

**По вопросам продаж и поддержки обращайтесь:**

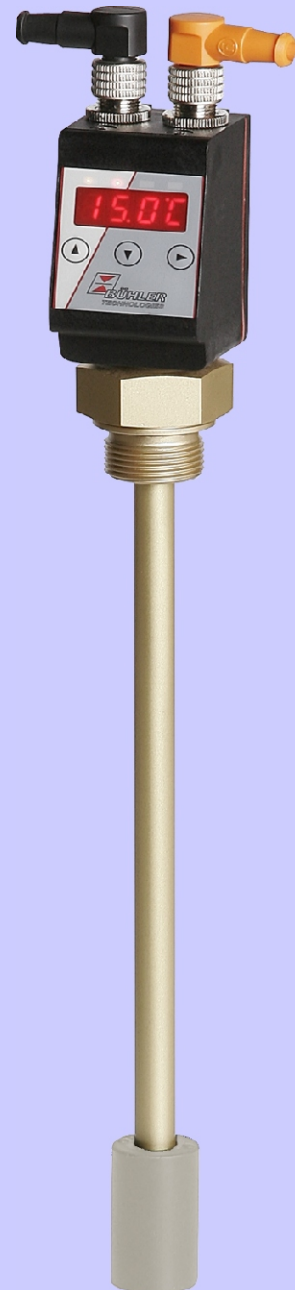
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## Измерители уровня и температуры Nivotemp NT M-XP Buhler

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

- G3/4" thread
- 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 24574
- Up to four programmable switching outputs, selectable as level or temperature signal
- Alternatively continuous signals (current or voltage adjustable) for level and temperature output plus 2 or 4 programmable switching outputs
- Output characteristic for 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



## Technical data

## NT M-XP

### Basic unit

max. operating pressure	1 bar
operating temperature	-20 °C to +80 °C (-4°F to 176°F)
min. spec. density of fluid lengths	0.80 kg/dm <sup>3</sup> 200, 280, 370, 500, 650, 800mm (other lengths on request)

### Weight

at L=280 mm	approx. 390 g
plus per 150 mm	approx. 20 g

### Material / Design

Float	MS hard PU
immersion tube	brass
thread G3/4	brass

### Level measurement

measuring resistor	reed chain
resolution	10 mm

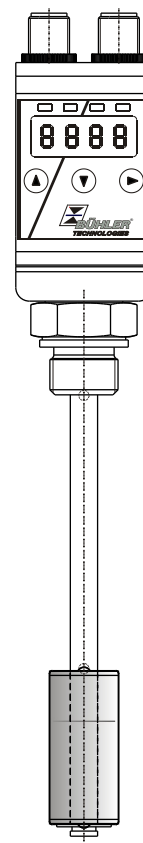
### Temperature measurement

measuring resistor	Pt 100 (RTD) class B, DIN EN 60 751
tolerance	± 0,8 °C

### Display and control unit

display	XP 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 - 32 V DC (nominal voltage 24 V DC)
ambient temperature	-20 °C to +70 °C (-4°F to 158°F)
protection class	IP65

	Level	Temperature
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 212 °F
accuracy	1% of the final value	



Dimensions and pin assignment  
see page 4

### Following output options are available

	-2S		-2S-KN-KT
connector (base)	1 x M12 - 4 pol		2 x M12 - 4 pol
PNP transistor output	2 x free programmable optional allocation for e.g. 1 x Level / 1 x Temperature		2 x free programmable with free selectable allocation
alarm memory	1 x PNP output allocable as alarm logbook		1 x PNP output allocable as alarm logbook
max. current	0,5 A per output		0,5 A per output
contact load	max 1 A		max 1 A
			<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
			<b>-4S-KN-KT</b>
			1 x M12 - 8 pol
			4 x free programmable with free selectable allocation
			1 x PNP output allocable as alarm logbook
			0,5 A per output
			sustained short-circuit proof
			max 1 A
			<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
			Other output options on request

# Product code for NT M-XP

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

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**Design**  
**MS** brass

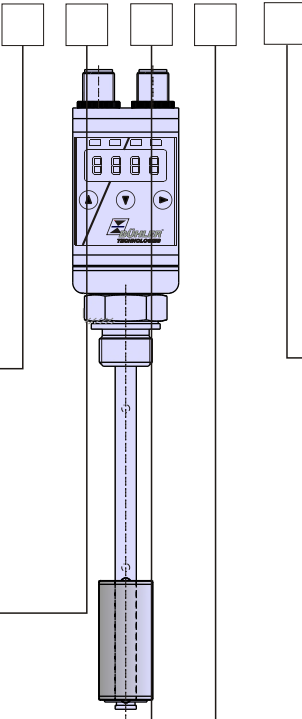
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**Connector**  
**M12-4-pol.** (with option 2S only)  
**2M12-4-pol.**  
**M12-8-pol.** (with option 4S-KN-KT only)

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**Length (max. 800 mm)**  
200  
280  
370  
500  
650  
800

NT M-XP



**Options**  
**OV** = Oval flange  
**G1** = Adapter to G1"

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**Card**  
**-2S**  
2 x PNP transistor output

**-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  
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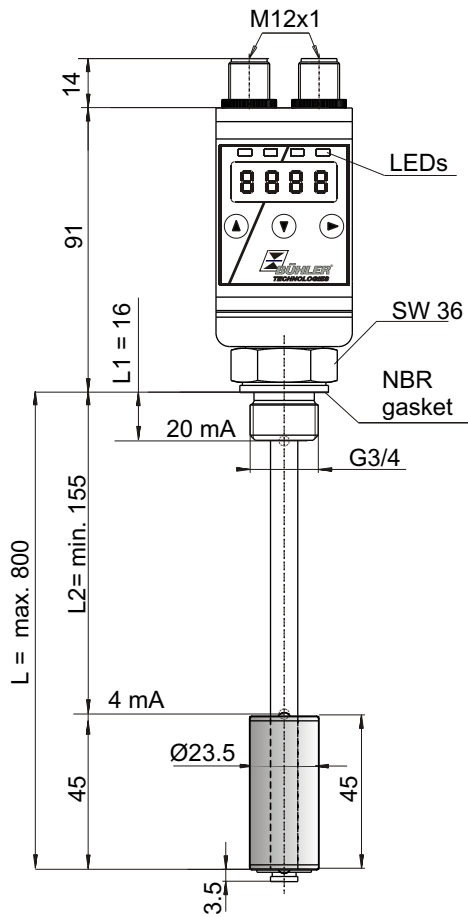
**Accessories:**

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

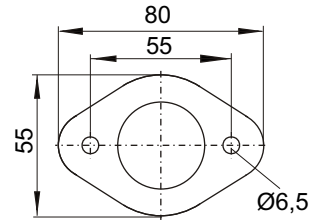
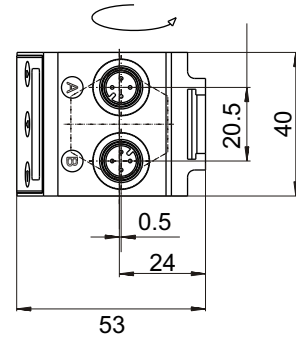
**Example for order**

You need: Level and temperature measurement, brass design, 2xM12 connector, length L=650mm with 2 programmable PNP - switch-points and analogue output for level and temperature

You order: NT M-XP-MS-2M12 / 650-2S-KN-KT



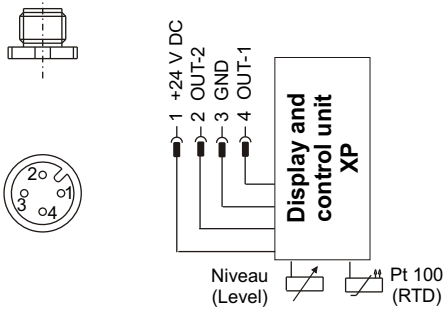
Housing able to rotate 270°



## Standard pin assignment NT M-XP

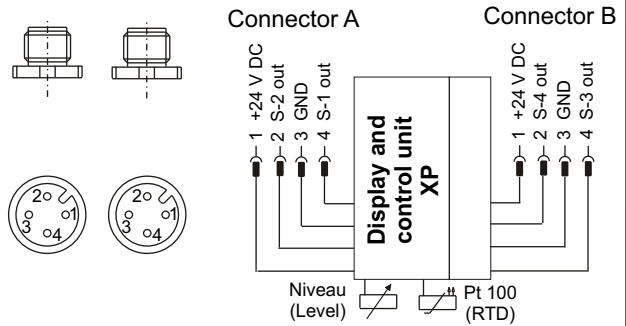
**Typ NT M-XP..-2S**  
2 x PNP - Transistor output  
free programmable

**Connector 1xM12 (4 - pol)**



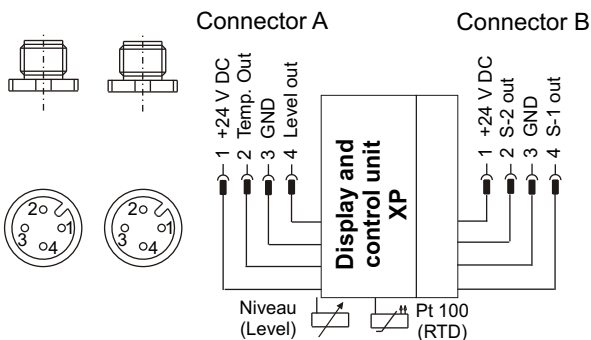
**Typ NT M-XP..-4S**  
4 x PNP - Transistor output  
free programmable

**Connector 2xM12 (4 - pol)**



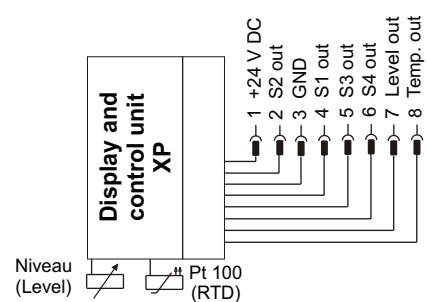
**Typ NT M-XP..-2S-KN-KT**  
2 x PNP-Transistor output  
free programmable  
1 x Analogue output level  
1 x Analogue output temperature

**Connector 2xM12 (4 - pol)**



**Typ NT M-XP..-4S-KN-KT**  
4 x PNP-Transistor output  
free programmable  
1 x Analogue output level  
1 x Analogue output temperature

**Connector 1xM12 (8 - pol)**



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