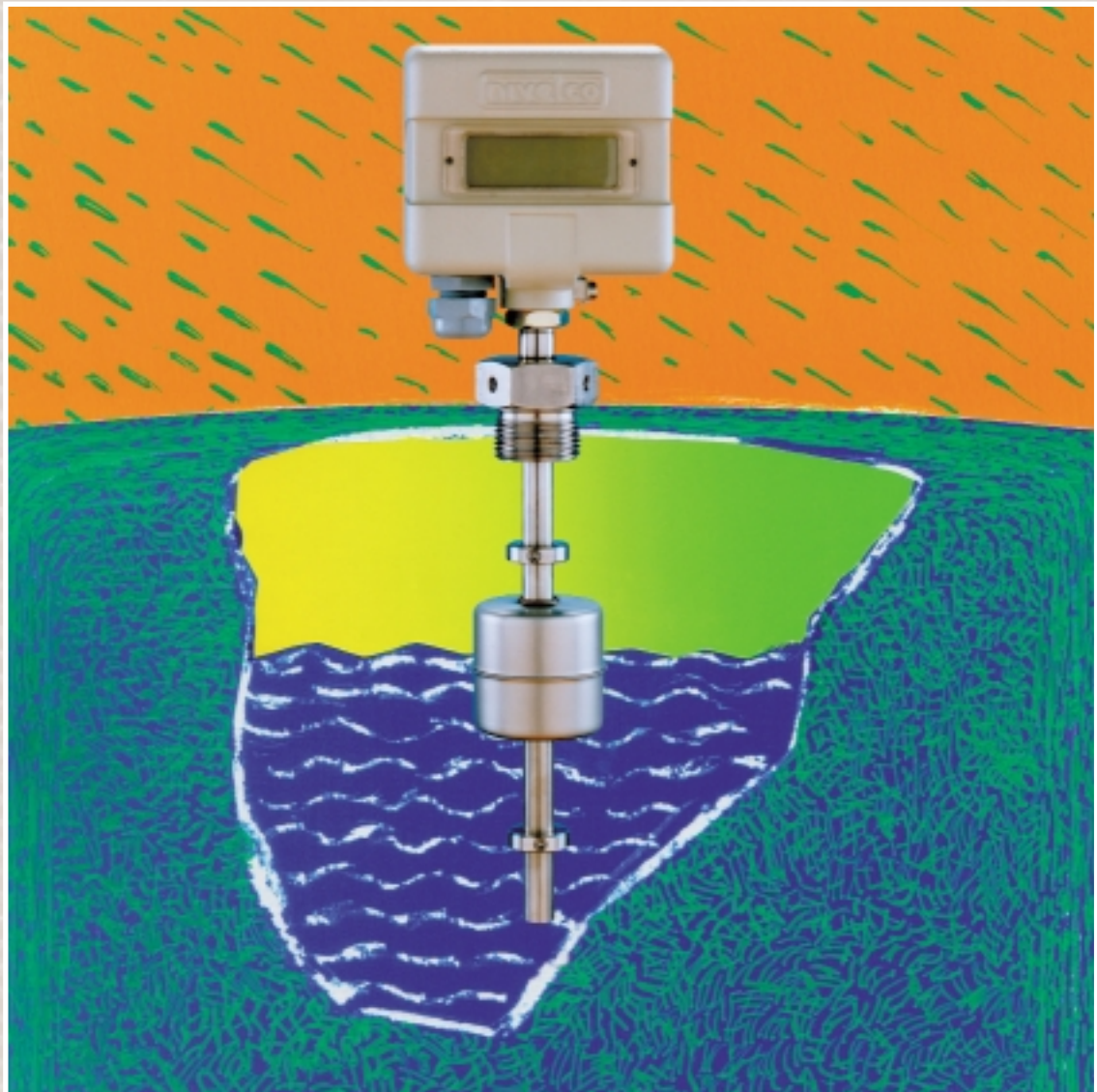




*Loop operated!*

# NIVOTRACK

MAGNETIC FLOAT LEVEL TRANSMITTER



OUR PROFESSION IS YOUR LEVEL

## OPERATING PRINCIPLE

The level is sensed via a magnetic float moving alongside the protection probe that is submerged in the liquid.

The magnetic float tracks the level, magnetically activating an array of cascaded reed switches. The reed switches act as the wiper of a potentiometer made up by a chain of resistors. The electronics in the probe housing converts the voltage supplied via the potentiometer into a 4-20 mA signal.

## GENERAL

The NIVOTRACK two-wire level gauges are available in three varieties: transmitter, transmitter with display and as a field indicator. Optional switching device can be connected to the 4-20 mA output. All wetted parts are made of stainless steel or plastic, the electronics inside the Alu-housing is fully potted. Various process connections and float sizes as well as flanged versions (upon request) can be ordered. Vertical fine adjustment of the probe is possible via an optional compression fitting.

## APPLICATION

The MT-100 series level transmitters can measure normal and flammable liquids in application where ultrasonic or capacitance would not operate because of dense vapour, foam or inhomogeneity of gas layer above the surface. For installation in hazardous area, intrinsically safe supply unit or a Zener-barrier between an ordinary supply unit and the device must be used.

## SPECIFICATIONS

Model	Transmitter	Transmitter with display	Local indicator
Version	MT-100	MB-100	MD-100
Measuring range	0.5 to 3 m		
Material in contact with medium	SS316Ti*		
Process connection	See order codes below		
Temperature ranges	Medium	-40 to +130 °C	
	Ambient	-25 to +80 °C	
Process pressure	max. 25 bar		
Medium density (minimum)	Ø95 ball float: 0.5 g/cm <sup>3</sup> , Ø52x52 cylindrical float: 0.7 g/cm <sup>3</sup>		
Output current	4 to 20 mA		-
ZERO adjustability (4 mA)	0 to 80% of measuring range		-
SPAN adjustability (20 mA)	20 to 100% of measuring range		-
Output thermal error	0.003 mA/°C		
Display	-	3 1/2 digits, 18 mm LCD	
Display zero-point adjustability	-	0 to 20% of measuring range	
Resolution	5 mm		-
Display resolution	-	up to 2 m: 5 mm, above 2 m: 1 cm	
Supply voltage	U <sub>T</sub> =12...30V DC, max. 25 mA		
Load resistance	$R_L = \frac{U_s - 12V}{0.02A}$		
Electrical connection	Pg 11 for Ø7 to Ø12 mm cables, 0.75 to 2.5 mm <sup>2</sup> wire cross section		
Enclosure	IP 65		
Ex protection mark	EEx ia IIC T4...T6		
Weight	0.6 kg + 0.3 kg/m		

\* PP or PVDF version at request

## ORDER CODE

NIVOTRACK **M** **1**

Model	Code	Length	Code	Float / Ex	Code
Transmitter	T	0 m	0	Ø 95 Ball	1
Local indicator	D	1 m	1	Ø 52x52 Cylinder	2
Transmitter & display	B	2 m	2	Ø 95 Ball/Ex	5
		3 m	3	Ø 52x52 Cylinder/Ex	6

Process connection	Code	Length	Code
1" BSP	A	0 dm	0
2" BSP	C	1 dm	1
1" NPT	D	2 dm	2
2" NPT	G	3 dm	3
1" BSP Comp. fitting	H*	4 dm	4
2" BSP Comp. fitting	K*	5 dm	5
1" NPT Comp. fitting	L*	6 dm	6
2" NPT Comp. fitting	N*	7 dm	7
		8 dm	8
		9 dm	9

\* 8 week delivery time  
other process connections  
at request

