

По вопросам продаж и поддержки обращайтесь:

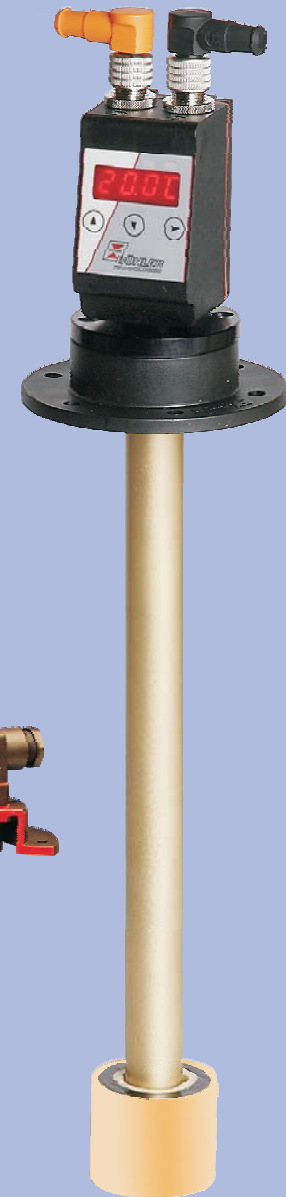
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Измерители уровня и температуры Nivotemp NT 64 Buhler

Level and temperature switch with display NT64D

- Highly visible LED display indicates the switching outputs, able to rotate 270°
- Menu structure based on the VDMA guidelines
- Two wireless, adjustable level contacts
- Up to four programmable temperature switching outputs
- Continuous temperature signal (adjustable current or voltage) plus one 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



Level and temperature switch NT 64

- Wireless, adjustable level contacts
- Flange according to DIN 24557 part 2
- Multiple connector options
- Up to four level contacts or two outputs for level plus RTD or analogue output for temperature
- Reliable dynamic float system
- Stainless steel option for temperatures up to 150 °C
- Probe length up to 1.5 m (longer on request)
- 24 V standard, 230 V on request

Technical data

NT 64

Basic unit

max. operating pressure	1 bar
operating temperature	-20 °C to +80 °C
min. density of fluid	0.80 kg/dm ³ with float SK 610 0.85 kg/dm ³ with float SK 221
length mm	280, 370, 500

Material / Design

float	MS hard PU (SK 610)	VA 1.4571 (SK 221)
immersion tube	brass	1.4571
flange (DIN 24557)	PA	PA

Level contacts

function	K NO/NC*	W change over
max. #	4	2
max. voltage	30 V	30 V
max. current	0.5 A	0.5 A
max. contact load	10 VA	20 VA
min. distance of contact	40 mm	40 mm

*NO = normally open / NC = normally closed

included in delivery

mounting bolts M5 (6 pieces) and GI cork-gasket

Temperature contact

max. voltage	TK 30 V
max. current	2.5 A
max. contact load	100 VA

Function

switching point in °C	NC 50 / 60 / 70 / 80	NO 50 / 60 / 70 / 80
switching point tolerance	± 3 K	± 5 K
max. hysteresis	10 K ± 3 K	10 K ± 3 K

NO = normally open / NC = normally closed (figures at **increasing temperature**)

Temperature sensor

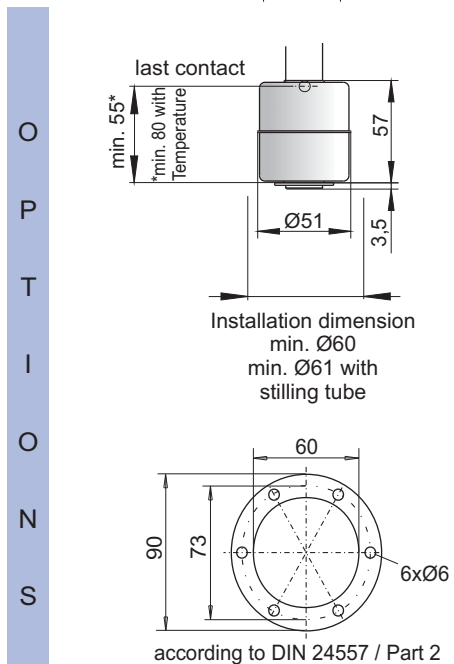
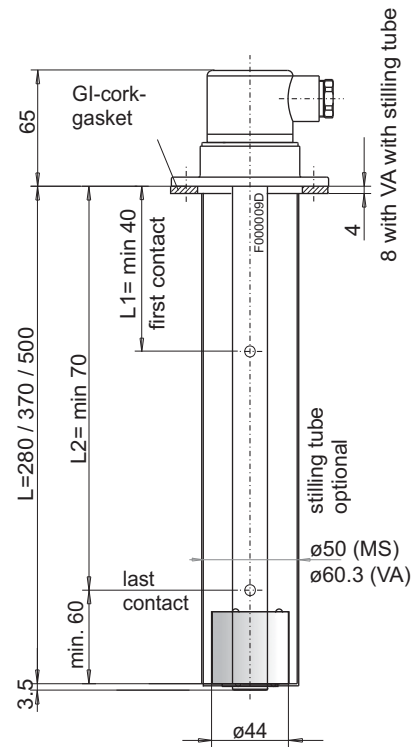
tolerance **Pt 100** (RTD), class B, DIN EN 60751 ± 0.8 °C

Temperature transmitter

probe element	KT Pt 100 (RTD), class B, DIN EN 60751
measuring range	0 °C to +100 °C
operating voltage (U _B)	10 - 30 V DC
output	4 - 20 mA
load Ω max.	= (U _B - 7.5 V) / 0.02 A
other measurement ranges on request	

Option

SSR - stilling tube material same as immersion tube



Connector	M3	S6	M12 (base)	2 x M12 (base)
max. voltage	3 pol. + PE DIN EN175301-803 30 V AC/DC	6 pol. + PE DIN EN 175201-804 30 V AC/DC	4 pol. 30 V DC	2 x 4 pol. 30 V DC
protection class	IP 65	IP 65	IP 67**	IP 67**
cable connection	PG 11	M20 x 1.5		
max. # of contacts	1 x K / 1 x TK - / -	3 x K / 1 x TK 1 x W / 1 x TK	1 x K / 1 x TK - / -	2 x K / 1 x TK 1 x W / 1 x TK
- level only	2 x K 1 x W	4 x K 2 x W	2 x K 1 x W	

**with casted connector head / other connectors on request

Product code for NT 64

NT 64-

Series
Nivotemp **NT 64**

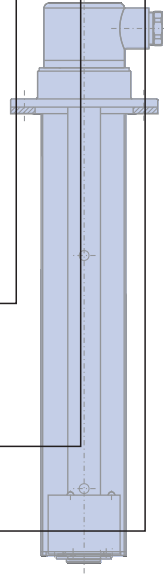
Design
MS brass
VA float and immersion tube stainless steel

Connector
M3
S6
M12
2M12

Length (mm)
280
370
500

of level contacts
1-4

Level contact
K = NO/NC
W = change over



Accessories
SSR = stilling tube

Temperature

Pt 100 = Temperature sensor (RTD)
KT = Temperature transmitter


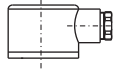

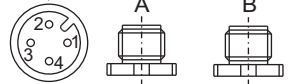
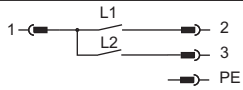
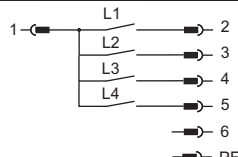
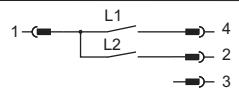
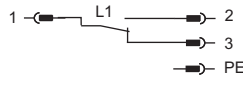
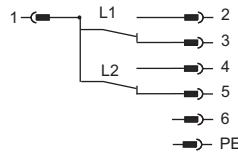
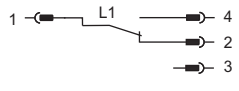
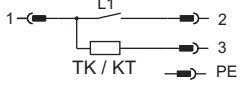
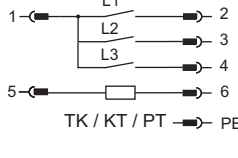
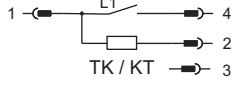
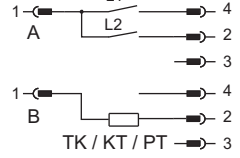
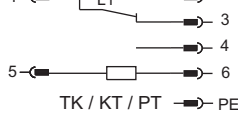
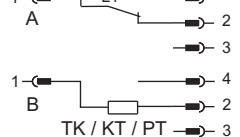
TK = Temperature contact
T50NO = 50 °C
T60NO = 60 °C
T70NO = 70 °C
T80NO = 80 °C

T50NC = 50 °C
T60NC = 60 °C
T70NC = 70 °C
T80NC = 80 °C

Example for order

You need: Level switch with flange, brass, connector S6, length L= 500 mm, 2 x level contacts and temperature contact TK80 as NC, 1st contact 100 mm) NC, 2nd contact 420 mm NO
You order: NT 64-MS-S6/ 500 - 2K -T80NC, L1=100 NC, L2 = 420 NO

Standard pin assignment NT 64

Connector	M3 	S6 	M12 (base) 	2 x M12 (base) 
only level contact(s) Type K				
only level contact(s) Type W				
Level contact(s) Type K and temperature				
Level contact(s) Type W and temperature				

TK = Thermo contact

KT = Temperature transmitter

PT = Temperature sensor Pt 100 (RTD)

other assignments on request

Technical data

NT 64D

Basic unit

max. operating pressure	1 bar
operating temperature	-20 °C to +80 °C
min. density of fluid	0.80 kg/dm ³ , float SK 610 0.85 kg/dm ³ , float SK 221
lengths mm	280, 370, 500

Material / Design

	MS	VA
display housing	PA	PA
float	hard PU (SK 610)	1.4571 (SK 221)
immersion tube	brass	1.4571
flange (DIN 24557)	PA	PA
SSR (option)	brass	stainless steel

Level contacts

	K
max. #	2
function	NO / NC*
max. voltage	30 V
max. current	0.5 A
max. contact load	10 VA
min. distance of contact	40 mm

*NO = normally open / NC = normally closed

included in the delivery

mounting bolts M5 (6 pieces) and GI cork-gasket

Display

temperature display range	-20 °C to +120 °C
alarm indicator range	0 °C to 100 °C
accuracy	1%
resolution	0.5 °C
protection class	IP65
display	4 digit 7 segment LED display
operation	3 button keypad
current consumption at power up	approx. 100 mA for 100 ms
operating current consumption	approx. 50 mA
supply voltage (U _B)	10 - 30 V DC (nominal voltage 24 V DC)
ambient temperature	-20 °C to +70 °C

Temperature sensor: Pt 100 (RTD) class B, DIN EN 60751

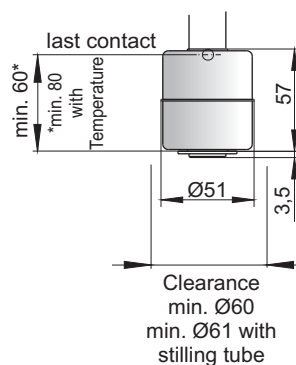
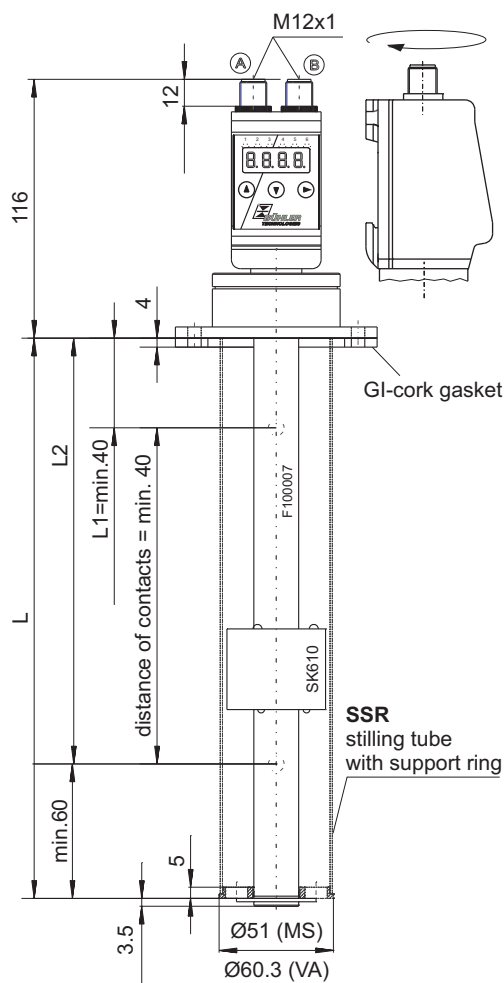
The following temperature outputs are available:

connector (base)	-2T 2 x M12 - 4 pol	O P T I O N S
max. contact load	1 A	
PNP transistor output,	2 x free programmable	
max. current PNP output	0.5 A per output	
connector (base)	1T-KT 2 x M12 - 4 pol	
max. contact load	1 A	
PNP transistor output,	1 x free programmable	
max. current PNP output	0.5 A per output	
analog output	1 x 4-20 mA, 2-10 V, 0-10 V or 0-5 V	
load analog output max.	500 Ω	
connector (base)	-4T 1 x M12 - 4 pole 1 x M12 - 8 pole	
max. contact load	1A	
PNP transistor output,	4 x free programmable	
max. current PNP output	0.5 A per output / 1 A overall	

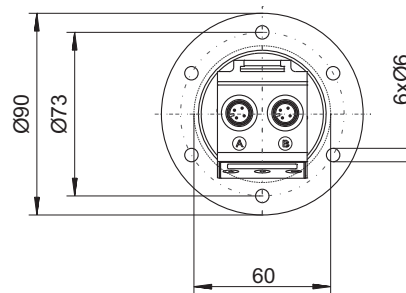
Option
stilling tube

SSR
Material same as immersion tube

Housing
able to rotate 270 degrees



top view:



Product code for NT 64D

NT 64D- -2M12

Series
Nivotemp **NT 64D**

Design
MS brass
VA float / immersion tube stainless steel

Connector
2 x M12

Length
280
370
500

of level contacts
1K or **2K**
K = NO/NC

Position L1=...mm
1st level contact

Switch function 1st contact
NO/NC

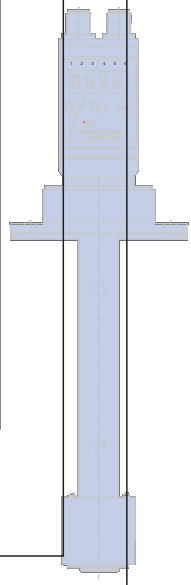
-2T
LED Temperature display
2 x Temperature output

-4T
LED Temperature display
4 x Temperature output

-1T-KT
LED Temperature display
1 x Temperature output
1 x Analogue output

Switch function 2nd contact
NO/NC

Position L2=...mm
2nd level contact



Accessories:

Part No.	Description
91 44 05 0010	Connecting cable M12x1, 4-pol., 1.5 m, elbow connector (female) and straight connector (male)
91 44 05 0046	Connecting cable M12x1, 4-pol., 3.0 m, elbow connector (female) and straight connector (male)
91 44 05 0047	Connecting cable M12x1, 4-pol., 5.0 m, elbow connector (female) and wire
91 44 05 0048	Connecting cable M12x1, 8-pol., 1.5 m, elbow connector (female) and straight connector (male)
91 44 05 0049	Connecting cable M12x1, 8-pol., 3.0 m, elbow connector (female) and straight connector (male)
91 44 05 0033	Connecting cable M12x1, 8-pol., 5.0 m, elbow connector (female) and wire

Example for order

You need: Level switch with flange, design MS, connector S6, length L= 500 mm, 2 x level contacts; 1st contact 100 mm NC, 2nd contact 420 mm NO, with temperature display and 2x programmable temperature output

You order: NT 64D-MS-2M12/500-2K-100NC-420NO-2T

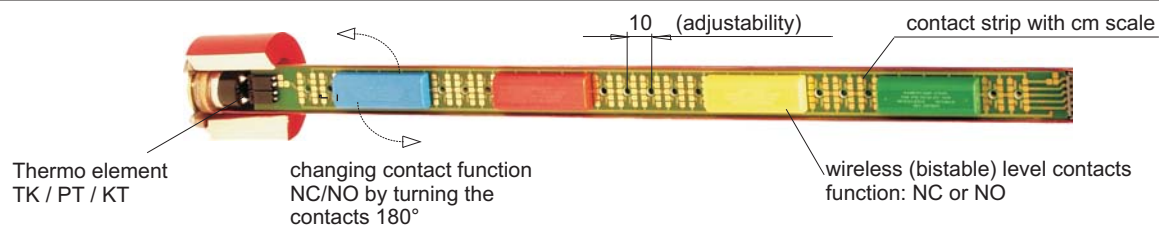
Standard pin assignment NT 64D

	Type NT 64D-2T Level contact(s) 2 x Temperature output	Type NT 64D-1T-KT Level contact(s) 1 x Temperature output 1 x Analogue output	Type NT 64D-4T Level contact(s) 4 x Temperature output
Connector A = level 			
Connector B = temperature 			

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.

The EasyJust System



Using adjustable level contacts allows the application of standardized immersion tubes in oil tanks of different sizes and geometrical shapes.

The switching points are changeable to the requirement of the individual application at any time without purchasing a specific level switch.

This facilitates design and logistics for the users and OEMs.

The Easy Just System is based on a wireless structure of the contacts.

The contacts are designed of closed and color coded housings. They are positioned on a printed circuit board with gold plated contacts. The colors are used for the coding of the different contacts and assure the allocation of the connector's assignments.

The contacts' function (NC or NO) is determined by the 180° rotation on the printed circuit board.

An adjusted temperature switch (bi-metal, NO or NC), a Pt 100 (RTD) or a 4-20 mA transmitter is fixed at the lower end of the printed circuit board, depending on the chosen option for the temperature monitoring.

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