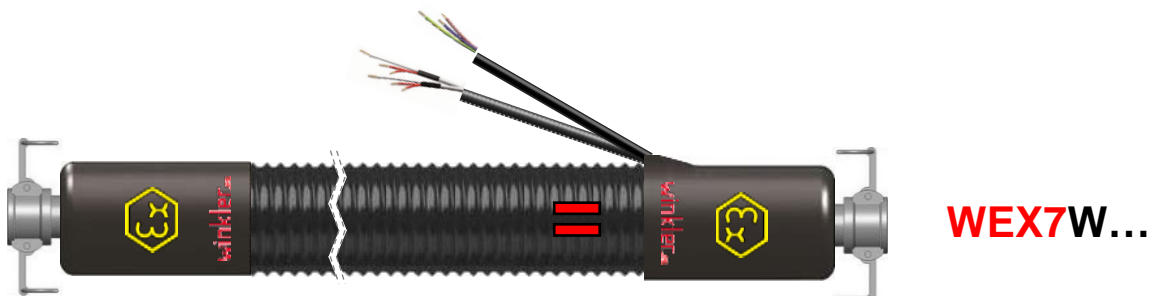
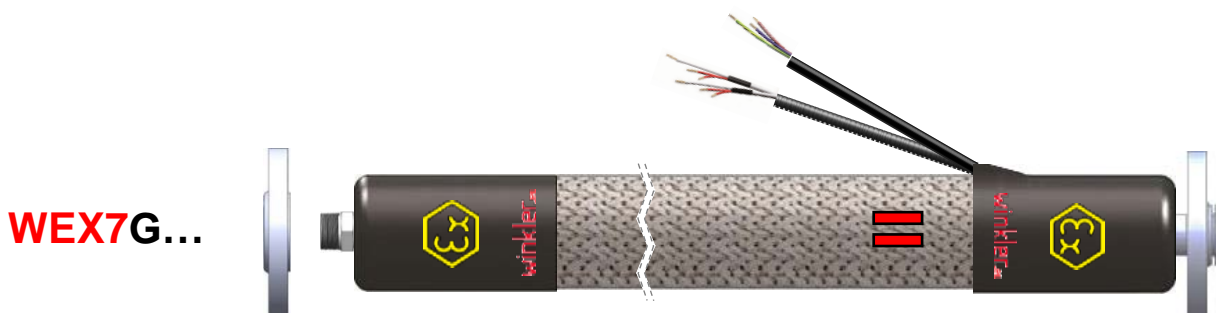
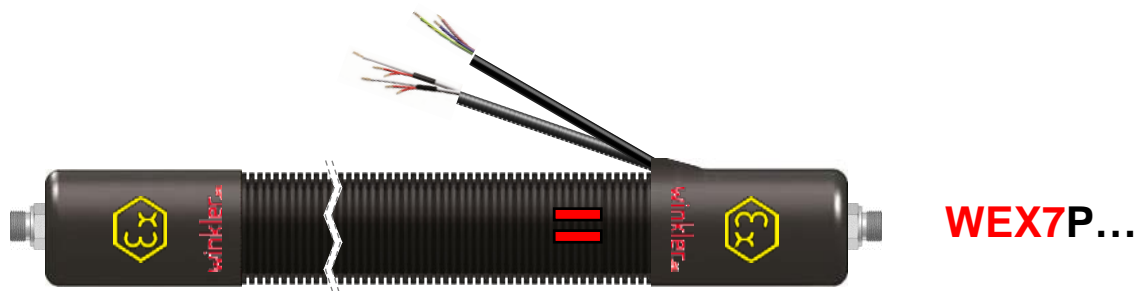


# Instruction for Installation and Operation



## ATEX heated hoses

**Series WEX7...**  
(fixed resistance heating cable)



## Important safety information for the use of ATEX heated hoses



Please read the instructions for installation and operation very carefully before using ATEX heated hoses. Observe the data on the name plate and any possible warnings on the product. The instructions for installation and operation are part of the explosion protection document in accordance with §6 of the German Ordinance on Hazardous Materials (GefStoffV). These instructions must always be available to everyone using or operating the equipment. You should therefore keep the instructions for installation and operation at a safe place for further use.

ATEX heated hoses are employed in hazardous areas where special operational requirements and conditions have to be met. Please study these requirements and regulations in advance and observe compliance to ensure trouble-free operation within the intended field of application.

If you have any questions or would like further clarification, just get in touch with us (see contact data).

We will always be happy to advise and assist you so that you can rely on the safe operation of your ATEX heated hoses for the intended purpose.

### The ATEX heated hose is an electrical apparatus



Operation and maintenance of ATEX heated hoses may only be carried out by a qualified electrician or a person with appropriate electrotechnical training.

In order to prevent hazards due to electric current, it is necessary to carry out regular inspections and, where appropriate, maintenance of ATEX heated hoses in accordance with the applicable technical rules and standards (VDE / BGV A3 / ...).

It is recommended to install a residual current device (RCD) to support safe operation. The device function must be checked before putting the device into operation and thereafter at regular intervals.

### Area of application of ATEX heated hoses



For explosive gas atmospheres > in zones 1 and 2

For explosive dust atmospheres > in zones 21 and 22

**Not suitable for use in zone 0 or zone 20!**

### Additional safety rules



In the event of obvious damage, the ATEX heated hoses must be taken out of operation immediately and may not be reused. The cause of the damage must be analysed and eliminated without delay.

Mechanical damage of the protective jacket > due to the impact of external force

Mechanical damage of the silicone connection caps > due to the impact of external force

Brittle or broken protective jacket > thermal overload or exposure to strong solar radiation

Always take care to avoid overheating of ATEX heated hoses. Observe the minimum and maximum operating temperatures and make sure that the temperature cannot overshoot or undershoot these limits. Overheating may be due to a number of causes. Please check the operating and ambient conditions in advance and monitor the first heating-up phases.

**Two temperature sensors are built-in in series WEX7... since with unregulated operation an overheating of the hose may occur.**

If required (optional) additional temperature sensors can be installed. These however have nothing to do with the actual protection function of the heating hose (controller / limiter) and are to be used depending on the application or process. This must be done using suitable ATEX temperature controllers and temperature limiters, which is precondition for ensuring that ATEX heated hoses are operated correctly and as intended.

### Directives and regulations for explosion protection

The following Directives and regulations were taken into account for the design, testing, official approval and manufacture of ATEX heated hoses:

**Directive 2014/34/EU** – Equipment and protective systems intended for use in potentially explosive atmospheres  
Annex III Module B – EU-Type Examination

### EN-norms and regulations for explosion protection:

**EN 1127-1** Explosive atmospheres - Explosion protection part 1: Basic concepts and methodology

**EN 60079-0 (VDE0170-1)** Explosive atmospheres Part 0: Equipment – General requirements

**EN 60079-7 (VDE0170-6)** Explosive atmospheres Part 7: Equipment protection by increased safety „e”

**EN 60079-14 (VDE0165-1)** Explosive atmospheres Part 14: Electrical installations design, selection and erection

**EN 60079-18 (VDE0170-9)** Explosive atmospheres Part 18: Equipment protection by encapsulation „m”

**EN 60079-30-1 (VDE0170-60-1)** Explosive atmospheres Part 30-1: trace heating – General and testing requirements

**EN 60079-31 (VDE0170-15-1)** Explosive atmospheres Part 31: Equipment dust ignition protection by enclosure „t”

## Instructions for installation and operation ATEX heated hoses of series WEX7...

With ATEX heated hoses you have acquired a high-quality product suitable for use in hazardous areas with potentially explosive atmospheres in accordance with the relevant standards and regulations as well as the conditions set out here. It is always our main objective to manufacture products that will function to your full satisfaction and meet the desired requirements. To ensure that this can be properly implemented for your own benefit, please read the following carefully and observe the instructions concerning installation and operation. If you have any questions we will be happy to assist you (s. sect. 11, "Contact data").

In the following ATEX heated hoses are simply referred to as "heated hoses".

### Contents:

- |   |   |
|---|---|
| 1. General information                          | 8. General technical data   |
| 2. Area of application                          | 9. Pressure load  |
| 3. Installation / initial operation             | 10. Chemical resistance of the outer jacket   |
| 4. Operation / removal                          | 11. Contact data  |
| 5. Installation guidelines, wrong – right chart | 12. EU Type Examination Certificate   |
| 6. Maintenance and repair / inspections         | 13. EU Declaration of Conformity  |
| 7. Permissible bending radii                    | 14. QM Certificate according to ISO 9001:2015 and to Directive 2014/34/EU Annex VII |

### 1. General information

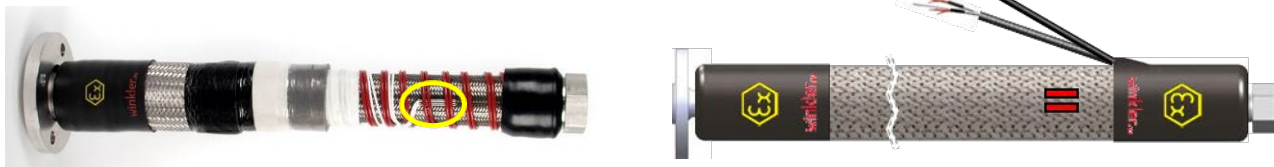
The central element of the heated hose is the inner tube through which the fluid flows. This fluid carrying inner tube is made predominantly of high-grade PTFE with a smooth surface (PTFE smooth hose), a corrugated surface (PTFE flexible corrugated hose) or a corrugated stainless-steel hose. The inner tubes are application-specific customized which ensures beside the suitable pressure resistance also other hose features such as resistance, robust application and mechanical stability. The entire heated hose is designed in such a way that the flexibility and the bending potential of the inner tube are hardly affected. However, the maximum specified permissible bending radius must always be observed to prevent defects and damage to any additional components (see sect. 7, "Permissible bending radii").



The maximum operating temperatures of the heated hose are stated on the name plate corresponding to the ATEX marking. These temperatures must on no account be exceeded at any point along the length of the heated hose. Therefore the hose is equipped with two sensors for temperature control. Use suitable temperature control equipment for the temperature control of the heated hose, also in relation to the relevant temperature class for ATEX applications.

### Series WEX7...

With fixed resistance heating cable (up to +200°C)



The devices of series WEX7... are suitable for applications up to 200°C (T3). The temperature can be set using suitable approved temperature control equipment (controller and limiter). This series incorporate a resistance heat conductor (fixed resistor) and need to be temperature controlled and limited. The electrical connections (ATEX connection sleeves) are arranged underneath the silicone connection cap of the heated hose.

Exact temperature setting on the entire heated hose length is not possible. The reference measurement of the temperature sensor at the installation location between the heating cable and the basic hose is transmitted to the entire length of the heating hose due to the constant heating power of the fixed resistance heating cable. Extremely low ambient temperatures or deviating medium temperatures can falsify the values measured by the temperature sensor.



### 2. Area of application

Series WEX7... carry the following ATEX marking:

for explosive gas atmospheres

for explosive dust atmospheres

for both areas

CE 0123  II 2G Ex eb mb IIC T3 Gb  
CE 0123  II 2D Ex mb tb IIIC T200°C Db  
Ta = see name plate

The heated hoses can be employed for the temperature stabilization of various media in areas with explosive gas atmospheres – zones 1 and 2 – as well as in areas with combustible dust – zones 21 and 22. They are not suitable for application in zone 0 or zone 20. The range of application embraces freeze protection, temperature maintenance and temperature increase up to a maximum of 200°C (temperature class T3). The nominal voltage of these heated hoses is 230 V. Other voltages are possible upon enquiry. The maximum permissible ambient temperature for heated hose application spans from -40°C to +85°C depending on the outer jacket (Ta = see name plate). The max. media temperature must be guaranteed by a suitable temperature control equipment (controller/limiter combination). The heating power of the heated hoses depends on the type of construction as well as on the actual length and cross-section. You will find the exact details specified on the name plate attached to the heated hose.



Different ambient temperatures along the hose route will result in different internal temperatures. The decisive factor for temperature control is the ambient temperature at the sensor location; to avoid overheating the sensor must therefore be installed at the point where the highest ambient temperature occurs. This needs to be determined in advance and taken into account during application planning. As standard, the sensors are fitted at a distance of 30 cm from the electrical connection. Other sensor locations are possible upon enquiry (hot spot).

Since the heated hose is a product for use under special conditions in hazardous areas, all the relevant Directives, rules and regulations or other requirements must be determined and complied with, including monitoring of compliance. This information can be found in the Explosion Protection Document for the entire plant, which should be kept by the operator in accordance with §6 of the German Ordinance on Hazardous Materials (GefStoffV). In addition, it is absolutely essential to observe the entire manufacturer's information (instructions for installation and operation) to ensure that the heated hose is used properly and as intended. Before putting the system into operation, please check which regulations or internal works rules are additionally applicable in your case to give you trouble-free and safe operation of the heated hose.



If the ATEX heated hoses are employed under operating conditions that are not in compliance with the present instructions for installation and operation or if the intended use is not observed, the manufacturer's warranty and liability will lapse. Please contact us in time if you have any questions in this respect so that we can help you find a solution.

### 3. Installation / initial operation



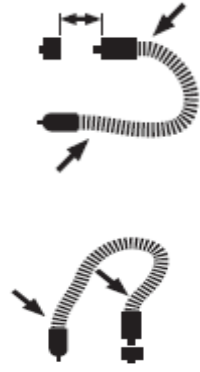
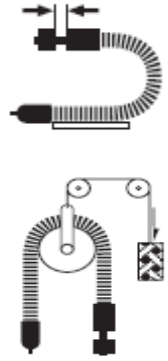


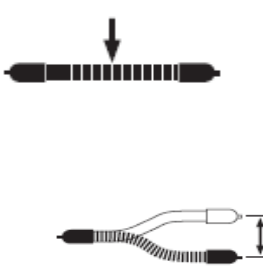
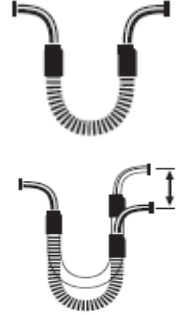


1. Check the data on the name plate. Do the type, design, mains voltage, power and operating temperature correspond to your specifications? If in doubt, compare with your documentation.
2. Does the heated hose supplied conform to the requirements at the place of installation (ATEX marking / ATEX zone) and is it suitable for this purpose?
3. Are all the certificates and confirmations available and have the persons responsible for the plant (operator) carried out an inspection of the entire hazardous area installations (Explosion Protection Document)? Do the existing facilities and ambient conditions meet the requirement for the intended use? Are there any special rules and regulations applicable at the place of installation and have these been observed during installation?
4. Observe all the following installation guidelines, especially the wrong-right chart. These guidelines are based on many years of experience as well as on a danger analysis (CE) and regular fault analyses in the heated hose sector with the aim to prevent the most common causes of failure.
5. It is essential to use suitable temperature control equipment (approved for ATEX application). For series WEX7... always connect both ATEX-PT100 sensors. The limiter must switch off permanently upon reaching the set max. temperature max. T3 200°C according to EN60079-0, i.e. switching the system back on again should only be possible manually after successful fault diagnosis and remedy. Observe the relevant guidelines and connection diagrams of the temperature control units!
6. When connecting the mains lead, the SI cable must be introduced through the gland of ATEX terminal box WZX188EX and connected to the appropriate terminals (1/2>L1; 3/4>N; PE>PE). Make sure that the ATEX glands are fully sealed. If this cannot be guaranteed, the ATEX heated hose must not be put into operation.
7. On the part of the operator, the electrical connection must be provided with a master switch (3mm contact gap), to function as disconnecter, and a 16A or 20A fuse corresponding to the heating power (observe cable cross-section).
8. It is recommended to use a residual current device RCD (FI) of  $I_r \leq 30\text{mA}$ .
9. When connecting the sensor leads, the Teflon leads in the corrugated tube must be introduced through the gland of ATEX terminal box WZX189EX (blue; intrinsically safe) and connected to the appropriate terminals. Make sure that the ATEX glands are fully sealed. If this cannot be guaranteed, the ATEX heated hose must not be put into operation.
10. The connecting power leads are normally supplied stripped and ready for connection. If shortening is necessary, use suitable tools. Wire-end ferrules must be crimped onto the stripped wire ends. If the connecting power leads need to be extended, use a suitable ATEX terminal box.
11. The operator/customer must check if the material that comes into contact with the media is resistant to the media to be heated. If you have any questions in this respect please contact us directly for advice.
12. Always monitor the first heating-up phases of the heated hose very carefully so that any possible faults can be detected and, where appropriate, remedied at an early stage. Check whether any nearby objects, plant components and other parts could cause damage to the heated hose or impair its function and, where applicable, remove or rearrange such items.

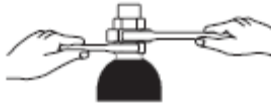


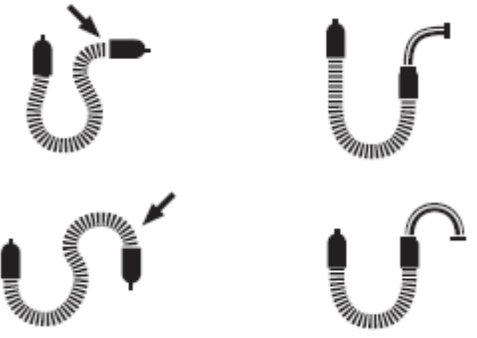


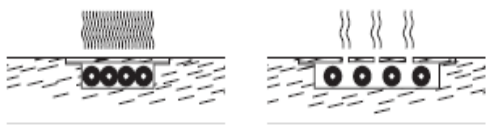



### 4. Operation / removal

1. Check the first heating-up phase exactly and monitor the further operation of the heated hose.
2. Make sure that the medium at the inflow or inlet point does not get hotter than the max. permissible operating temperature of the heated hose, otherwise the heated hose could be damaged.
3. Extreme movements or vibrations, shaking etc. should be avoided during operation of the heated hoses.
4. If you want to remove the heated hose, you must first allow it to cool down and ensure all-pole disconnection from the mains power supply.
5. The connecting power lead should never be used to pull the heated hose; it is not suitable for this purpose.
6. The fitting should never be used to pull the heated hose; the fittings are resistant to pressure, but more susceptible to tension forces.
7. It can happen that a fitting becomes clogged up when the liquid hardens and that the fitting only becomes unclogged after a certain heating-up period. Do not try to shorten this waiting period by applying heat externally. This may damage the heated hose.
8. If you notice any damage to the heated hose or abnormal functioning during operation, the hose must be switched off as quickly as possible and disconnected at all poles from the mains power supply. The fault needs to be exactly analysed in order to determine the cause.
9. Never open the heated hose or ATEX terminal box during operation!
10. Avoid exposing the heated hoses to direct solar radiation or, in unavoidable, provide suitable protection. As a result of direct and prolonged solar radiation the outer cover will suffer damage, which will impair the protective effect but only become apparent after a longer period of dynamic operation.

## 5. Installation guidelines, wrong – right chart

(Excerpt from the danger analysis)

1.	<p>If the heated hose is too short, it will be bent excessively at the connection ends. <u>Remedy:</u> Include a straight section (5 x hose diameter). A large bending radius will increase the service life of the hose.</p>	<p><b>wrong</b></p> 	<p><b>right</b></p> 
2.	<p>Hose is laid with a sagging part. <u>Remedy:</u> Supports or rollers with counterweight.</p>		
3.	<p>Pulling at the end of a rolled up hose will result in torsional stress and a bending radius smaller than permissible. <u>Remedy:</u> Unroll the hose ring without pulling at the heated hose. Observe minimum bending radius = 5 x hose diameter.</p>		
4.	<p>Compression along the longitudinal axis due to wrong installation or during movement will reduce the pressure resistance. Stretch compensation by fixed hoses leads to their destruction. <u>Remedy:</u> Bends at connection points.</p>	<p><b>wrong</b></p> 	<p><b>right</b></p> 
5	<p>Torsional movements will destroy the heated hose. This is often due to wrong installation, particularly to turning the hose in the wrong direction when connecting it up. <u>Remedy:</u> Ensure that the hose axes run parallel and that the direction of motion is on one plane.</p>		

	<p>Use a counter-wrench during installation to prevent twisting the hose.</p>	
6.	<p>Corners are danger spots because of the risk of kinks and bending stress. <u>Remedy:</u> Saddle support or roller with suitable diameter.</p>	
7.	<p>Excessive bending stress just behind the connection points is damaging. <u>Remedy:</u> Pipe bends</p> <p style="text-align: center;"><b>wrong</b>                      <b>right</b></p> 	
8.	<p>With hand-held equipment, the risk of kinks is particularly great. <u>Remedy:</u> Depending on working position, fit bend or anti-kink system (e.g., wire spiral).</p>	
9.	<p>If powdery substances, adhesives or other materials with thermal insulation properties are spilt onto the heated hose, overheating will occur at these points. <u>Remedy:</u> Constant cleaning/removing of such materials and eliminating the cause.</p>	
10.	<p>If heated hoses are laid in a closed channel or duct, this will result in heat concentration. <u>Remedy:</u> The hoses must not be in contact with each other. Additionally, adequate ventilation should be provided.</p>	
11.	<p>Bundling of hoses or laying hoses in close contact next to each other will lead to overheating at the points of contact. <u>Remedy:</u> Always leave sufficient space between the hoses.</p>	<p style="text-align: center;"><b>wrong</b>                      <b>right</b></p> 
12.	<p>Heat concentration with overheating can also be caused by wrapping other materials around the heated hose. If the sensor area is wrapped up, the remaining hose section will cool down.</p>	
13.	<p>When fixing the hose with clamps or similar it must be ensured that the outer structure is not squeezed.</p>	

## 6. Maintenance and repair / inspections

1. Should any defects become apparent on the outside of the heated hose or the connecting mains lead, the heated hose must be disconnected immediately from the mains supply, removed and sent back to our works for inspection. Never open the heated hose or any of its components on your own initiative, i.e. unauthorized, because this would endanger the explosion protection (ATEX). The connecting mains lead cannot be replaced. In the event of damage, the entire heated hose needs to be replaced.
2. Inspection or maintenance of the heated hose should be carried out at regular intervals in order to guarantee operational safety. The inspection intervals should be chosen in relation to the operating conditions on site. However, according to BGV A3 (safety instructions for electrical installations and equipment) inspections by a qualified electrician should take place at least every 6 months using suitable measurement and test equipment.
3. The service life of the heated hose will depend on the actual operating conditions. There for it is not possible to make a generally valid statement about the length of the service life. However, the service life will generally be shorter under severe operating conditions as against occasional use under optimum conditions. For more information please contact us directly for competent advice.
4. If a cut-out switches the hose off permanently, the cause has to be analysed before putting the hose back into service and appropriate measures have to be taken to prevent reoccurrence.
5. If you intend to use the heated hose for another purpose than originally planned, please get in touch with our specialists to check if it is really suited to this. Unauthorized change of use is not permitted.
6. Any changes on the hose performed by the customer will endanger the operational safety and will automatically result in the manufacturer's warranty becoming invalid.
7. If you have any problems or questions, please contact us directly for quick and competent advice (see contact data, sect. 11).

## 7. Permissible bending radii



The heated hoses have been designed to withstand bending stress. However, non-observance of the minimum bending radius or kinks or strong torsional movement will lead to the destruction of the heated hose. The minimum permissible bending radius depends on the material and the nominal diameter (DN) of the heated hose.

**As a general rule: Minimum permissible bending radius > 5 x hose diameter**

Should you require any other bending radius, please get in touch with us so that we can advise you!

## 8. General technical data (For specific technical data, see name plate on the heated hose)

Min./ max. ambient temperature	: -40°C to +85°C <b>depending on the outer jacket (Ta = see name plate)</b>
Max. operating temperature	: +200 °C - temperature class T3
Nominal operating voltage	: 230 V (AC) / 50 Hz (other voltages upon enquiry)
Nominal power	: depending on heated hose type (see name plate)
Power tolerance	: +/- 10 %
Connecting mains lead	: 2.0 m silicone lead (3 x 1.5mm <sup>2</sup> / 3 x 2.5mm <sup>2</sup> )
Connecting sensor leads	: 2.0 m Teflon lead
Chemical resistance	: Inner tube > depending on the version and according to the documentation of the basic hose Outer jacket > depending on the version and according to the documentation of the outer jacket

## 9. Pressure load

The high-quality PTFE smooth hose / flexible corrugated hose or corrugated stainless steel hose may only be subjected to pressure because it is provided with stainless steel braiding / coils and suitably pressed-on fittings. The pressure load capacity of the flexible heated hoses – equipped with fittings – varies in relation to the different working temperatures.



**Take account of pressure peaks (dynamic operation)!**

They can be very high and are not registered on normal pressure gauges. The operating pressure must never be exceeded.

## 10. Chemical resistance of the outer jacket

The chemical resistance of the basic hose and the electrostatically dissipative outer jacket should be determined by the operator in advance. Since the basic hose is application-specific customized it is expected that the chemical resistance is ensured. This should also be the case for the outer jacket (P / W / G) since it can also come in contact with the heated medium. Please note that there is a dependency on the ambient temperature and working temperature, the exposure duration (constant or occasional contact) and the concentration of the chemical substance. Values taken from resistance tables only meant to serve as a guideline.

However, the suitability for the individual application must be checked by the operator/user. If you have any questions or problems in this respect, please get in touch with us for further information (see sect. 11, contact data).

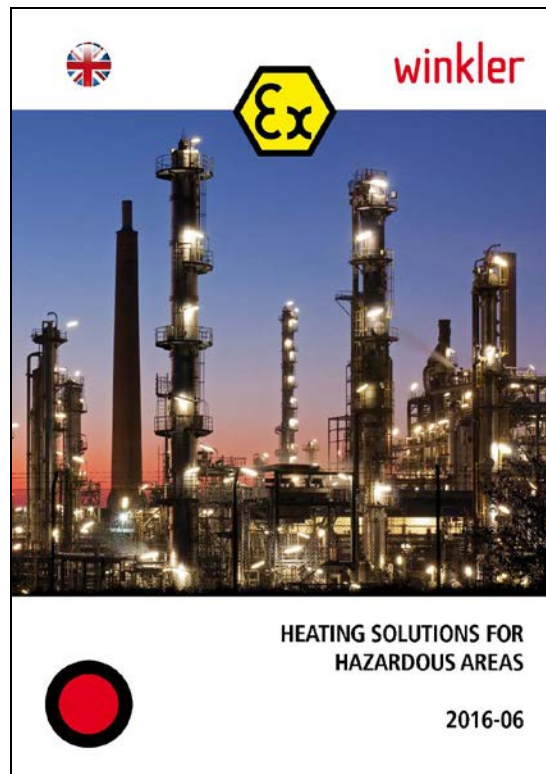


## 11. Contact data

Winkler AG  
Englerstrasse 24  
D-69126 Heidelberg  
Germany

Tel. +49-6221-3646-0  
Fax +49-6221-3646-40  
E-Mail: [atex@winkler.eu](mailto:atex@winkler.eu) / [sales@winkler.eu](mailto:sales@winkler.eu)  
Homepage: [www.winkler.eu](http://www.winkler.eu)

Issued 04 / 2019



Catalog heating solutions for hazardous areas





### 12. EU Type Examination Certificate

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ CERTIFICADO ◆ CERTIFICAT

(1) **EU-Type Examination Certificate**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:  
**TPS 17 ATEX 29587 016 X**

(4) Equipment: **Ex-Heating hoses**  
Type: **WEX7**

(5) Manufacturer: **Winkler GmbH**

(6) Address: **Englerstr. 24, 69126 Heidelberg**

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) TÜV SÜD Product Service GmbH, notified body No. 0123 in accordance with Article 17 of the Council Directive 2014/34/EU of the European Parliament and of the Council dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipments and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive.  
The examination and test results are recorded in the confidential report 713090457.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

<b>EN 60079-0:2012 + A11:2013</b>	<b>EN 1127-1:2011</b>	<b>EN 60079-7:2015</b>
<b>EN 60079-18:2015</b>	<b>EN 60079-31:2014</b>	<b>EN 60079-30-1:2007</b>

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

**II 2G Ex eb mb IIC T3 Gb**

**II 2D Ex mb tb IIIC T200°C Db**

Product Service

Certification body

Andreas Pfeil

Filderstadt, 2017-06-07

Page 1 / 2

EU-Type Examination Certificate without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH. In case of dispute, the German text shall prevail.  
(Document no.: TPS 17 ATEX 29587 016 X)

The document is internally administrated under the following number: EX5A 17 06 29587 016  
TÜV SÜD Product Service GmbH · Zertifizierstelle · Ridlerstraße 65 · 80339 München · Germany

A17/04.11

TUV®

Winkler AG, Englerstraße 24; 69126 Heidelberg; Tel. +49 (6221) 3646-0; Fax. +49 (6221) 3646-40; E-Mail: [sales@winkler.eu](mailto:sales@winkler.eu); [www.winkler.eu](http://www.winkler.eu)

Issue 04 / 2019

9 of 12



Product Service

- (13) **Schedule**
- (14) **EU-Type Examination Certificate TPS 17 ATEX 29587 016 X**
- (15) Description of equipment:

The Ex-Heating hoses are used to heat mediums. Fixed-resistor design.

Coding of model:

WEX0abbc-230ZEdd-EEEEffT3

W = Winkler

EX = Ex model

7 = Series 7

a = Type/ Outer sheath (P-easy / W-avarage / G-heavy version)

bb = Indication of the type of heater band (power)

c = Basic hose and fittings

230 = Operating voltage 230 V / 115 V

Z = Number of thermo couples (XX = no ; XE = one ; ZE = two)

E = EX-PT100 thermocouple

ddd = Nominal diameter of the basic hose

EEEE = Length of the heating hose in cm

ff = Sensor position basic hose

T3 = Code for temperature class T3

Electrical data:

Rated voltage: 230 V / 115 V ~; 50/60 Hz

Max. load heating cable: max. 30 W/m

Ambient temperature:  $-40^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$  (Outer sheath : W7:  $-20^{\circ}\text{C} \leq T_a \leq +65^{\circ}\text{C}$ )

Maximum temperature: X-Marking / refer to special conditions

- (16) Test report: 713090457

- (17) Special conditions for safe use:

Operator side, ensure that the permissible operating temperatures and pressures are not exceeded. It must be used an approved and suitable Controller / Limiter combination for Ex-area.

The real maximum surface temperature of  $195^{\circ}\text{C}$  (Dust-Ex) /  $195^{\circ}\text{C}$  (T3/Gas-Ex) must be complied with. The Ex-heating hose must be cleaned cyclically in the Dust-Ex area.

During operation dust layer has to be  $< 5$  mm. The manufacturer's instructions according installation note and user manual must be followed.

- (18) Essential health and safety requirements:

met by standards.

Certification body

Filderstadt, 2017-06-07



Andreas Pfeil

Page 2 / 2

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TUV®



## 13. EU Declaration of Conformity

**EU-DECLARATION OF CONFORMITY** winkler.eu

Manufacturer : WINKLER AG  
Englerstraße 24  
69126 Heidelberg



Contact : Tel.: ++ 49 (0) 6221-3646-0 Fax.: ++ 49 (0) 6221-3646-40  
atex@winkler.eu www.winkler.eu

Product group : ATEX HOSES

Product : **Series WEX7....**

Directives : DIRECTIVES 2014/34/EU (ATEX)  
"of the European Parliaments and Council of 26 February 2014 on the harmonisation of laws of Members States relating to equipment and protective systems intended for use in potentially explosive atmospheres" Annex III EU-Type-Examination

We hereby declare that in planning and manufacturing of this product the basic safety and health requirements of the EU Directives mentioned above have been observed.

Identification CE<sub>0123</sub>  II 2G Ex eb mb IIC T3 Gb  
CE<sub>0123</sub>  II 2D Ex mb tb IIIC T200°C Db  
-40°C ≤ Ta ≤ +85°C / Ta = see type plate

EU-Type Examination Certificate **TPS 17 ATEX 29587 016 X**

Further rules and technical specifications applied:

EN 1127-1:2011	EN 60079-7:2015	EN 60079-31:2014
EN 60079-0/A11:2014	EN 60079-18:2015	EN 60079-30-1:2014

Any modification to the product without our consent will make this declaration invalid.

Heidelberg, February 01<sup>th</sup> 2019

Winkler AG

Andreas Zenner  
CEO



14. QM-Certificate according to ISO 9001:2015 and to Directive 2014/34/EU Annex VII

ZERTIFIKAT ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFICAT ◆ 認 證 證 書 ◆



# CERTIFICATE

The Certification Body  
of TÜV SÜD Management Service GmbH  
certifies that



**Winkler AG**  
Englerstr. 24  
69126 Heidelberg  
Germany

has established and applies  
a Quality Management System for

**Development, manufacture and sales  
of heat engineering products with  
control and monitoring systems.**

An audit was performed, Report No. 70002379.  
Proof has been furnished that the requirements  
according to

**ISO 9001:2015**  
are fulfilled.

The certificate is valid from 2018-10-23 until 2021-04-19.  
Certificate Registration No.: 12 100 28096 TMS.




Product Compliance Management  
Munich, 2018-10-24

TÜV SÜD Management Service GmbH • Zertifizierungsstelle • Ridlerstrasse 65 • 80339 München • Germany  
www.tuev-sued.de/certificate-validity-check


ZERTIFIKAT ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFICAT ◆ 認 證 證 書 ◆

## Product quality assurance notification

No. EX3A 18 07 29587 020

**Holder of Certificate:** Winkler GmbH  
Englerstraße 24  
69126 Heidelberg  
GERMANY

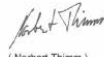
**Factory(ies):**  
Winkler GmbH  
Kleinfeldweg 38, 69190 Walldorf, GERMANY  
  
Winkler GmbH  
Englerstraße 24, 69126 Heidelberg, GERMANY

**Scope of Certificate:**  curing tube, heating sleeve, modulator-delimiter-power controller-combination Equipment Group II, category 2 G/D protection level "e", "l", "m", "t"

The certification body of TÜV SÜD Product Service GmbH certifies that the certificate holder maintains a quality system which fulfils the requirements of Annex VII of Directive No. 2014/34/EU for Equipment and protective systems intended for use in potentially explosive atmospheres (ATEX). The Validity of this Certificate requires periodical surveillance. See also notes overleaf.

**Report no.:** 713133503

**Valid until:** 2021-05-23

**Date,** 2018-07-13   
(Norbert Thimm)

TÜV SÜD Product Service GmbH is a Notified Body in accordance with Directive 2014/34/EU for equipment and protective systems intended for use in potentially explosive atmospheres with the identification number 0123.

Page 1 of 1

