

Level- and temperature sensor

Nivotemp NT 63



Fluidcontrol

In hydraulics and lubrication technology the fill level of oil tanks needs to be monitored continuously. Here, modern factory automation requires compatible signals. Despite central system control, visualising the current level on the actual tanks is often desired. To minimise production costs and the space required on containers, it makes sense to use one monitor for both e.g. the fill level and oil temperature. The Nivotemp series meets virtually all requirements arising in this area of application.

NT 63

Connecting flange as per DIN 24557 Part 2

Continuous liquid level measurement

Continuous liquid level and temperature measurement

Analog output 4-20 mA (2-10 V DC upon request)

Resolution 5 mm (liquid level)

Various plug options

Proven and tested highly dynamic float system

Float and immersion tube optionally available in stainless steel

Immersion tube length up to 1420 mm (longer upon request)



Technical Data NT 63

Basic unit

K = continuous level and temperature measurement

KN = continuous level measurement

Version	MS	VA
Operating pressure	max. 1 bar	max. 1 bar
Operating temperature	-20 °C to +80 °C	-20 °C to +80 °C
Float	SK604	SK221
Min. fluid density	0.80 kg/dm ³	0.85 kg/dm ³
Lengths (all versions)	280, 370, 500, 670, 820, 970, 1120, 1270 and 1420 mm (other lengths available upon request)	

Material/Version

Float	PU	1.4571
Immersion tube	Brass	1.4571
Flange DIN 24557 Part 2	PA	PA
Weight at L=280 mm	approx. 200 g	approx. 300 g
Each 100 mm add	approx. 30 g	approx. 50 g

Includes:

Mounting screws (quantity 6) and rubberised cork seal.

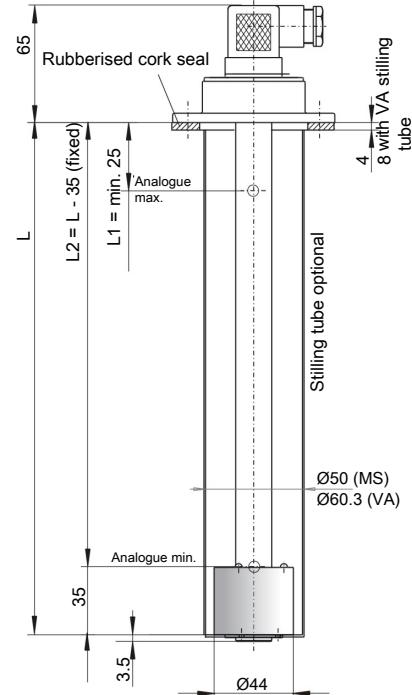
Options

Stilling tube	SSR Brass	SSR 1.4571
---------------	-----------	------------

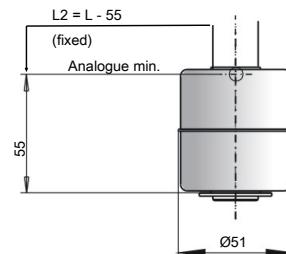
Input values	Level	Temperature
Principle of measurement	Reed-contact	Pt100 Cl. B, DIN EN 60751
Resolution	5 mm	
Tolerance		± 0.8 °C
Operating voltage (U_B)	10 – 30 V DC	10 – 30 V DC
Analysis display electronics accuracy	± 1 % from end value	± 1 % from end value
Output	4-20 mA	A (0-100 °C*) *Other ranges available upon request
Burden Ω max.	$= (U_B - 7.5 \text{ V}) / 0.02 \text{ A} = (U_B - 7.5 \text{ V}) / 0.02 \text{ A}$	

Dimensions

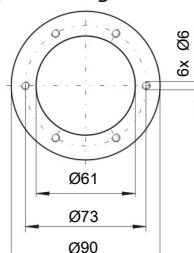
Basic model



SK 221 Float



Flange drawing



Ordering instructions NT 63

Model key

Model designation	NT 63-□□-□□-□□-□□-□□	Optional SSR Stilling tube
Measuring mode		Length (max. 1420 mm)
K Level and temperature measurement		280
KN Level measurement only		370
Version		500
MS Brass		670
VA float and VA immersion tube		820
Plug connection		970
M3		1120
M12		1270
		1420

Another accessory offered is a programmable display and control unit for displaying and monitoring measured variables, see data sheet no. 180201.

Accessories

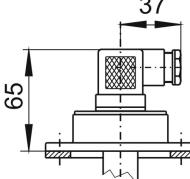
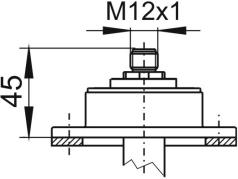
Item no.	Description
9144 05 0010	Connecting cable M12x1, 4-pin, 1.5 m, angular coupling and straight plug
9144 05 0046	Connecting cable M12x1, 4-pin, 3.0 m, angular coupling and straight plug
9144 05 0047	Connecting cable M12x1, 4-pin, 5.0 m, angular coupling and strands

Ordering example

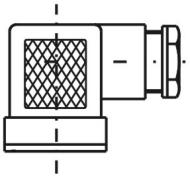
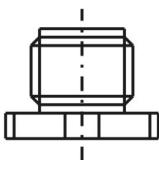
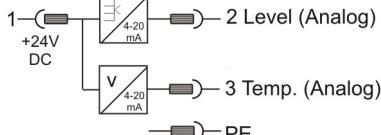
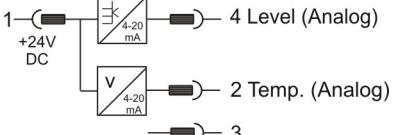
You require:	Level and temperature measurement with 5 mm resolution, brass version with M12 plug connector and length L = 670 mm
Order:	NT 63- K-MS-M12-670

Standard pin assignment NT 63

Plug connection

	M3	M12 (base)
Dimensions		
Number of pins	3-pin + PE	4-pin
DIN EN	175301-803	61076-2-101
Degree of protection	IP65	IP67*
Cable fitting	PG11	

*With moulded plug top

	M3	M12 (base)
Connection schematic		
K continuous level and temperature measurement		
KN continuous level measurement	