

Installation and Maintenance Instruction Manual



Bourdon tube pressure gauge, model T5500 KF and T6500 KF

for explosion risk areas in European Union pursuant to Directive 2014/34/EU

In the following configuration:

- ###T5500 KF/T6500 KF###I#####ATEX bourdon tube pressure gauge with inductive proximity switches



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1 General remarks

The bourdon tube pressure gauge described in these operating instructions is designed using the latest standards, guidelines and findings. During the manufacturing processes, all components are subject to our high quality and environmental criteria. For this purpose, we maintain certified management systems according to ISO 9001 and ISO 14001. For the special requirements of devices for intended use in potentially explosive atmospheres, we maintain a management system according to ISO 80079-34.

The source language of this technical documentation is English, all other languages are based on translations.

1.1 Purpose of this Manual

These operating instructions contain basic instructions that must be followed for the installation, operation and maintenance of the device. It must be read by the installer, the operator and the specialist personnel responsible for the device before the device is installed and commissioned. These operating instructions must always be available at the place of use.

The following sections on general safety instructions 2 as well as the following special instructions on intended use 0 to disposal □ contain important safety instructions, the non-observance of which may cause health and safety hazards to people, in particular to workers, and possibly to domestic and farm animals, as well as property.

1.2 Symbols



Warning!

This indicates a possibly hazardous situation where failing to follow advice may result in risks to people, animals, the environment and buildings.



Information!

This emphasizes key information for efficient, fault-free operation.

1.3 Limits of liability

Failure to respect this safety information, the envisaged uses or the limit values relating to use indicated in the technical data for the device may result in risk or to injury to people, the environment or the plant.

Claims for compensation for damage against the device supplier are excluded in such an eventuality.

1.4 Copyright

This Operating Manual may only be copied and passed on as a complete document without the special permission of the publisher.

1.5 Warranty

For the product described here, we offer a warranty pursuant to Section 6 Guarantee in Respect of Defects in our General Terms and Conditions of Delivery and Payment.

1.6 Manufacturer's address, customer services

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2 Safety

2.1 General sources of hazards

Pressure gauges are pressurized parts where failure can result in hazardous situations. The selection of pressure gauge should be made in accordance with the rules set out in EN 837-2.

2.2 Use in accordance with intended purpose

The devices may only be used for the purpose intended by the manufacturer.

The intended use of the devices, determined by the manufacturer, is the direct indication of negative and positive overpressures in potentially explosive atmospheres.

According to the Pressure Equipment Directive 2014/68/EU, the device is classified as pressure-maintaining equipment without a safety function in accordance with Article 4(3) of the Directive.

When operating the device, care must be taken to ensure that the medium used is harmless to the selected device material. Process media that exhibit changes in the state of aggregation within a range of application can influence the functionality. Negative influences must be avoided for this reason. The process condition of these media must be within the technical limits of the device.

Further technical data on the intended use are summarized in the product data sheet, see section 12.1 these instructions.

2.3 Operator's responsibility

Instructions for the proper operation of the device must be observed. They are to be provided by the operator, the respective qualified personnel for installation, maintenance and operation. Hazards due to magnetic fields, electrostatic charges and leaking media due to improper connection of the device must be excluded. The device must be included in the equipotential grounding within the system; this can be ensured by selecting electrically conductive seals.

The device must be taken out of operation and secured against unintentional operation if it must be assumed that safe operation is no longer possible (see chapter 10, Faults).



Opening the device and performing technical modifications by the customer violate the explosion protection approval and are not permitted.

The operational safety of the device and the manufacturer's warranty are only guaranteed if the device is used as intended. The device design, as well as a possible housing filling, must be adapted to the medium and potentially explosive atmosphere used in the plant. The limit values specified in the technical data must not be exceeded.

The safety instructions listed in this operating manual, existing national regulations for accident prevention and internal work, operating and safety regulations must be observed by the operator. Furthermore, he is responsible for ensuring that all prescribed maintenance, inspection and assembly work is carried out by authorized and qualified personnel.

The device is to be regarded as a pressure-maintaining part of a plant in a potentially explosive atmosphere. The operator of this plant is obliged to carry out an ignition hazard analysis and a zone classification..

2.4 Staff qualifications (target group assessment)

The device may only be installed and commissioned by trained specialist personnel.

Specialized personnel are persons who are able to perform the work assigned to them due to their specialized training, experience and knowledge of the country-specific regulations, applicable standards and guidelines. For explosion-protected devices, the personnel must be trained or instructed or authorized to work on explosion-protected devices in hazardous areas.

2.5 Signs/Safety markings

The device is provided with a label. The label shows the type designation, measuring range, serial number, year of manufacture, certificate of approval number, filling medium, Ex marking (including X for special conditions of use), electrical connection parameters and manufacturer.

On the dial the manufacturer, measuring unit, accuracy class, note Silicone-free, note Oxygen-Service and the applied standard are visible.

The device may have other labels and safety marks indicating special conditions of use:

- Note on calibration
- Note on the use of the manual, Note on the use of the vent plug.

The operator must check the label, which is important for the use in potentially explosive atmospheres, at regular intervals to ensure that it remains legible.

The outer packaging is labeled with the type designation, order number, item number, measuring range and manufacturer's data.

2.6 Safety equipment

This unit is equipped with a blow-out rear cover (type T6500-KF) or blow-out disc (type T5500-KF). For a description, see Chapter 6.3.4. The window is made of laminated safety glass, no other material options are permitted here.

2.7 Environmental protection

This device may optionally contain filling liquid (e.g. glycerin or silicone oil). The provisions of the Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) 2006/1907/EC must be observed, the corresponding safety data sheets of the manufacturers of the chemicals, are available for download on our website. At the end of the product life cycle we recommend to recycle the devices, as they are mostly made of stainless steel. Instructions for disassembly, material separation and disposal can be found in chapters 11.1 and 11.2.

3 Use in potentially explosive atmospheres according to Directive 2014/34/EU (ATEX)

3.1 Range of use

Potentially explosive atmospheres Zone 1 and 2, as well as 21 and 22, hazard due to gases and dry dusts.

The permissible environment has the usual oxygen content (21%), ambient pressure 80 kPa (0.8 bar) to 110 kPa (1.1 bar).

The requirements of the applicable standards EN ISO 80079-36:2016, EN ISO 80079-37:2016 and EN 1127-1:2019 were considered by an ignition hazard assessment. The applicable requirements of these standards have been met.

For the European Union the documentation has been filed with TÜV-Nord-Cert NB 0044 (see Declaration of Conformity).

Ambient temperatures:

Execution	Min. / Max. permissible ambient temperature
Dry finish	-20°C to +60°C
PLUS!™ Performance	-20°C to +60°C
Liquid filled devices	-20°C to +60°C

The temperature influence on the accuracy in the case of a deviation from the reference temperature 20°C according to DIN EN 837-1 (chap. 9.1) is max. $\pm 0.4 \%$ / 10 K of the full scale value.

To avoid additional influences on the device, they must not be exposed to direct sunlight during operation.

Process media Temperatures:

Permissible max. medium temperature in the measuring system
90°C

The process media temperature depends on the ignition temperature of the surrounding gas, vapors or dust, on the design of the device, especially the pressure change rate and the surface, as well as the ambient temperature and other external heat sources. The device itself does not have its own heat source.



Rapid pressure changes or pressure surges must always be avoided to protect the movement and the switching contact. Suitable protective measures, such as a throttle screw, must be used.

The devices are calibrated up to a measuring range of 70 bar with the medium gas, above that liquids are used.

EPL	Temperature classes Ignition temperatures <u>for gases and vapors</u>	Permissible, max. surfaces incl. ambient temperature	
		Dry finish	Liquid filled devices
Gb	T4 (> 135°C ... ≤ 200°C)	95°C	95°C
	T5 (> 100°C ... ≤ 135°C)	95°C	95°C
	T6 (> 85°C ... ≤ 100°C)	80°C	80°C

The maximum surface temperature including the ambient temperature, for the application on site, depends on the device type with its technical specifications. The lowest temperature limits apply in each case.

Temperatures in explosive atmospheres - Dusts

For the determination of the ignition temperature, the method according to ISO/IEC 80079-20-2 is to be used. This can only be carried out by the user on site for the individual case. The device-specific properties as well as the limit temperatures of the dusts and their form as a deposited layer or in the form of a surrounding dust cloud must be taken into account here. For this reason, the ignition temperatures must be determined separately. In the case of dust layers, the thickness of the dust layer must be taken into account as a further criterion.

EPL	Permissible max. surface temperature of device
Db	T95°C (without dust cover and safety factor)



The devices must not be operated in potentially explosive areas of a plant in which an explosive mixture of gases and dusts is present in the atmosphere.

Labeling:

Ex marking according 2014/34/EU				Ex marking according ISO 80079-36 / 80079-37				
CE	Ex	II	2G 2D	Ex h	IIC IIIC	T6...T1 T95°C	Gb Db	X
CE	Ex	II	2G 2D	Ex h	IIC IIIC	T6...T1 T95°C	Gb Db	X
CE	Conformity mark							
Ex	Explosion protection mark							
II	Group II equipment is intended for use in locations with explosive gas atmospheres, excluding mine gas and/or dust from hazardous mining operations.							
2G	Equipment group for gases and vapors in which an explosive atmosphere may occasionally occur during normal operation.							
2D	Equipment group for dusts in which an explosive atmosphere may occur during normal operation or for a short period.							
Ex h	Marking according to the equipment protection level for non-electrical equipment in potentially explosive atmospheres							
IIC	Suitable for gas atmosphere IIC							
IIIC	Suitable for combustible suspended solids, non-conductive and conductive dust							
T6...T1 T95°C	Maximum surface temperatures which are mainly dependent on the operating conditions							
Gb	Equipment protection level for gases containing all potential ignition sources that are effective, which may occur during normal operation, rare and expected malfunctions.							
Db	Equipment protection level for dusts containing all potential ignition sources that are effective, which may occur during normal operation, rare and expected malfunctions.							
X	Special operating conditions must be observed and can be found in the operating instructions.							

3.2 Special operating conditions for safe use in potentially explosive atmospheres

- Maintenance work to be carried out, from chap. 9 (such as refilling the equipment with the filling medium) by unauthorized personnel may result in damage and lead to loss of approval.
- To avoid possible spark generation due to static charge, the device should always be cleaned with a damp cloth.
- The legibility of the nameplates must be checked at regular intervals. It must remain legible throughout the entire period of use of the device. If a reliable reading is no longer given, please contact the manufacturer.
- Impacts on the device must be avoided at all costs. Impacts or shocks can produce sparks.
- It is the responsibility of the operator to evaluate attached process components or accessories together with the delivered device by means of an ignition hazard analysis. The operator must recognize the ignition hazards and prevent them by using appropriate protective measures.
- The operator must comply with the points from chapter 2.3 "Responsibility of the operator".

EU type examination certificates for the built-in inductive proximity switch	
Product code	File number
Ixxxx	PTB 99 ATEX 2219 X
IxxxxSN	PTB 00 ATEX 2049 X

The built-in proximity switch is indicated on the type plate as product coding and wiring diagram.



For use in potentially explosive atmospheres, the devices must be connected to certified intrinsically safe circuits.

Electrical connection parameters	
Max. supply voltage	$U_{\max} = 16 \text{ V}$
Max. current	$I_{\max} = 25 \text{ mA}$
Max. power	$P_{\max} = 64 \text{ mW}$
Max. capacity of proximity switch	$C_{i \max} = 30 \text{ nF}$
Max. conductivity of proximity switch	$L_{i \max} = 100 \text{ }\mu\text{H}$

Recommended isolating switch amplifier		ATEX	SILx	Namur
Switch contact Code Ixxxx	KCD2-SOT-Ex1.LB (1-channel) KCD2-SOT-Ex2 (2-channel)	x	SIL2	Namur
Switch contact Code IxxxxSN	KFD2-SH-EX1 (1-channel)	x	SIL3	Namur with safety function

For non-electrical part of device the requirements of the applicable standards EN ISO 80079-36:2016, EN ISO 80079-37:2016 and EN 1127-1:2019 were considered by an ignition hazard assessment. The applicable requirements of these standards have been met.

For the European Union the documentation has been filed with TÜV-Nord-Cert NB 0044 (see Declaration of Conformity).

4 Technical data

The detailed technical information can be found in the documents in the Appendix, Chapter 12.

5 Marking of the device

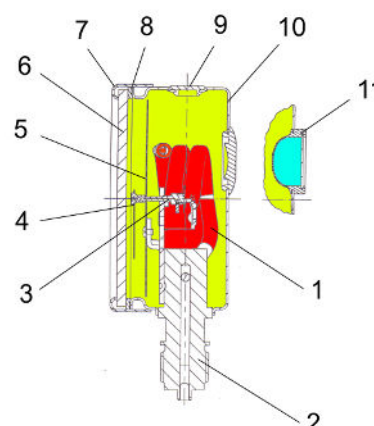
The nameplate with serial number and type designation is located on the housing. The materials used for the wetted parts as well as other device-specific versions are represented by a type coding on the nameplate and can be broken down at any time with the aid of the data sheet. The marking for the hazardous areas, in the form of the description of the type of protection, the permissible ambient temperature and the deposit number, are located in the lower area of the nameplate. If the differential pressure gauge is specified with an integrated inductive proximity switch the electrical parameters are mentioned on the name plate.

ASHCROFT®		Ashcroft Instruments GmbH 52477 Alsdorf, Germany
100=T6500_KF=S=L=15=L=10BR=X=ATEX=GV=CS=I100		2024
0=EN	P _{max} : 1.3 x FS	S/N : 01138203
T _{amb} : -20 ... 60°C	Fill Fluid: Silicone	
CE 	II 2G Ex h IIC T6...T4 Gb X	File No.: 35134582
	II 2D Ex h IIC T95°C Db X	
U _i = 16 V	I _i = 25 mA	P _i = 64 mW

6 Construction and function

6.1 Overview

1. Tube
2. Spring support and process connection
3. Measuring system
4. Pointer
5. Dial
6. Window
7. Bayonet ring
8. Seal
9. Venting valve
10. Case
11. Blow-out spout/compensation diaphragm



6.2 Description of function

An elastic measuring element in the form of a Bourdon tube (circular or helical, depending on the measuring range) is welded to a socket. It is pressurized on one side from the inside. A pressure transmission medium can be gaseous or liquid, depending on the material and design used.

Pressure loading causes elastic deflection from the normal position. This deflection is proportional to the applied pressure. At the end of the Bourdon tube, a tension rod picks up the deflection and transmits it to a movement. The measured value is displayed on a 270° scale.

The requirements for indicating pressure gauges with Bourdon tubes are in accordance with EN 837-1.

The device is equipped with inductive contact switches with non-contacting electrical proximity sensors (proximity switches) in accordance with DIN EN 60947-5-6 (NAMUR).

The output signal is determined by the presence and absence of a control vane moved by the actual value pointer in the area of the electromagnetic field of the proximity switch. An adjustment lock with a separate or permanently mounted key is used to set the setpoint pointers of the built-in limit switch contact assemblies from the outside to the setting at which the switching operation is to take place.

6.1 Description of components

6.1.1 Scale with pointer

The pressure gauge is equipped with a dial and pointer according to EN 837-1, nominal size 100 mm or 160 mm.

6.1.2 Instrument connection

The instrument connection is located on the bottom (Model T5500-KF, T6500-KF) or eccentrically on the back (available on Model T5500-KF only) of the instrument.

6.1.3 6.3.3 Vent valve

The vent valve (if present) is located on the top of the instrument. When the nipple (pull) is pulled out, the housing is vented and the pressure built up in the housing due to temperature influence is relieved.

When the valve is closed, the degree of protection is IP66/IP67 according to EN 60529 / IEC 60529.

When the valve is open, the degree of protection is reduced to the minimum requirement according to EN ISO 80079-37 chap. 5.2.2a

6.1.4 6.3.4 Blow out back cover/disc

The device has a blow-out disc (model T5500-KF) or a blow-out back cover (model T6500-KF) on the rear wall of the housing. These serve as a safety device in accordance with EN 837-1 and enable automatic compensation of the internal housing pressure, which can be caused by temperature influences in the housing, via a rubber diaphragm.

6.2 Accessories

Please contact the manufacturer for information on special sealing materials and accessories.

7 Transportation

The device must be protected against impact. Transport must be carried out exclusively in the glass-break-proof packaging provided for transport. The device shall only be transported in a cleaned condition (free of residual media).

7.1 Delivery

The delivery is to be checked for completeness and transport damage. In case of transport damage, the delivery is not to be accepted or only with reservation, the extent of damage is to be noted and, if necessary, a complaint is to be initiated. In these cases, please contact our service department.

7.2 Storage

The storage of the devices should exclude external influences as far as possible to avoid damage to the devices. Vibrations or impact effects must be avoided, and the limit values of the storage temperatures must be taken into account.

Permissible storage temperature: -40 to +60°C

8 Assembly/Installation

8.1 Preparation

To ensure safe working during installation and maintenance, suitable shut-off valves must be installed in the system, by means of which the unit can be

- depressurized within the relevant plant for the purpose of repair or inspection,
- subjected to a functional check on site.

During assembly/installation work, the system must be secured against being switched on again.

It is recommended to perform the assembly / installation without an existing explosive atmosphere (e.g. ventilated room).

8.2 Requirements for the installation site

- Check the suitability of the device for the process media to be measured,
 - Design of the measuring range to the requirements of the measurement,
 - A gauge support must be installed if the measuring line does not have sufficient load-bearing capacity,
 - Units with blow out device require a minimum distance to the rear of min. 20 mm,
 - The installation location must be chosen in such a way that workplaces of the operating personnel are not located at the rear of the measuring device,
 - Protection against pressure surges by means of suitable pressure snubbers,
 - Protection against mechanical vibration, e.g. by means of a flexible capillary line.
- The following limits must not be exceeded under any circumstances:
 Frequency of mechanical vibration: max. 150 Hz
 Acceleration: max. 0.5 g (approx. 5 m/s²)

8.3 Process connection

The process connections comply with the general technical regulations for pressure gauges. Thread types and materials of the process connections may vary depending on the application.

- Assembly of the device only by authorized and qualified personnel.
- The device must be integrated into the equipotential bonding of the process installation (e.g. by using an electrically conductive seal).
- The pressure pipe must be laid inclined in such a way that, for example, for measurements of fluids no air bubbles can form, and for measurements of gases no water pockets. If the necessary incline is not achieved, then at suitable points water separators or air separators must be installed.
- The pressure measuring line should be kept as short as possible and laid without sharp bends.
- In the case of liquid measuring media, the pressure line must be vented, as trapped air bubbles could lead to a measuring error.
- It must be ensured that the blow-out back cover is not blocked and that a sufficiently large distance to the nearest stationary object is guaranteed.
- If water is used as the measurement medium, the device must be frost-protected.
- The unit is adjusted at the factory for vertical mounting position.



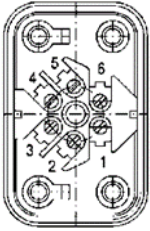
**Only use the appropriate open-end wrench to tighten the sealant on the intended wrench flat.
 The tightening torque depends on the sealant used.**

8.4 Electrical connection

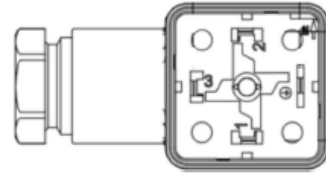


Take note of the electrical data in the EU design type test certification and the locally-applicable regulations and guidelines for installing and operating electrical plant in explosion risk areas (e.g. EN 60079-14, EN 60079-17 etc.).

- Connection to be undertaken by authorized and qualified specialist staff only.
- The electrical connection of the device is to be undertaken in accordance with the relevant regulations of the VDE and the regulations supplied by the local utilities company.
- Disconnect the plant from the mains supply before wiring electrical connections.
- Install appropriate fuses upstream.



Please refer to type label for configuration of connections.



8.5 Starting up

A prerequisite for starting up is the proper installation of all measuring lines. All connection must be laid in such a way that no mechanical forces can act on the device.

Before starting up, the tightness of the pressure connection must be checked.

Any shut-off valves must be opened slowly to avoid pressure surges.

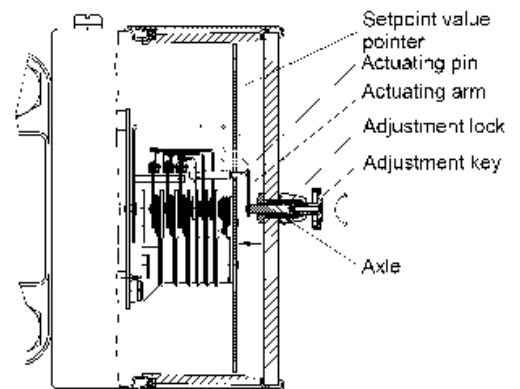
8.5.1 Setting the switch point

An adjustable lock is fitted in the front panel of the pressure gauge. Using the removable adjustment key, the contacts mounted on the target value indicators can be set to any point on the range covered by the scale.

For reasons relating to accuracy of switching and the lifetime of mechanical measurement systems, the switch points should be positioned between 10% and 90% of the range.

- Place the adjustment key on the axle of the adjustable lock.
- Press the axle inwards, until the carrier arm grips behind the adjuster pin on the target value indicator.
- By turning the key, adjust the target value indicator to the desired switch point.

Release the pressure on the axle, and remove the adjustment key.



8.5.2 Contact function

Function 1: Close contacts with the indication rising in a clockwise direction.

Function 2: Open contacts with the indication rising in a clockwise direction.

Contact assignment:

- 1st contact left target value indicator,
- 2nd contact middle target value indicator,
- 3rd contact right target value indicator

8.6 Subsequent relocation of the gauge



Do not disassemble the device from the measuring point in order to mount it at another measuring point without cleaning it first (cleaning the Bourdon tube). There is a risk of mixing media with unpredictable chemical reactions.

9 Servicing

The devices are low maintenance. To ensure reliable operation and a long service life of the device, we nevertheless recommend that the device is checked regularly. When carrying out maintenance work on the device, the lines must be depressurized, unintended starting up must be prevented.

In case of frequent ambient temperature changes and heavy use of the red set hand adjustable, it is recommended to check the adjustment device regularly and replace it if necessary.

9.1 Check on function, and recalibration

Calibration

For our devices we recommend a calibration interval of:

- Accuracy class ≤ 0.6 annual recalibration.
- Accuracy class ≥ 1.0 recalibration at an interval of two years

Functional tests

The exact test cycles must be adapted to the operating and ambient conditions. When various device components interact, the operating instructions of all other devices must also be observed.

- Check on the display.
- Check on function, in conjunction with downstream components
- Check of pressure lines for damage and tightness.
- Check of filling liquids, the level must not fall below 80 to 85 % of the window diameter

9.2 Cleaning and maintenance

Cleaning is carried out with a non-aggressive cleaning agent and a damp soft cloth to avoid electrostatic charging. In the same work process, care can be taken to detect possible damage to the device at an early stage. If any damage is detected, the unit should be handed over to the manufacturer's service department immediately.

10 Faults

All defective or faulty equipment must be taken out of service. Defective or faulty devices should be handed over to the manufacturer's service department immediately. Under no circumstances repair attempts should be made on site. Device safety can no longer be guaranteed.

Contact details see chap. 1.6

Fault	Possible causes	Possible measures
Jerky or random pointer movement	Defective measuring device due to high vibrations of the plant	Check for mounting errors and installation location. Decoupling plant --- device Replace device if necessary
No zero setting of the pointer with pressure less device	Device was overloaded, operation outside device specification	Replacement of the device, Repair usually no longer possible.
Bent or loose pointer	Damage with transport or external rough impact	Repair by the manufacturer
Cracked window	External influences	Repair by the manufacturer
Leakage with filled device	High solar radiation, operation outside the device specification	Repair by the manufacturer
Leakage with filled device	Window option red set hand adjustable used out of ambient temperature range	Repair by the manufacturer
Case damage	Improper handling	Check installation location, Device must be replaced

Signs of leakage of the measuring system (discoloration of the dial or the filling liquid).	Process media not compatible with the material used for the Bourdon tube, installation location with excessive external influences	Improper use, Replace device Shield installation site or relocate installation site. Attach shields to the device
Inductive switching contact does not operate	Defective measuring mechanism due to high vibrations of the system Rapid pressure changes or pressure surges	Check installation location, Repair by the manufacturer

10.1 Behavior after rectifying the fault

See chapter 8 Assembly/Installation

11 Removal, disposal

11.1 Disassembly

- During maintenance work on the unit, the lines must be depressurized and the system must be secured against being switched on again.
- Dismantle the measuring device using a suitable tool
- For devices with case filling, close the vent plug before disassembly



Residual media in and on dismantled measuring instruments can endanger people, the environment and equipment. Sufficient precautionary measures must be taken. If necessary, the devices must be cleaned thoroughly (see notes in the safety data sheets).

11.2 Disposal



At the end of the product life cycle, do not dispose of this product with normal household waste. Take this product to a collection point or a specialist disposal company for recycling of the components.

With the help of the product coding and our data sheets (see Appendix 12.1 available on our website) you will receive the necessary information to be able to carry out a material separation yourself. Our devices described in this manual are mostly made of stainless steels which can be recycled. Before disassembling, check if there is a device filled with filling fluid. This fluid must first be drained off and collected in accordance with the safety instructions in the safety data sheet. Then separate the case ring, which carries the window, from the case using a strap wrench. The sealing ring and flat glass can be removed. Next, remove the pointer and dial, which are made of aluminum. Dismantle the venting and pressure equalization device last, everything else is made of stainless steel.

Materials to be recycled:

- Filling fluid (oil see data sheet)
- Stainless steel (case, case ring, Bourdon tube socket, Bourdon tube, movement see data sheet)
- Dial and pointer (aluminum)
- Window (see data sheet glass or plastic)

Seals (sealing ring of the sight glass, venting device, pressure relief device)

Please help to protect our environment!



Some of the product materials can be reused if you take the product to a collection point or to a waste management company. By reusing some parts or raw materials from used products, you make an important contribution to protecting the environment.

Our products are delivered in optimized packaging. This essentially means that materials are used which can be recycled as secondary raw materials at the local disposal service. For more information on the disposal of packaging, please contact your local administration.

12 Appendix

12.1 Data Sheet Bourdon Tube Pressure Gauge T5500 KF/ T6500 KF

Detailed data sheet is available from supplier's website (see 1.6 Manufacturer's address, customer services)

This Table refers to specific documents:

Model	Description	Document
T5500KF	Stainless Steel Pressure Gauge Model T5500-KF	DS.T5500 KF
T6500KF	Solid Front Stainless Steel Pressure Gauge Model T6500-KF	DS 65500 KF
K55	Electrical contact devices for pressure and temperature gauges	DS.K55

12.2 EU Declaration of conformity model T5500 KF and T6500 KF



EU-Konformitätserklärung EU-Declaration of Conformity EN ISO IEC 17050-1:2010

Ashcroft Instruments GmbH
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erklärt in alleiniger Verantwortung, dass die mit CE gekennzeichneten Produkte
declares in sole responsibility that the products marked with CE

Gerät: Druckmessgerät Typ T5500-KF / T6500-KF mit induktivem Näherungsschalter
Equipment: Pressure gauge Type T5500-KF / T6500-KF with inductive proximity switch
Kennzeichnung: TÜV 35134582
Marking:

CE **Ex** II 2G Ex h IIC T6...T4 Gb X
II 2D Ex h IIC T95°C Db X
Ta = -20°C to +60°C

Herstellungsdatum: ab 15.10.2024
Date of manufacture: from 15th of October 2024

die grundlegenden Sicherheits- und Schutzanforderungen erfüllen, in Übereinstimmung mit den unten genannten Richtlinien und Normen. Die Konformitätsaussage bezieht sich auf die Konzeption und Fertigung der oben genannten Produkte.
the fundamental safety and protection requirements passed in accordance with the guidelines and standards listed below. This declaration of conformity refers to the design and manufacture of the above products.

Richtlinie <i>Directive</i>	2014/34/EU „Geräte und Schutzsysteme zur bestimmungs-gemäßen Verwendung in explosionsgefährdeten Bereichen“ <i>“equipment and protective systems intended for use in potentially explosive atmospheres”</i>	
Harmonisierte Normen <i>Harmonized Standards</i>	EN ISO 80079-36:2016, EN ISO 80079-37:2016, EN 1127-1:2019	
Benannte Stelle 0044 <i>Notification Body</i>	TÜV NORD CERT Langemarkstrasse 20, 45141 Essen, Germany	
Hinterlegungsnummer: <i>Dossier File No.:</i>	35134582	
EU- Baumusterprüfbescheinigung <i>EU-Type-Certified</i>	Verbaute induktive Näherungsschalter <i>Installed inductive proximity switch</i>	PTB 99 ATEX 2049 X, PTB 99 ATEX 2219 X
	Physikalisch Technische Bundesanstalt Bundesallee 100, 38116 Braunschweig, Germany Code number of notified Body: 0102	
Richtlinie <i>Directive</i>	⁽¹⁾ 2014/68/EU „Druckgeräterichtlinie“ <i>„Pressure Equipment Directive“</i>	
Angewendete Prüfnormen: <i>Used test standards:</i>	EN 837-1,2,3:1996	
⁽¹⁾ PS >200 bar und V <0,1l, gemäß Anhang II, Art.4, Diagr.1, „Drucktragende Ausrüstungsteile“, Modul A. <i>PS >200 bar and V <0.1l, according to Annex II, Art.4, Diagr.1, “Pressure Accessories”, Module A.</i>		
Richtlinie <i>Directive</i>	2011/65/EU „Richtlinie zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten“ <i>“Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment”</i> 2015/863/EU „Änderung von Anhang II der Richtlinie 2011/65/EU“ <i>“Amending Annex II to Directive 2011/65/EU”</i>	
Bewertung <i>Evaluation</i>	Die oben aufgeführten Produkte fallen nicht unter diese Richtlinie, da es sich nicht um elektrische oder elektronische Geräte handelt. <i>The products listed above are not covered by this directive as they are not electrical or electronic equipment</i>	

Alsdorf, den 07.10.2024
Ort und Datum
Place and date

ATEX Verantwortlicher
ATEX Manager

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