Fluidcontrol

Level switch for tank installation

NT M...-Atex

Installation and Operation Instructions

Original instructions

BE100011
02/2022

Bühler Technologies GmbH, Harkortstr. 29, D-40880 Ratingen
Tel. +49 (0) 21 02 / 49 89-0, Fax: +49 (0) 21 02 / 49 89-20
E-Mail: fluidcontrol@buehler-technologies.com
Internet: www.buehler-technologies.com

Bühler Technologies GmbH, Harkortstr. 29, D-40880 Ratingen
Tel. +49 (0) 21 02 / 49 89-0, Fax: +49 (0) 21 02 / 49 89-20
Internet: www.buehler-technologies.com
E-Mail: fluidcontrol@buehler-technologies.com

Read this instruction carefully prior to installation and/or use. Pay attention particularly to all advises and safety instructions to prevent injuries. Bühler Technologies can not be held responsible for misusing the product or unreliable function due to unauthorised modifications.

Document information
Document No. BE100011
Version 02/2022
Part No. 9031274

Contents

1 Introduction

1.1 Intended Use

The level switches are used to monitor levels and temperatures inside a tank. The measuring tube is inside the tank during the process.

According to EN 60079-11, NT M...-Atex series level switches are simple electrical apparatuses without separate voltage source intended for tank top installation.

When used in explosive areas these types may only be operated on intrinsically-safe circuits. With intrinsically safe connection they may be installed in Zone 2 explosive areas.

Never use the level switches in highly flammable or corrosive liquids. The medium must not contain particles, particularly metallic particles, to prevent deposits on the float or between the float and switching tube.

Before installing the level switches, verify the listed technical data meet the application parameters. Also observe the applicable requirements of EN 60079-14.

Further verify all contents are complete.

Please note the specific values of the level switches when connecting and the correct version when ordering spare parts.

1.2 Layout and Functionality

The height adjustable level contacts (bistable reed contacts) and temperature contacts (bimetal disc thermostat) are located inside the measuring tube. The level contacts are activated by a magnet inside the level switch float.

The temperature is monitored via thermal element mounted to the end of the rail. Choose from temperature contacts with fixed increments or a resistance thermometer (Pt100).

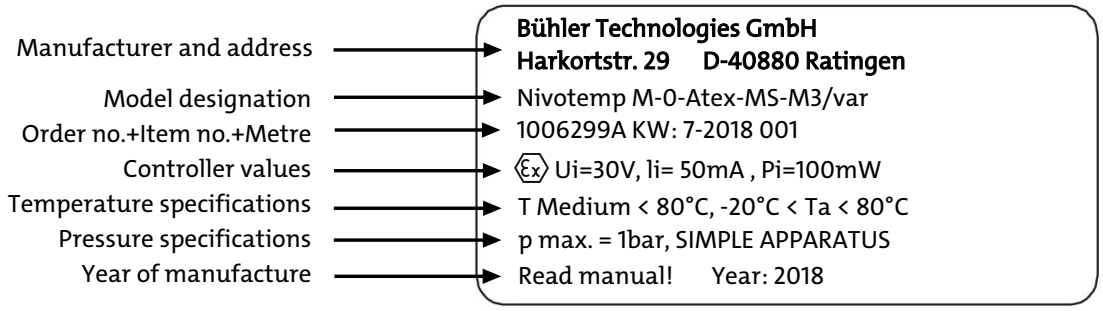
It installs to the tank via the female thread on the level switch.

1.3 Scope of Delivery

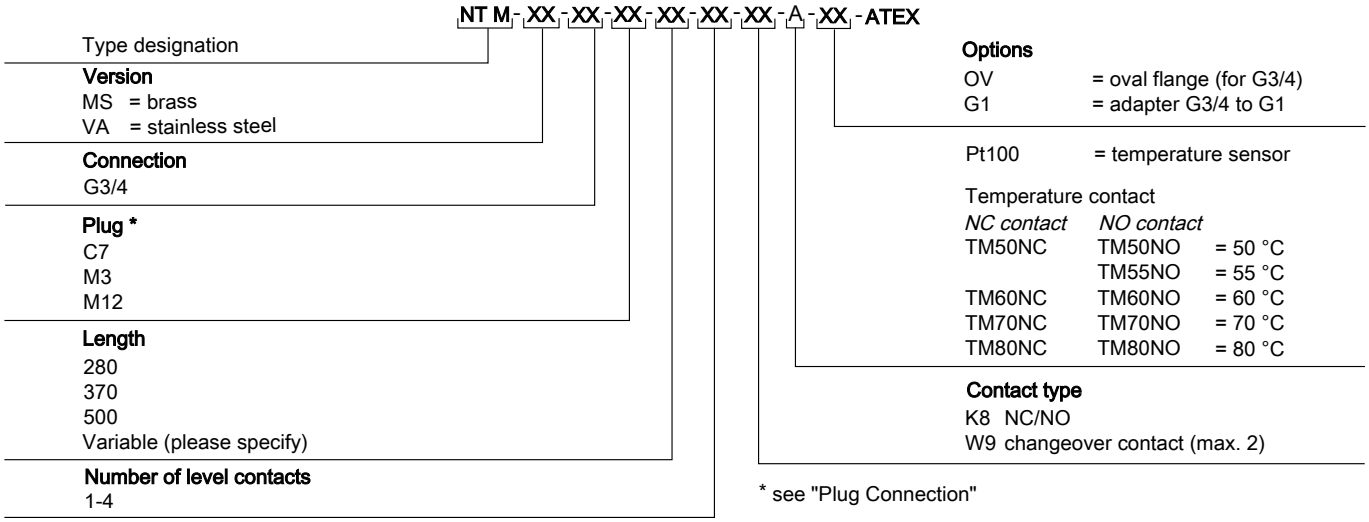
- Level switch
- Elastic profile gasket (NBR) M27x2 (G 3/4)
- Product Documentation

1.4 Type plate

Example:



1.5 Model Key



* see "Plug Connection"

2 Safety instructions

2.1 Important advice

This unit may only be used if:

- The product is being used under the conditions described in the operating- and system instructions, used according to the nameplate and for applications for which it is intended. Any unauthorized modifications of the device will void the warranty provided by Bühler Technologies GmbH,
- The specifications and markings in the type plate are observed,
- The specified limits are observed,
- The equipment is operated on intrinsically-safe circuits, see chapter “Intrinsically-Safe Connection”,
- The protective element is installed outside the explosive area,
- No equipment functions exceed the limits,
- Monitoring equipment / protection devices are connected correctly,
- Service and repair work not described in these instructions are performed by Bühler Technologies GmbH,
- Genuine replacement parts are used.

Regulations EN 60079-14 and EN 60079-17 must be observed when erecting electrical systems in explosive areas.

Additional national regulations pertaining to initial operation, operation, maintenance, repairs and disposal must be observed.

These operating instructions are a part of the equipment. The manufacturer reserves the right to change performance-, specification- or technical data without prior notice. Please keep these instructions for future reference.

Signal words for warnings

DANGER	Signal word for an imminent danger with high risk, resulting in severe injuries or death if not avoided.
WARNING	Signal word for a hazardous situation with medium risk, possibly resulting in severe injuries or death if not avoided.
CAUTION	Signal word for a hazardous situation with low risk, resulting in damaged to the device or the property or minor or medium injuries if not avoided.
NOTICE	Signal word for important information to the product.

Warning signs

These instructions use the following warning signs:

	Warns of a general hazard		General information
	Warns not to inhale toxic gasses		Wear respiratory equipment
	Warns of corrosive liquids		Wear a safety mask
	Warns of explosive areas		Wear gloves

2.2 General hazard warnings

The equipment must be installed by a professional familiar with the safety requirements and risks.

Be sure to observe the safety regulations and generally applicable rules of technology relevant for the installation site. Prevent malfunctions and avoid personal injuries and property damage.

The operator of the system must ensure:

- Safety notices and operating instructions are available and observed,
- The respective national accident prevention regulations are observed,
- The permissible data and operational conditions are maintained,
- Safety guards are used and mandatory maintenance is performed,
- Legal regulations are observed during disposal,
- compliance with national installation regulations.

Maintenance, Repair

Please note during maintenance and repairs:

- Repairs to the unit must be performed by Bühler authorised personnel.
- Only perform conversion-, maintenance or installation work described in these operating and installation instructions.
- Always use genuine spare parts.
- Do not install damaged or defective spare part. If necessary, visually inspect prior to installation to determine any obvious damage to the spare parts.

Always observe the applicable safety and operating regulations in the respective country of use when performing any type of maintenance.

The method for cleaning the devices must be adapted to the IP protection class of the devices. Do not use cleaners which could damage the device materials.

DANGER **Toxic, acidic gases/liquids**

Protect yourself from toxic, corrosive gasses/liquids when performing any type of work. Wear appropriate protective equipment.

3 Transport and storage

Only transport the product inside the original packaging or a suitable alternative.

The equipment must be protected from moisture and heat when not in use. It must be stored in a covered, dry, dust-free room at room temperature.

4 Installation and connection

4.1 Installation

Please note before installing the level switch!

After transport and delivery of the level switch, the switching status of the bistable contacts may be different than required for proper operation.

Therefore slide the float for the level switch along the level switch tube from below immediately before installation.

This ensures all built-in bistable contacts have a clearly defined switching status (NC or NO).

The level switches (transmitters) come fully assembled and can be mounted to the tank via by screw-in thread and seal. Please be sure the float can move freely and to leave enough space between the tank wall and add-ons.

After removing the float, where applicable, be sure the magnet inside the float is above the fluid level. This can easily be verified with a piece of iron to determine the magnet position inside the float.

4.2 Electrical connections

Please refer to the tables in the appendix for the pin assignment and electrical data of your level switch.

Proceed as follows: Locate (as specified in your order) the plug type, the contact type (NC/NO or changeover contact, with or without temperature measurement) and the number of contacts.

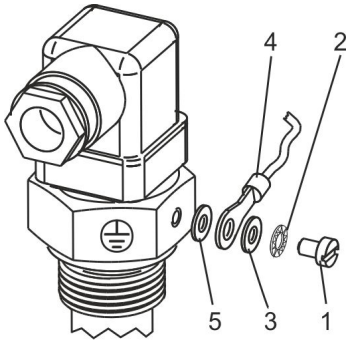
Please note, every level switch must be connected to the earthed tank container using the existing external PA connection.

4.2.1 PA connection (potential equalisation)

CAUTION	**Electrostatic charge**
	Level switch housings must be connected to the tank via external PA connection! Ensure the level switch is adequately earthed (minimum conductor cross-section 4 mm²). Please also particularly observe the requirements of EN 60079-14.

The level switch has an external PA connection. This is identified by the decal shown on the right. The connection uses an M4 thread. The PA cable for potential equalisation between the level switch and the tank is not included and must be supplied and installed by the customer.

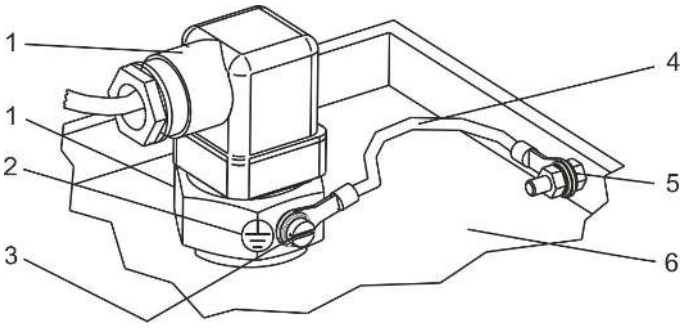
Layout of the PA connection:



1	Screw	4	PA cable (to be installed by the customer)
2	Serrated washer	5	Washer
3	Washer		

PA connection example:

Drawing A



1	NT-M ATEX level switch	5	PA cable
2	PA decal	6	PA connection on the tank
3	PA connection on the level switch	7	Tank

4.2.2 Intrinsically-safe connection

According to EN 60079-11 the components for level and temperature monitoring are simple electrical equipment and to be considered purely ohmic circuits. The electrical circuits must be operated separately using a controller suitable for the zone; please note the information specified in the pin assignments.

CAUTION

Explosion hazard due to prohibited electrical connection data

Prohibited electrical connection data can cause an explosive gas mixture to ignite.
In areas with explosive gas atmospheres the level switch may only be operated with an intrinsically-safe power supply. The power supply must be suitable for the respective zone. The limits specified in these operating instructions must be observed and must not exceeded, even with two separate intrinsically-safe power supplies.
Ensure the limits will not be exceeded, even in the event of a fault, e.g. accidental series or parallel connection.
Please observe the relevant safety requirements, e.g. EN 60079-11 and EN 60079-14, when installing and operating intrinsically-safe equipment.

Please refer to the chart below for the technical parameters and the approved limits (U_i, I_i, C_i, L_i, P_i) for intrinsically-safe operation:

	U_i	I_i	C_i	L_i	P_i
Level contact	30 V	50 mA	negligible	negligible	100 mW
Temperature contact	30 V	50 mA	negligible	negligible	100 mW
Pt100 Temperature Sensor	30 V	50 mA	negligible	negligible	100 mW

Remarks about the Pt100 connection

Operate the Pt100 with the respective EX approved RTD converter or a separating barrier with RTD input, suitable for EX. The measuring current must be **≤ 1 mA** to prevent excessive self-heating, which will cause measuring errors.

5 Operation and control

DANGER

Toxic, acidic gases/liquids

Protect yourself from toxic, corrosive gasses/liquids when performing any type of work. Wear appropriate protective equipment.

DANGER

Dangerous electrostatic charge (explosion hazard)

The equipment may only be used where normal operating conditions do not produce frequent flammable, electrostatic discharge.

Sparking

Incendive electrostatic charges may occur when cleaning plastic housing parts and decals (e.g. with a dry cloth or compressed air). The sparks this produces could ignite flammable, explosive atmospheres.

Always clean plastic housing parts and decals **with a damp cloth**!

DANGER

Impact

Strong blows to the housing can produce sparks, which can ignite an EX atmosphere. Protect the equipment from external impact. Damaged housing parts must be replaced immediately.

CAUTION

Explosion hazard due to prohibited electrical connection data

Prohibited electrical connection data can cause an explosive gas mixture to ignite.
In areas with explosive gas atmospheres the level switch may only be operated with an intrinsically-safe power supply. The power supply must be suitable for the respective zone. The limits specified in these operating instructions must be observed and must not exceeded, even with two separate intrinsically-safe power supplies.
Ensure the limits will not be exceeded, even in the event of a fault, e.g. accidental series or parallel connection.
Please observe the relevant safety requirements, e.g. EN 60079-11 and EN 60079-14, when installing and operating intrinsically-safe equipment.

NOTICE

The device must not be operated beyond its specifications.

Before startup, check

- the electrical connections are undamaged and correctly installed,
- the level switch is connected intrinsically-safe (proof of intrinsic safety e.g. according to EN 60079-14),
- no parts have been removed from the level switches,
- protection and monitoring devices are installed and functional (e.g. switch amplifier),
- the ambient parameters and technical specifications (e.g. U_i, I_i) are met,
- electrical connections are securely connected and the monitoring devices are connected and set as prescribed.
- Precautions have been taken,
- the screws are installed with gaskets,
- the connectors are closed and the cable glands are properly sealed.
- The requirements of EN 60079-14 are met,
- the earth is proper and functional.

Level display:

Inside the float of a level switch is a magnet which is mounted in a way that exceeding the level contacts (bistable reed contacts) will trigger these magnetically. This can switch signals used to display the liquid level. When using several level contacts inside the level switch, signals are switched using a common root.

Temperature monitoring:

The temperature of a fluid is monitored via bimetal disc thermostat inside the level switch tube. When a set temperature is reached, a bimetal snap disk inside the thermostat is triggered, which opens or closes an electrical contact. A Pt100 temperature sensor can optionally be used in place of the bimetal thermostat.

Please note the technical specifications for the level switches and the connection diagrams at the end of this manual.

6 Cleaning and Maintenance

This device is maintenance-free.

The method for cleaning the devices must be adapted to the IP protection class of the devices. Do not use cleaners which could damage the device materials.

7 Service and repair

This chapter contains information on troubleshooting and correction should an error occur during operation.

Repairs to the unit must be performed by Bühler authorised personnel.

Please contact our Service Department with any questions:

Tel.: +49-(0)2102-498955 or your agent

If the equipment is not functioning properly after correcting any malfunctions and switching on the power, it must be inspected by the manufacturer. Please send the equipment inside suitable packaging to:

Bühler Technologies GmbH

- Reparatur/Service -

Harkortstraße 29

40880 Ratingen

Germany

Please also attach the completed and signed RMA decontamination statement to the packaging. We will otherwise be unable to process your repair order.

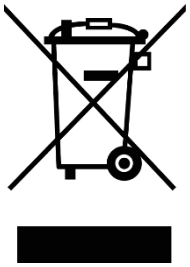
You will find the form in the appendix of these instructions, or simply request it by e-mail:

service@buehler-technologies.com.

8 Disposal

The applicable national laws must be observed when disposing of the products. Disposal must not result in a danger to health and environment.

The crossed out wheelie bin symbol on Bühler Technologies GmbH electrical and electronic products indicates special disposal notices within the European Union (EU).



The crossed out wheelie bin symbol indicates the electric and electronic products bearing the symbol must be disposed of separate from household waste. They must be properly disposed of as waste electrical and electronic equipment.

Bühler Technologies GmbH will gladly dispose of your device bearing this mark. Please send your device to the address below for this purpose.

We are obligated by law to protect our employees from hazards posed by contaminated devices. Therefore please understand that we can only dispose of your waste equipment if the device is free from any aggressive, corrosive or other operating fluids dangerous to health or environment. **Please complete the "RMA Form and Decontamination Statement", available on our website, for every waste electrical and electronic equipment. The form must be applied to the packaging so it is visible from the outside.**

Please return waste electrical and electronic equipment to the following address:

Bühler Technologies GmbH
WEEE
Harkortstr. 29
40880 Ratingen
Germany

Please also observe data protection regulations and remember you are personally responsible for the returned waste equipment not bearing any personal data. Therefore please be sure to delete your personal data before returning your waste equipment.

9 Appendices

9.1 Technical Data

NT M...-Atex			
Operating pressure:	max. 1 bar		
Medium /operating temperature:	max. +80 °C (C7 and M3 plug) max. +70 °C (M12 plug)		
Ambient temperature:	-20 to +80 °C (C7 and M3 plug) -20 to +70 °C (M12 plug)		
Fluid density:	min. 0.8 kg/dm³		
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	40 mm	
Temperature contacts			
Switch-back difference:	15 K ± 5 K		
Switching point:		**NC***	**NO***
	50 °C	TMÖ-50	-
	55 °C	-	TMS-55
	60 °C	TMÖ-60	TMS-60
	70 °C	TMÖ-70	TMS-70
	80 °C	TMÖ-80	TMS-80

Other temperatures available upon request
*NC = NC contact/NO = NO contact All data for rising temperature

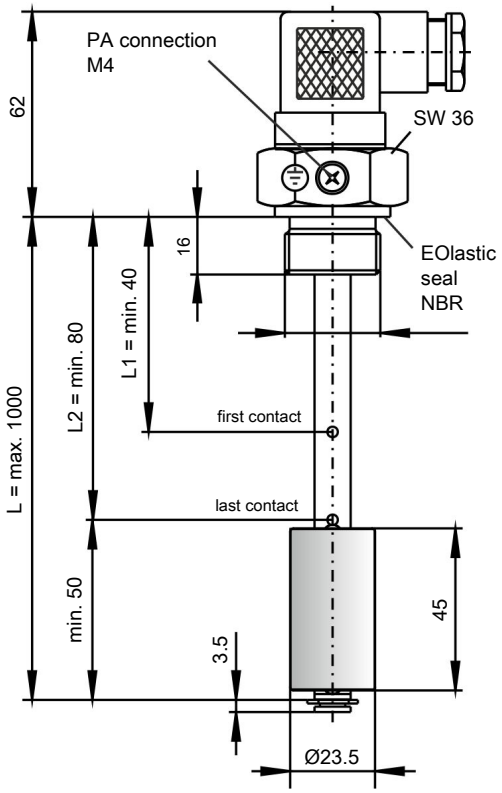
Pt100 resistance thermometer
(Pt100 class B DIN / IEC 751)

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 long, item no.: 9144050018
Adapter G3/4 to G1, item no.: 1011000
Adapter G3/4 to oval flange, item no.: 1012000

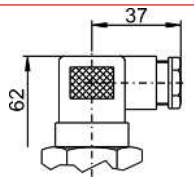
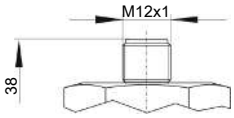
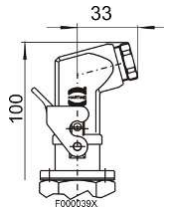
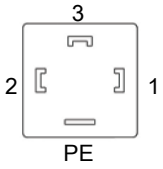
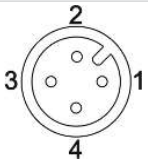
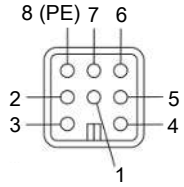
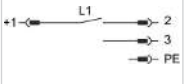
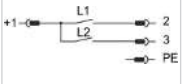
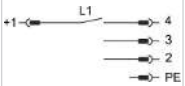
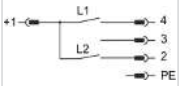
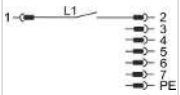
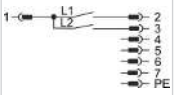
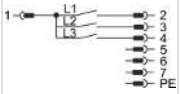
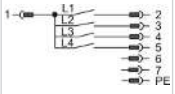
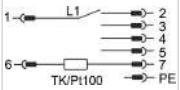
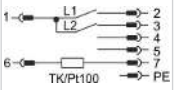
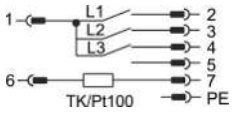
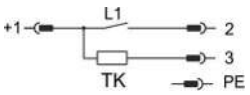
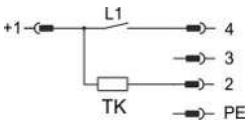
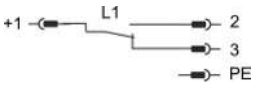
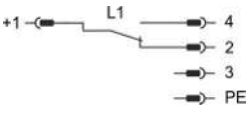
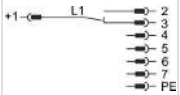
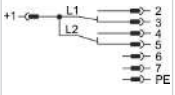
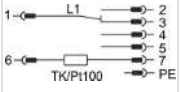
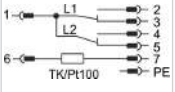
The device is suitable for use in ATEX category II 3 G Ex ic IIC T4 Gc.
The level switches may only be operated on intrinsically-safe circuits!

Dimensions



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

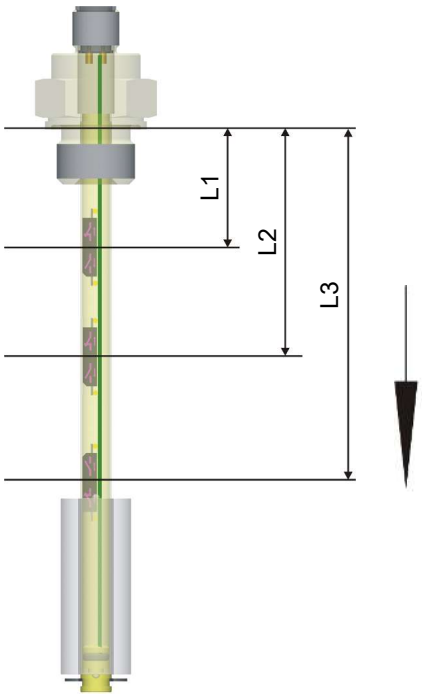
9.2 Standard pin assignment

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)	**1 x K...**  **2 x K...** 	**1 x K...**  **2 x K...** 	**1 x K8**  **2 x K8**  **3 x K8**  **4 x K8** 
Level contact(s) Type K8 (NC/NO) plus temperature contact TK or Pt100 Attention: 2 separate roots			**1 x K8 + 1 x TK or Pt100**  **2 x K8 + 1 x TK or Pt100**  **3 x K8 + 1 x TK or Pt100** 
Level contact(s) type K8 or K10 (NC/NO) plus temperature contact TK	**1 x K... + 1 x TK** 	**1 x K... + 1 x TK** 	
Only level contact(s) Type W9 (changeover contact)	**1 x W...** 	**1 x W...** 	**1 x W9**  **2 x W9** 
Only level contact(s) Type W9 (change-over contact) plus temperature contact TK or Pt100 Attention: 2 separate roots			**1 x W9 + 1 x TK or Pt100**  **2 x W9 + 1 x TK or Pt100** 

*with respective plug top.

**IP 44 with gland/without gasket.

9.3 Definitions



The contact positions are measured top to bottom:

L1 = Contact no. 1

L2 = Contact no. 2

L3 = Contact no. 3

, etc.

Note: The number of contacts may be limited depending on the level switch model (see model key in the type plate and technical data).

Abbreviation	Explanation
NO	rising NO contact/falling NC contact
NC	rising NC contact/falling NO contact
TK	Temperature contact
PT	Pt100 Temperature Sensor
L1, L2, L3, L4	Level contact
T1, T2, T3, T4	Temperature output/contact

10 Attached documents

– Manufacturer Declaration HX100001
– RMA - Decontamination Statement

Herstellererklärung
Manufacturer Declaration

der Firma Bühler Technologies GmbH nach EN 60079-11 Abschn. 5.7 „Einfache elektrische Betriebsmittel".

by Bühler Technologies GmbH pursuant to EN 60079-11 Section 5.7 "Simple apparatus".

Produkt / products: Niveauschalter für Tankeinbau / *level switch for top tank installation*
Typ / type: NT M...-Atex

Zusätzliche Angaben/*additional details:*
Die Erklärung gilt für alle Exemplare, die nach den beim Hersteller hinterlegten Fertigungsunterlagen – die Bestandteil dieser Erklärung sind - hergestellt wurden.
Bei dem Betriebsmittel handelt es sich nach EN 60079-11 um ein einfaches elektrisches Betriebsmittel ohne eigene Zündquelle, welches für den Tankeinbau bestimmt ist. Gemäß den Anforderungen dieser Norm wird dieses Betriebsmittel keiner Typprüfung und keiner Kennzeichnung nach Richtlinie **2014/34/EU (Atex)** unterworfen.
Bei eigensicherem Anschluss kann das Betriebsmittel im explosionsgefährdeten Bereich der Zone 2 (Gruppe IIC) installiert werden. Eine vergleichbare ATEX-Kennzeichnung lautet: II 3G Ex ic IIC T4 Gc.
Die Betriebsmittel dürfen nur durch Fachpersonal installiert werden; die einschlägigen Sicherheitsvorschriften (z.B. EN 60079-14) sind zwingend zu beachten.
This declaration is valid for all devices manufactured according to the design and manufacturing specifications of the manufacturer. These specifications are part of this declaration.
*According to EN 60079-11, the equipment is a simple electrical apparatus without innate ignition source intended for tank top installation. According to this standard this equipment is not subject to type approval and marking pursuant to directive **2014/34/EC (Atex).***
In case of intrinsically safe connection they can be used in Zone 2 (group IIC) of Ex-areas. A comparable ATEX marking is: II 3G Ex ic IIC T4 Gc.
The equipment has to be installed by trained personnel. All safety regulations have to be fulfilled (e.g. EN 60079-14).

Beschaltungswerte der einfachen elektrischen Betriebsmittel/*Parameters of the simple apparatuses:*

U_i = 30 V
I_i = 50 mA
C_i, L_i vernachlässigbar/negligible
Messtrom/Measuring current (Pt100) ≤ 1 mA

Zur Beurteilung der Konformität gemäß Atex-Richtlinie wurden folgende harmonisierte Normen herangezogen:
For the assessment of conformity according to the Atex directive the following standards have been used:

EN 60079-11:2012 **EN 60079-0:2018**

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.
This declaration of conformity is issued under the sole responsibility of the manufacturer.

Dokumentationsverantwortlicher für diese Konformitätserklärung ist Herr Stefan Eschweiler mit Anschrift am Firmensitz.
The person authorised to compile the technical file is Mr. Stefan Eschweiler located at the company's address.

Ratingen, den 17.02.2023

Stefan Eschweiler
Geschäftsführer – *Managing Director*

Frank Pospiech
Geschäftsführer – *Managing Director*

Bühler Technologies GmbH, Harkortstr. 29, D-40880 Ratingen,
Tel. +49 (0) 21 02 / 49 89-0, Fax. +49 (0) 21 02 / 49 89-20
Internet: www.buehler-technologies.com

Manufacturer Declaration

Herewith Bühler Technologies GmbH declares that the following products are not „equipment" for the purpose of legislation **Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016** respectively, and therefore are not labelled with the UKCA mark.

Product: Level switch for top tank installation
Type: NT M...-Atex

This declaration is valid for all devices manufactured in accordance with the manufacturing documents deposited with the manufacturer – which form an integral part of this declaration.

According to EN 60079-11, the equipment is a simple apparatus without innate ignition source intended for tank top installation. According to this standard, this equipment is not subject to type approval and marking pursuant to legislation **Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016**. In case of intrinsically safe connection, they can used in Zone 2 (group IIC) of ex-area.
A comparable marking is: II 3G Ex ic IIC T4 Gc.
The equipment has to install by trained personnel. All safety regulations have to be fulfilled (e. g. EN 60079-14).

Parameters of the simple apparatuses:

U_i = 30 V
I_i = 50 mA
C_i, L_i negligible
Measuring current (Pt100) ≤ 1 mA

The object of the declaration described above is in conformity with the relevant designated standards:

EN 60079-11:2012 **EN 60079-0:2018**

This declaration of manufacture is issued under the sole responsibility of the manufacturer.

Ratingen in Germany, 01.11.2022

Stefan Eschweiler
Managing Director

Frank Pospiech
Managing Director

Bühler Technologies GmbH, Harkortstr. 29, D-40880 Ratingen,
Tel. +49 (0) 21 02 / 49 89-0, Fax. +49 (0) 21 02 / 49 89-20
Internet: www.buehler-technologies.com

RMA-Formular und Erklärung über Dekontaminierung
RMA-Form and explanation for decontamination

RMA-Nr./ RMA-No.

Die RMA-Nr. bekommen Sie von Ihrem Ansprechpartner im Vertrieb oder Service. Bei Rücksendung eines Altgeräts zur Entsorgung tragen Sie bitte in das Feld der RMA-Nr. "WEEE" ein./ You may obtain the RMA number from your sales or service representative. When returning an old appliance for disposal, please enter "WEEE" in the RMA number box.

Zu diesem Rücksendeschein gehört eine Dekontaminierungserklärung. Die gesetzlichen Vorschriften schreiben vor, dass Sie uns diese Dekontaminierungserklärung ausgefüllt und unterschrieben zurücksenden müssen. Bitte füllen Sie auch diese im Sinne der Gesundheit unserer Mitarbeiter vollständig aus./ This return form includes a decontamination statement. The law requires you to submit this completed and signed decontamination statement to us. Please complete the entire form, also in the interest of our employee health.

Firma/ Company

Firma/ Company	
Straße/ Street	
PLZ, Ort/ Zip, City	
Land/ Country	

Ansprechpartner/ Person in charge

Name/ Name	
Abt./ Dept.	
Tel./ Phone	
E-Mail	

Gerät/ Device	
Anzahl/ Quantity	
Auftragsnr./ Order No.	

Serien-Nr./ Serial No.	
Artikel-Nr./ Item No.	

Grund der Rücksendung/ Reason for return

- ☐ Kalibrierung/ Calibration
- ☐ Modifikation/ Modification
- ☐ Reklamation/ Claim
- ☐ Reparatur/ Repair
- ☐ Elektroaltgerät/ Waste Electrical & Electronic Equipment (WEEE)
- ☐ andere/ other

bitte spezifizieren/ please specify

Ist das Gerät möglicherweise kontaminiert?/ Could the equipment be contaminated?

☐ Nein, da das Gerät nicht mit gesundheitsgefährdenden Stoffen betrieben wurde./ No, because the device was not operated with hazardous substances.

☐ Nein, da das Gerät ordnungsgemäß gereinigt und dekontaminiert wurde./ No, because the device has been properly cleaned and decontaminated.

☐ Ja, kontaminiert mit:/ Yes, contaminated with:

☐ explosiv/ explosive	☐ entzündlich/ flammable	☐ brandfördernd/ oxidizing	☐ komprimierte Gase/ compressed gases	☐ ätzend/ caustic	☐ giftig, Lebensgefahr/ poisonous, risk of death	☐ gesundheitsgefährdend/ harmful to health	☐ gesundheitsschädlich/ health hazard	☐ umweltgefährdend/ environmental hazard

Bitte Sicherheitsdatenblatt beilegen!/ Please enclose safety data sheet!

Das Gerät wurde gespült mit:/ The equipment was purged with:

Diese Erklärung wurde korrekt und vollständig ausgefüllt und von einer dazu befugten Person unterschrieben. Der Versand der (dekontaminierten) Geräte und Komponenten erfolgt gemäß den gesetzlichen Bestimmungen.

This declaration has been filled out correctly and completely, and signed by an authorized person. The dispatch of the (decontaminated) devices and components takes place according to the legal regulations.

Falls die Ware nicht gereinigt, also kontaminiert bei uns eintrifft, muss die Firma Bühler sich vorbehalten, diese durch einen externen Dienstleister reinigen zu lassen und Ihnen dies in Rechnung zu stellen.

Should the goods not arrive clean, but contaminated, Bühler reserves the right, to comission an external service provider to clean the goods and invoice it to your account.

Firmenstempel/ Company Sign

Datum/ Date

rechtsverbindliche Unterschrift/ Legally binding signature

Bühler Technologies GmbH, Harkortstr. 29, D-40880 Ratingen
Tel. +49 (0) 21 02 / 49 89-0, Fax: +49 (0) 21 02 / 49 89-20
E-Mail: service@buehler-technologies.com
Internet: www.buehler-technologies.com

Vermeiden von Veränderung und Beschädigung der einzusendenden Baugruppe

Die Analyse defekter Baugruppen ist ein wesentlicher Bestandteil der Qualitätssicherung der Firma Bühler Technologies GmbH. Um eine aussagekräftige Analyse zu gewährleisten muss die Ware möglichst unverändert untersucht werden. Es dürfen keine Veränderungen oder weitere Beschädigungen auftreten, die Ursachen verdecken oder eine Analyse unmöglich machen.

Umgang mit elektrostatisch sensiblen Baugruppen

Bei elektronischen Baugruppen kann es sich um elektrostatisch sensible Baugruppen handeln. Es ist darauf zu achten, diese Baugruppen ESD-gerecht zu behandeln. Nach Möglichkeit sollten die Baugruppen an einem ESD-gerechten Arbeitsplatz getauscht werden. Ist dies nicht möglich sollten ESD-gerechte Maßnahmen beim Austausch getroffen werden. Der Transport darf nur in ESD-gerechten Behältnissen durchgeführt werden. Die Verpackung der Baugruppen muss ESD-konform sein. Verwenden Sie nach Möglichkeit die Verpackung des Ersatzteils oder wählen Sie selber eine ESD-gerechte Verpackung.

Einbau von Ersatzteilen

Beachten Sie beim Einbau des Ersatzteils die gleichen Vorgaben wie oben beschrieben. Achten Sie auf die ordnungsgemäße Montage des Bauteils und aller Komponenten. Versetzen Sie vor der Inbetriebnahme die Verkabelung wieder in den ursprünglichen Zustand. Fragen Sie im Zweifel beim Hersteller nach weiteren Informationen.

Einsenden von Elektroaltgeräten zur Entsorgung

Wollen Sie ein von Bühler Technologies GmbH stammendes Elektroprodukt zur fachgerechten Entsorgung einsenden, dann tragen Sie bitte in das Feld der RMA-Nr. „WEEE“ ein. Legen Sie dem Altgerät die vollständig ausgefüllte Dekontaminierungserklärung für den Transport von außen sichtbar bei. Weitere Informationen zur Entsorgung von Elektroaltgeräten finden Sie auf der Webseite unseres Unternehmens.

Avoiding alterations and damage to the components to be returned

Analysing defective assemblies is an essential part of quality assurance at Bühler Technologies GmbH. To ensure conclusive analysis the goods must be inspected unaltered, if possible. Modifications or other damages which may hide the cause or render it impossible to analyse are prohibited.

Handling electrostatically conductive components

Electronic assemblies may be sensitive to static electricity. Be sure to handle these assemblies in an ESD-safe manner. Where possible, the assembles should be replaced in an ESD-safe location. If unable to do so, take ESD-safe precautions when replacing these. Must be transported in ESD-safe containers. The packaging of the assemblies must be ESD-safe. If possible, use the packaging of the spare part or use ESD-safe packaging.

Fitting of spare parts

Observe the above specifications when installing the spare part. Ensure the part and all components are properly installed. Return the cables to the original state before putting into service. When in doubt, contact the manufacturer for additional information.

Returning old electrical appliances for disposal

If you wish to return an electrical product from Bühler Technologies GmbH for proper disposal, please enter "WEEE" in the RMA number box. Please attach the fully completed decontamination declaration form for transport to the old appliance so that it is visible from the outside. You can find more information on the disposal of old electrical appliances on our company’s website.

Bühler Technologies GmbH, Harkortstr. 29, D-40880 Ratingen
Tel. +49 (0) 21 02 / 49 89-0, Fax: +49 (0) 21 02 / 49 89-20
E-Mail: service@buehler-technologies.com
Internet: www.buehler-technologies.com