



Level and temperature switch

NT M...-Atex

The NT M...-Atex is used to monitor the liquid level and temperature in simple hydraulic systems. This series consists of simple electrical equipment without a separate voltage source. In the case of intrinsically safe connections as per EN 60079-14, the level switch can be used in Zone 2 (group IIC, device category 3G) explosive areas; this also applies to the inner zone of the tank. The NT M...-Atex can be used in temperature class T4.

This unit further has a particularly buoyant float despite its small dimensions. The bistable reed contacts can later be adjusted.

ATEX applications: Zone 2 (cat. 3G), simple electric equipment according to EN 60079-11

Various plug options

Level/temperature monitoring

Adjustable level contacts

Bistable = only one float

Particularly buoyant float

Connector standard

Easy installation

Maintenance free



Technical Data

NT M...-Atex

Operating pressure:	max. 14.5 psi	
Medium /operating temperature:	max. +176 °F (C7 and M3 plug) max. +158 °F (M12 plug)	
Ambient temperature:	-4 to +176 °F (C7 and M3 plug) -4 to +158 °F (M12 plug)	
Fluid density:	min. 0.029 lb/in ³	
Material	MS	VA
Switching tube:	Brass	1.4571
Flange:	Brass	1.4571
Float SK 161	NBR	NBR
Level contacts	K8	W9
Function	NC/NO*	Changeover contact
Min. contact spacing	40 mm (1.6 in)	40 mm (1.6 in)
Temperature contacts		
Switch-back difference:	15 K ± 5 K	
Switching point:		
	NC*	NO*
	50 °C (122 °F)	TMÖ-50 -
	55 °C (131 °F)	- TMS-55
	60 °C (140 °F)	TMÖ-60 TMS-60
	70 °C (158 °F)	TMÖ-70 TMS-70
	80 °C (176 °F)	TMÖ-80 TMS-80

Other temperatures available upon request

*NC = NC contact/NO = NO contact All data for rising temperature

Pt100 resistance thermometer

(Pt100 class B DIN / IEC 751)

Tolerance:	± 0.8 K
Measuring current I_c :	≤ 1 mA
P_i :	100 mW
U_i :	30 V
I_i :	50 mA
L_i, C_i :	negligible

Accessories

Connection cable M12x1 (5-pin) 3.0 m (9.8 ft) long, item no.: 9144050018

Adapter G3/4 to G1, item no.: 1011000

Adapter G3/4 to oval flange, item no.: 1012000

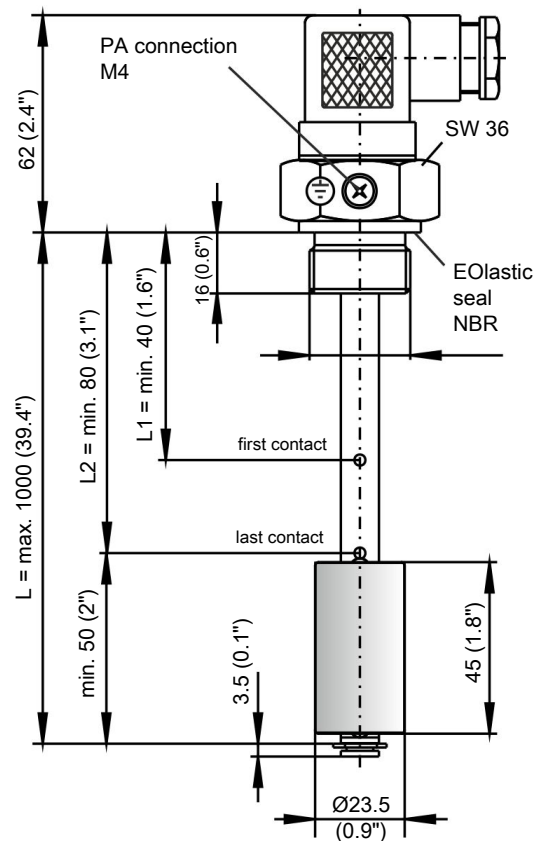
The device is suitable for use in ATEX category II 3 G Ex ic IIC T4 Gc.

The level switches may only be operated on intrinsically-safe circuits!

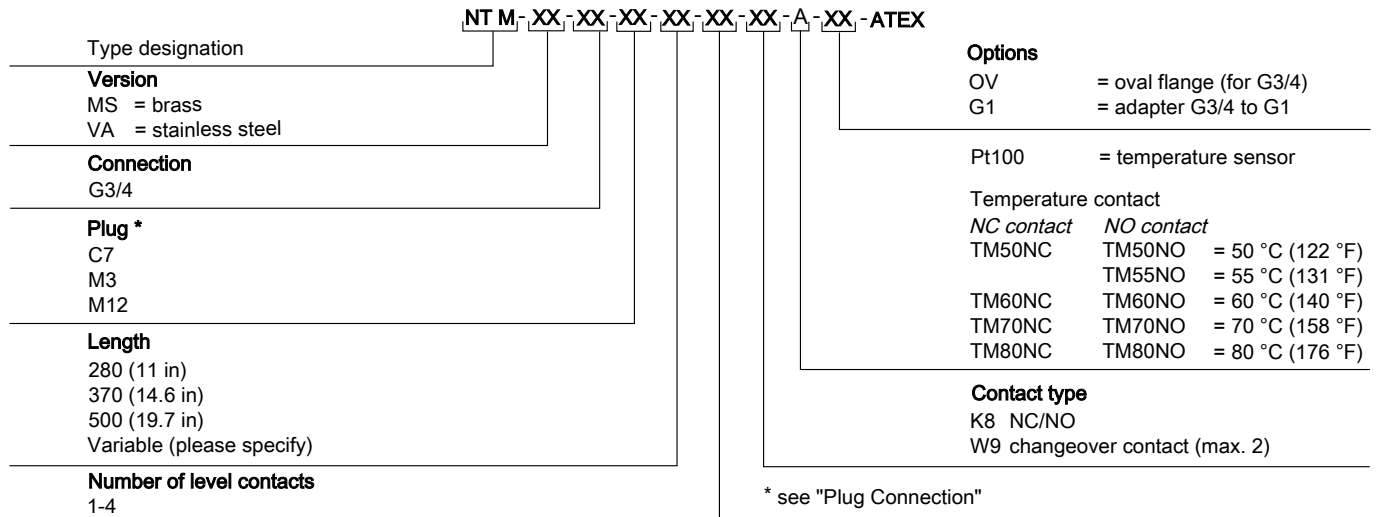
Temperature contacts

P_i	100 mW
U_i	30 V
I_i	50 mA
$L_i; C_i$	Negligible

Dimensions



Model Key

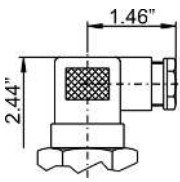
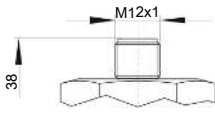
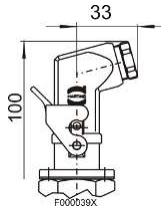
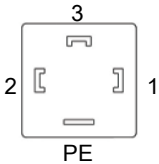
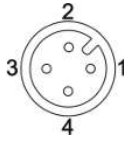
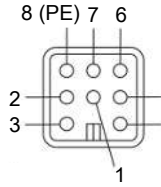
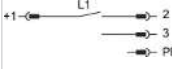
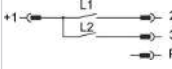
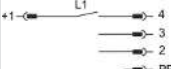
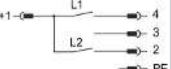
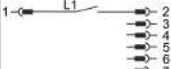
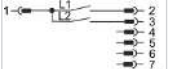


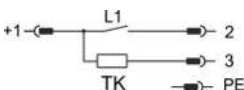
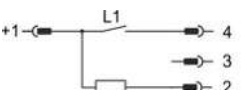
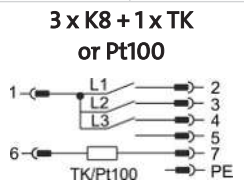
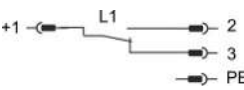
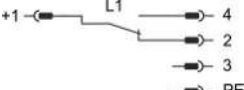

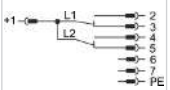
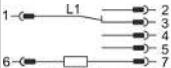
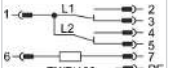


Ordering example

You require: Level switch with G3/4 connection, brass, length L= 500 mm,
2 level contacts, 1st contact 100 mm NC, 2nd contact 450 mm NO

Order NT M-MS-G3/4-M3/500-2K-100NC-450NO-ATEX

Standard pin assignment

Connector:	M3 valve connector	M12 plug A coded	C7 HAN 3 A
Dimensions:			
Connection schematic:			
Number of poles:	3-pin + PE	4-pin + PE	7-pin + PE
DIN EN	175301-803	61076-2-101	175301-801
Max. operating voltage:	30 V DC	30 V DC	30 V DC
IP rating:	IP65	IP67*	IP65**
Cable fitting:	PG 11		PG11
Only level contact(s) Type K8 (NC/NO)	<p>1 x K...</p>  <p>2 x K...</p> 	<p>1 x K...</p>  <p>2 x K...</p> 	<p>1 x K8</p>  <p>2 x K8</p> 
Level contact(s) Type K8 (NC/NO) plus temperature contact TK or Pt100 Attention: 2 separate roots			<p>1 x K8 + 1 x TK or Pt100</p>  <p>2 x K8 + 1 x TK or Pt100</p> 
Level contact(s) type K8 or K10 (NC/NO) plus temperature contact TK	<p>1 x K... + 1 x TK</p> 	<p>1 x K... + 1 x TK</p> 	<p>3 x K8 + 1 x TK or Pt100</p> 
Only level contact(s) Type W9 (changeover contact)	<p>1 x W...</p> 	<p>1 x W...</p> 	<p>1 x W9</p>  <p>2 x W9</p> 
Only level contact(s) Type W9 (change-over contact) plus temperature contact TK or Pt100 Attention: 2 separate roots			<p>1 x W9 + 1 x TK or Pt100</p>  <p>2 x W9 + 1 x TK or Pt100</p> 

*with respective plug top.

**IP 44 with gland/without gasket.