable dynamic float system
- Immersion tube in matched lengths up to 1420 mm max., other lengths on request



## Technical data

## NT67-XP

### Basic unit

max. operating pressure	1 bar
operating temperature	-20 °C to +80 °C
Min. density of fluid	0,80 kg/dm <sup>3</sup> with float SK 604 0,85 kg/dm <sup>3</sup> with float SK 221
	Lengths 280, 370, 500, 670, 820, 970, 1120, 1270 and 1420 mm
	(on request other lengths)

weight	<b>MS</b>	<b>VA</b>
at L=280 mm	approx. 850 g	approx. 950 g
plus per 100 mm	approx. 50 g	approx. 70 g

<b>Material / Design</b>	<b>MS</b>	<b>VA</b>
float	hard PU (SK 604)	1.4571 (SK 221)
immersion tube	brass	1.4571
flange DIN 24557 part 2	PA	PA

<b>Options</b>		<b>O P T.</b>
<b>SSR</b> - stilling tube	material same as immersion tube	

<b>Level measurement</b>	
measuring resistor	reed contact
resolution	5 mm

<b>Temperature measurement</b>	
measuring resistor	Pt 100 (RTD) class B, DIN EN 60751
tolerance	± 0,8 °C

<b>Display and control unit</b>	<b>XP</b>
display	4 digit 7 segment LED display
operation	3 button keypad
storage	Min. and Max. values
current consumption at power up	approx. 100 mA for 100 ms
operating current consumption	approx. 50 mA
supply voltage (U <sub>B</sub> )	10 - 30 V DC (nominal voltage 24 V DC)
ambient temperature	-20 °C to +70 °C
protection class	IP65

	<b>Level</b>	<b>Temperature</b>
indicating device	%, cm, L, i, Gal	C / F
indicating range	adjustable	-20 °C to +120°C or 4 °F to 248°F

alarm indicator range	e. g. 0-100%	0 °C to 100 °C or 32 °F to 178 °F
accuracy	1% of the final value	

## Following cards are available

<b>-4S</b>	
connector (base)	2 x M12 - 4 pol
PNP Transistor output	4 x free programmable with free selectable allocation for e.g. 2 x Level / 2 x Temperature
alarm memory	1 x PNP output allocable as alarm logbook
max. current contact load	0,5 A per output max. 1 A overall

<b>-2S-KN-KT</b>	
connector (base)	2 x M12 - 4 pol
PNP Transistor output	2 x free programmable with free selectable allocation
alarm memory	1 x PNP output allocable as alarm logbook
max. current contact load	0,5 A per output max. 1 A overall

<b>Level</b>	1 x 4 - 20 mA, 2-10 V, 0-10 V or 0-5 V (U <sub>B</sub> - 8 V) / 0,02 A
<b>Temperature</b>	1 x 4 - 20 mA, 2-10 V, 0-10 V or 0-5 V (U <sub>B</sub> - 8 V) / 0,02 A
load Ω max.	
programmable as	
load Ω max.	

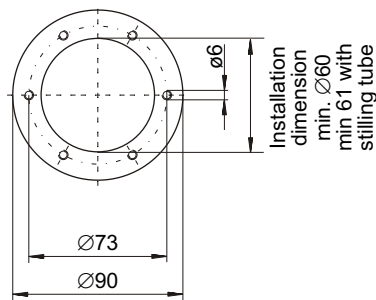
<b>-4S-KN-KT</b>	
connector (base)	1 x M12 - 8 pol
PNP Transistor output	4 x free programmable with free selectable allocation as alarm logbook
alarm memory	1 x PNP output allocable as alarm logbook
max. current contact load	0,5 A per output sustained short-circuit proof max. 1 A overall
analog output	<b>Level</b> 1 x 4 - 20 mA, 2-10 V, 0-10 V or 0-5 V (U <sub>B</sub> - 8 V) / 0,02 A
programmable as	<b>Temperature</b> 1 x 4-20 mA, 2-10 V, 0-10 V or 0-5 V (U <sub>B</sub> - 8 V) / 0,02 A

load Ω max.	
analog output	
programmable as	
load Ω max.	

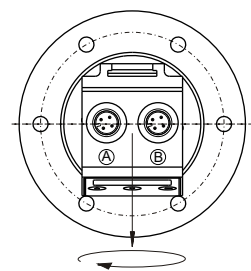
Other output options on request

### Flange picture

according to DIN 24557/part 2

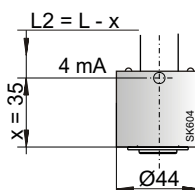


Top view

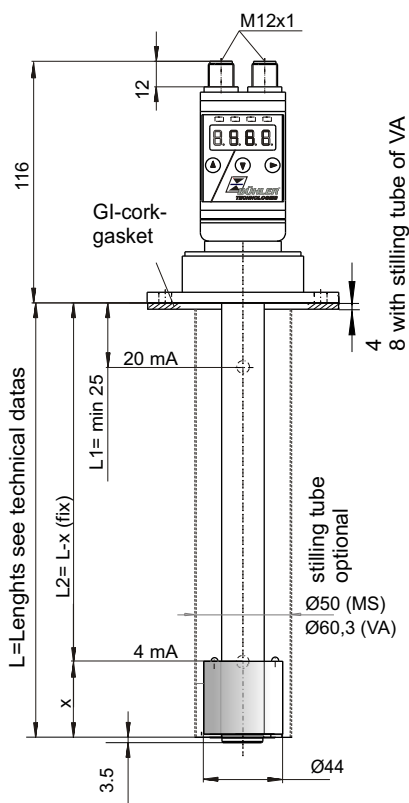
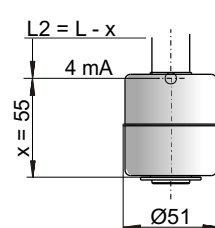


Housing able to rotate 270°

### Float SK 604 for NT67-XP-MS



### Float SK 221 for NT67-XP-VA



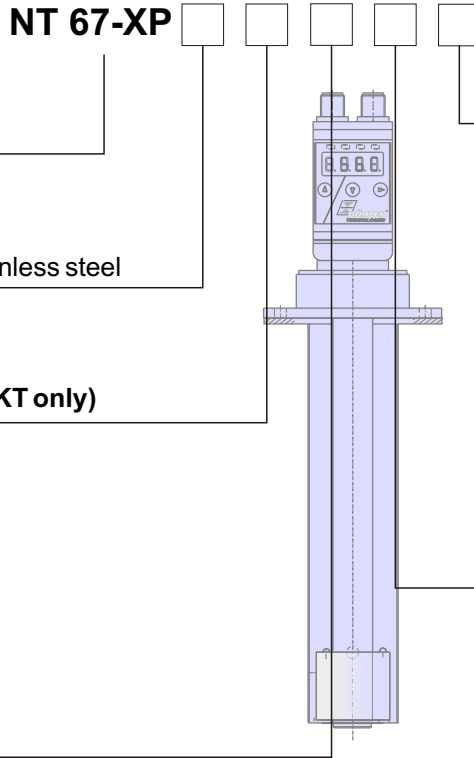
# Product code for NT 67-XP

**Series**  
Nivotemp NT 67-XP  
with display and control unit

**Design**  
**MS** brass  
**VA** float and immersion tube stainless steel

**Connector**  
**2M12**  
**M12-8-pol. (with option 4S-KN-KT only)**

**Length (max. 1420 mm)**  
280  
370  
500  
670  
820  
970  
1120  
1270  
1420



**Option**  
**SSR** = stilling tube

**Card**

**-4S**  
4 x PNP transistor output

**-2S-KN-KT**  
2 x PNP transistor output  
1 x analogue output level  
1 x analogue output temperature

**-4S-KN-KT**  
4 x PNP transistor output  
1 x analogue output level  
1 x analogue output temperature

O  
P  
T  
I  
O  
N  
S

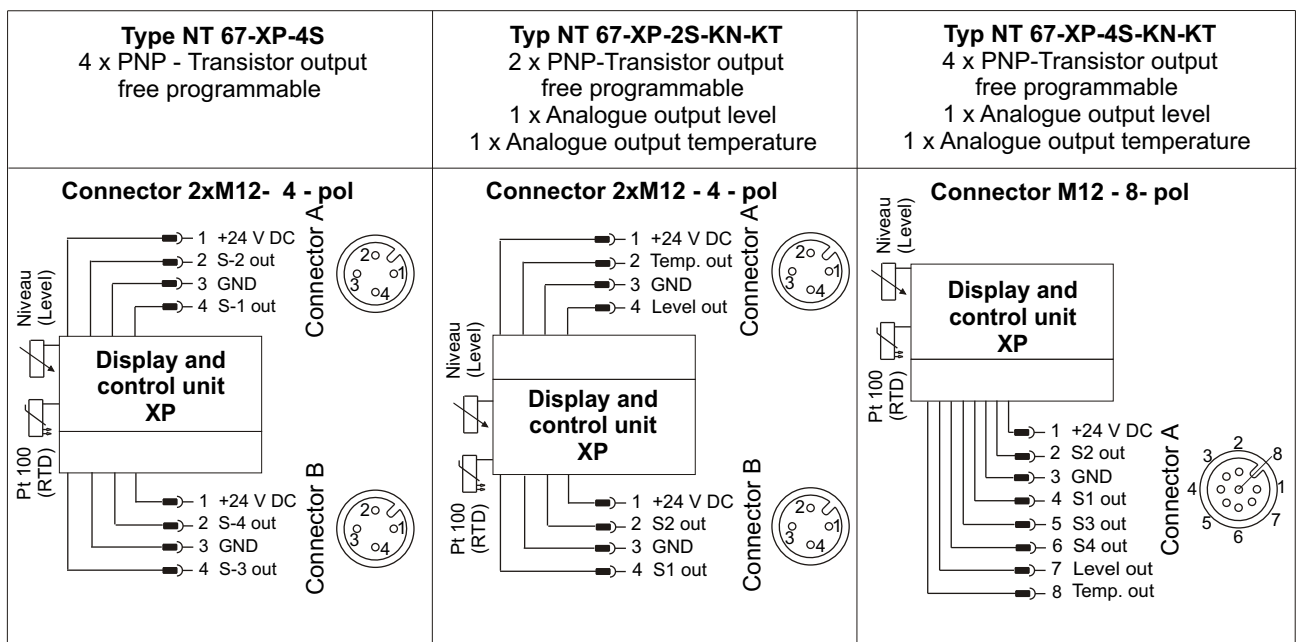
Part No. 4-pol.	Part No. 8-pol.	Description
9144 05 0010	9144 05 0048	Connecting cable M12x1, 1.5 m, elbow connector (female) and straight connector (male)
9144 05 0046	9144 05 0049	Connecting cable M12x1, 3.0 m, elbow connector (female) and straight connector (male)
9144 05 0047	9144 05 0033	Connecting cable M12x1, 5.0 m, elbow connector (female) and wire

### Example for order

You need: Level and temperature measurement with 5 mm resolution, brass design, 2xM12 connector, length L=670mm with 2 programmable PNP - switch-points and analogue output for level and temperature

You order: NT 67-XP-MS-2M12 / 670-2S-KN-KT

## Standard pin assignment NT 67-XP



### Note:

If the switching output is measured with high-impedance measuring equipment or if the frequency output is used, connect a 10 kΩ resistor between output and ground to avoid faulty measurements.