

# Nivotemp M-0-Atex



The Nivotemp M-0-Atex series comprises a group of controllers for the control of both liquid level and temperature in fluid power packs or lubrication systems.

This unit is a simple apparatus without own voltage source. In an intrinsically safe installation acc. to EN 60079-14 the level switch can be used in hazardous locations zone 2 (group IIC, cat. 3G). That applies also to the zone inside of the reservoir. For standard application the temperature class is T5 at ambient temperatures -20 °C to +80 °C.

The installation via a central thread is cost effective and allows the use of a small float with good buoyancy. Despite small physical dimensions the Nivotemp M has a series of adjustable bistable contacts. The number of contacts is determined by the type of connector; see tables overleaf.

- **Atex - range of use: zone 2 (cat. 3G), intrinsically safe acc. to EN 50020**
- **Combined level and temperature control**
- **adjustable contacts**
- **bistable = just one float**
- **float with good buoyancy**
- **electrical connector included**
- **easy installation**

## technical data

operating pressure : max. 1 bar  
 operating temperature : max. 80 °C  
 ambient temperature : -20 to +80 °C  
 spec. gravity of fluid : min. 0,8 kg/dm<sup>3</sup>

material: **M-0-Atex-MS** **M-0-Atex-VA**  
 switch tube brass 1.4571  
 flange brass 1.4571  
 float SK 161 NBR NBR

**level contacts** **K8** **W9**  
 function \*NC / NO change over  
 min. distance betw. Cont. 40 mm 40 mm  
 part - no 1893999 1890899

\*NC = normally closed / NO = normally open all figures at **empty reservoir**

### temperature contacts

hysteresis : 15 K ± 5 K

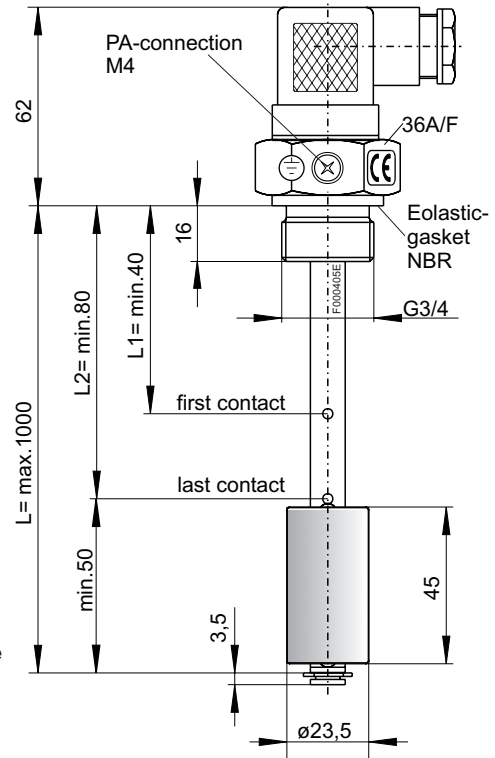
switch point	50°C	55°C	60°C	70°C	80°C	NC*	part-no	NO*	part-no
	50°C	55°C	60°C	70°C	80°C	TMÖ-50	1846299	-	-
						TMS-55		TMS-55	1848299
						TMÖ-60	1846099	TMS-60	1848099
						TMÖ-70	1847099	TMS-70	1849099
						TMÖ-80	1847299	TMS-80	1848499

other settings upon request

\*NC = normally closed / NO = normally open all indications are at **raising temperature**

### Temperature sensor Pt100 (only in combination with connector C7)

tolerance : ± 0,8°C  
 P<sub>i</sub> : 0,14 mW  
 I<sub>ma x</sub> : 1 mA  
 Part-no. : 1120012

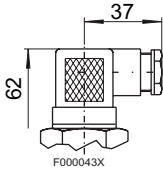
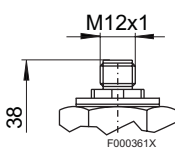
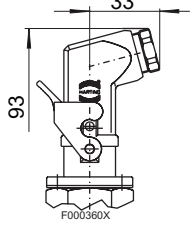


**Ex-qualification:** II 3 G EEx ib IIC T5

L<sub>i</sub>, C<sub>i</sub> : negligible ; I<sub>ma x</sub> : 90mA ; U<sub>ma x</sub> : 30V (DC)



The level switches to be allowed only for intrinsically safe electric circuit !

connectors	M3	M12 ( socket )	C7	controllers for level switch - Atex see data sheet DE18 0004
protection class	3 pol. + PE DIN 43650	4 pol. + PE	7 pol. + PE DIN 46651	
cable gland	IP 65 PG 11	IP 67** PG 7**	IP 65 PG 11	
other connectors upon request		** with plug fixed		
max. no of contacts level-/ temperature contact or	 1 x K8 / 1 x TM - / -	 1 x K8 / 1 x TM - / -	 3 x K8 / 1 x TM or Pt100 2 x W9 / 1 x TM or Pt100	
level contact only or	2 x K8 1 x W9	2 x K8 1 x W9	4 x K8 2 x W9	

## ordering information

part-no of basic version, **without** contacts (for the part no. of level- and temperature contacts see above)

with connector		M3	M12	C7
Nivotemp M-0-Atex-MS	L=250	1006299250A	1010179925A	1006899250A
Nivotemp M-0-Atex-MS	L=370	1006299370A	1010179937A	1006899370A
Nivotemp M-0-Atex-MS	L=520	1006299520A	1010179952A	1006899520A
Nivotemp M-0-Atex-MS	L=variable	1006299A	10101799A	1006899A
Nivotemp M-0-Atex-VA	L=250	1007099250A	1007399250A	1007499250A
Nivotemp M-0-Atex-VA	L=370	1007099370A	1007399370A	1007499370A
Nivotemp M-0-Atex-VA	L=520	1007099520A	1007399520A	1007499520A
Nivotemp M-0-Atex-VA	L=variable	1007099A	1007399A	1007499A

### order example:

you need : length L= 520mm, 2 level contacts 1. contact 100mm normally closed (NC), 2. contact 450mm normally open (NO)

you order: Part-no: 1006299520 Nivotemp M-0-Atex-MS-M3 , 2 x contact K8 (1893999) , L1=100 NC , L2 = 450 NO

**accessories:** adapter G3/4 to G1 part-no : 1011000 connection plug M12x1 (5 pol.) 3,0 m part-no. 9144050018  
 adapter G3/4 to oval flange part-no : 1012000