

Level- and temperature sensor

Nivotemp NT M-L

The IO-Link compatible combo sensors in the Nivotemp L series are a cost-effective and efficient option for monitoring the liquid level and temperature in oil tanks in hydraulics and lubrication technology. The digital, bidirectional communication of these sensors meets all requirements of modern plant automation, reduces acquisition and installation costs, and improves system availability. Their robust design makes them suitable for virtually any liquid properties, allowing a wide range of applications.

The Nivotemp NT M-L series meets virtually all requirements arising in this area of application.

Connecting flange G3/4 and G1

Continuous liquid level and temperature measurement

Resolution 10 mm (liquid level)

IO-Link and 1 x programmable switching output

Proven and tested highly dynamic float system

NBR float, brass immersion tube

Immersion tube length up to 950 mm (longer upon request)



Technical Data NT M-L

Basic unit

Version	MS
Operating pressure:	max. 1 bar
Medium temperature:	-20 °C to +80 °C
Ambient temperature:	-20 °C to +70 °C
Float:	SK 161
Min. fluid density:	0.8 kg/dm ³
Lengths (all versions):	200, 280, 370, 500, 650, 800 and 950 mm

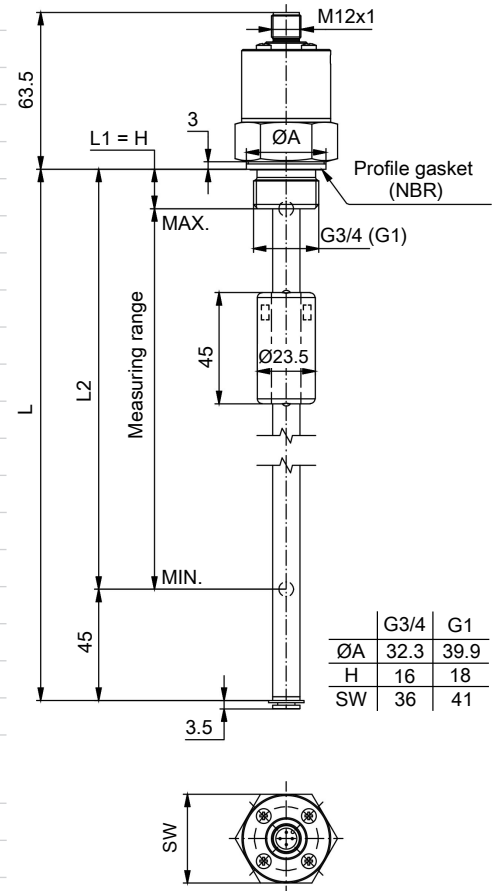
Material/Version

Float:	NBR
Immersion tube:	Brass
Flange G3/4:	Brass
Flange G1:	Brass
Seals:	NBR/FKM
Weight at L=500 mm:	G3/4 = approx. 300 g, G1 = approx. 390 g

Input values	Level	Temperature
Measuring principle:	Reed-contact	Pt100 Cl. B, DIN EN 60751
Resolution:	10 mm	
Tolerance:		± 0.8 °C
Operating voltage:	18 - 30 VDC	
Analysis display electronics accuracy:	± 1 % from end value	± 1 % from end value
Measuring range	0 to 100 %	-20 °C to +120 °C

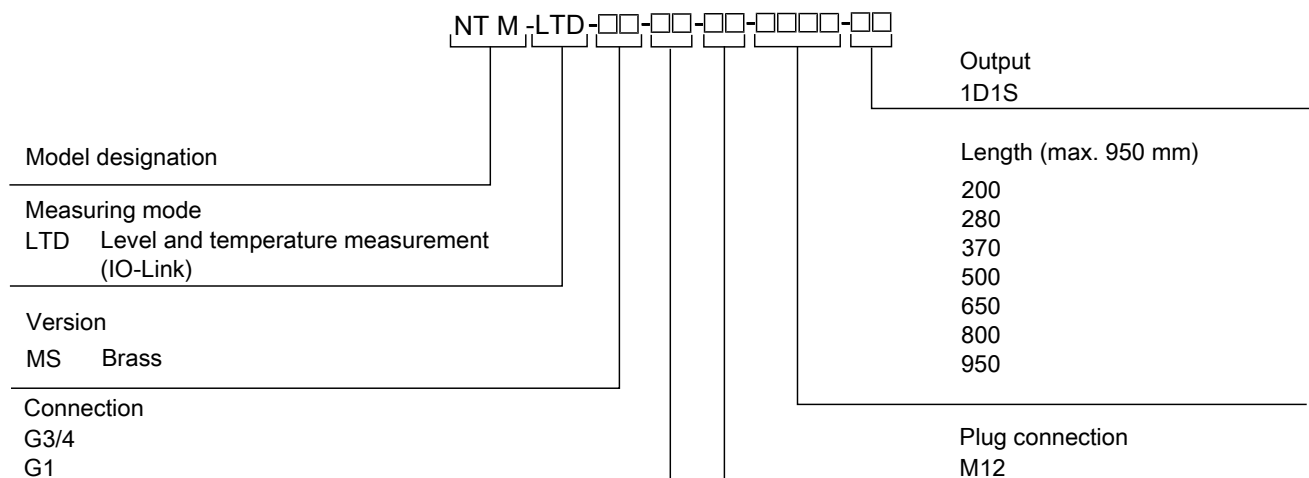
IO-Link	Revision 1.1
Baud rate:	COM3 (230.4 k)
SIO Mode:	Yes
min. time period:	10 ms

Dimensions



NT M-L Ordering Instructions

Model key



Ordering example

You need: Level and temperature measurement with 10 mm resolution, brass version, G1 plug connector and length L = 500 mm

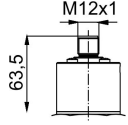
Order: NT M-LTD-MS-G1-M12-500-1D1S

Accessories

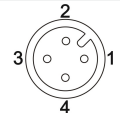
Item no.	Description
9144 05 0010	Connecting cable M12x1, 4-pin, 1.5 m, angular coupling and straight plug
9144 05 0046	Connecting cable M12x1, 4-pin, 3.0 m, angular coupling and straight plug
9144 05 0047	Connecting cable M12x1, 4-pin, 5.0 m, angular coupling and strands

Standard Pin Assignment NT M-L

Connector

	M12 plug A coded
Dimensions	
Number of pins	4-pin
DIN EN	61076-2-101
IP rating	IP67*

*with IP67 cable box attached

Version	LTD-1D1S
Plug	M12 4-pin
Connection schematic	
Pin	
1	+24VDC
2	S2 (PNP max. 200 mA)
3	GND
4	C/Q (IO-Link)