

Read and follow these safety instructions first



## 1. Safety instructions

- 1.1 Installation, mounting (fix into hoses), putting into operation, maintenance, removal and repair may be carried out by qualified experienced specialists with knowledge in pressurized piping construction only.
- 1.2 The statutory and other applicable regulations and standards have to be noticed and kept.
- 1.3 The pressure of maximum 10 bar, temperature of maximum +120 °C, the instructions of the  
> EU-Declaration of conformity EUKE-DG-K100  
and – if a limit switch is mounted – the instructions of the  
> Appliance information KE-GI-... resp. the technical datas of the KE-TD-..  
have to be noticed and kept.
- 1.4 Putting into operation and pressure admission only
- after correct building-in of the hose coupling into the delivery hose
  - after correct mounting of the coupling with thread at the tube (threaded connection) and if need by fixation with the locating screw
  - with closed coupling connection
- !!! Before pressurize the tubing make sure that the couplings are correct inserted resp. connected and
- with Storz-couplings
- is pulled to the limit stop
- with couplings according to DIN 28 450
- the clamping ring is tightened firmly and the safety lever is folded down
- with KAMLOK – couplings
- both levers are turned down to the coupling
- 1.5 **Disconnect resp. open the coupling connection only when pressure-free.**



### ATTENTION ! Danger of injuries

- If loosened and opened in pressurized condition the blank coupling, blank cap resp. closing cover or closing plug will accelerate like a bullet and may cause serious injuries and damages.
- If loosened in pressurized condition the hose will lay about one and may cause serious injuries.

- !!! Before loosen resp. open the coupling connection make sure that the tubing is pressure-free.

Depending on over pressure and hose diameter place suitable warning information.

e.g. **“Loosen only in pressure-free condition”**

- 1.6 If one of the coupling elements is damaged the pressurizing has to be shut off immediately and the tubing resp. hose line is to relieve from any pressure.
- 1.7 Elements of the coupling should be removed or demounted only in pressure-free condition.
- ▶ !!! For couplings with build-in limit switch take also notice of the safety instructions on the back.

Read and follow these special conditions and safety instructions



## 2. General safety instructions

- 2.1 The installation, maintenance, initial operation, removal and repair have to be controlled resp. checked by an “authorized person” for explosion protection.
- 2.2 Comply with the requirements of DIN EN 60079-14, DIN EN 60079-17 and DIN EN 1127-1, especially regarding the dust deposits and temperatures and follow the pertinent rules and regulations.



## 3. Safety Instructions **Gas+Dust** and **hybrid mixtures** for the application of couplings in explosive hazardous areas.

- 3.1 The couplings are allowed to be mounted on tubing
  - when the internal is classified as zone 0 or zone 20 resp. zone 0+20 (hybrid mixtures) or lower
  - when the external area is classified as zone 1 or zone 21 resp. zone 1+21 (hybrid mixtures) or lower
- !!! By attached electrical devices – e.g. limit switches or RFID – systems to recognize the connection – the couplings has to be mounted in the external area just in that zone the electrical devices are classified for.
- 3.2 The coupling has to be constantly conductible connected to the electrically conductive, earthed tubing.
  - If the tubing is not electrically conductive the coupling has to be earthed.
- 3.3 If combustible gases and vapours or combustible dusts with a minimum ignition energy under 3 mJ or a minimum ignition temperature under +300 °C (BAM assessment) were carried inside the coupling resp. by an appliance within zone 0 and/or zone 20 only the stainless steel variants of the product touching parts are permissible.



## 4. Safety Instructions for the application of limit switches in explosive hazardous areas.

- 4.1 Comply with the electrical connection take notice of the local and statutory rules and regulations and/or the VDE 0100.
- 4.2 Before electrical connection, compare the supply voltage with the details at the data plate.

for the version KE and KI Option B0 **Dust** 

- 4.3 The limit switches can be used in areas classified as zone 22.
- 4.4 A fuse (with max. 4 A) has to be connected in series to the supply voltage.
- 4.5 Protect the signal contacts of the limit switch KE against voltage peaks when inductive loads are connected.

for the version KN **Gas+Dust** 

- 4.6 The limit switches can be used in areas classified as zone 1 and zone 20 or lower.
- 4.7 To keep the intrinsically reliability a certified barrier or a certified isolation amplifier with an intrinsically safe circuit according to the present category has to be connected in series for power limitation.



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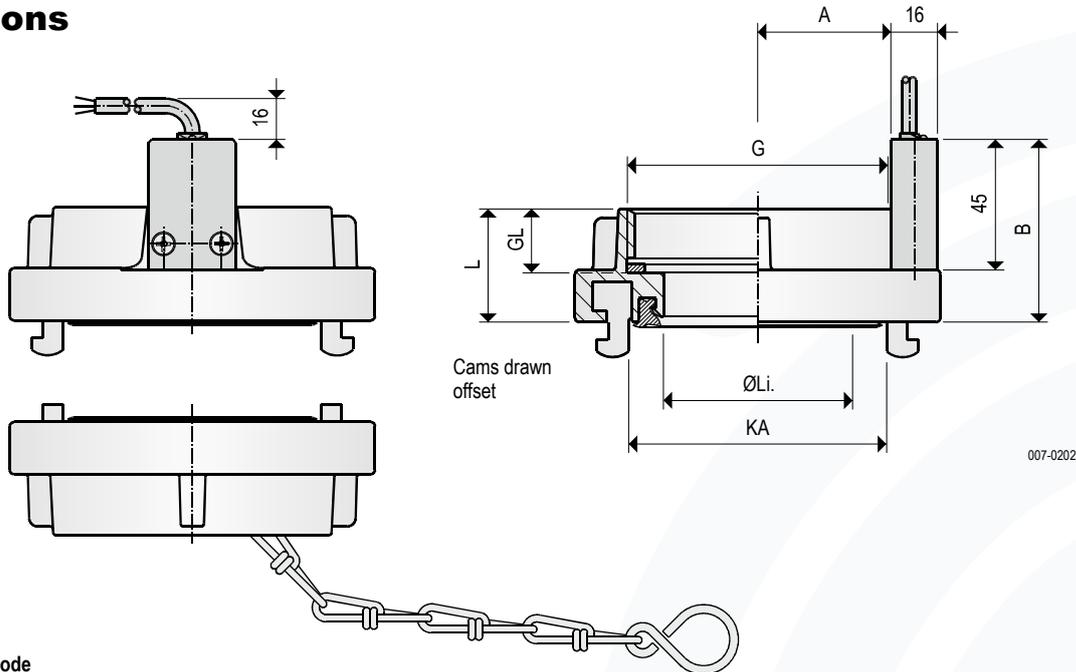
## Notes

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## Appliance information

### Dimensions



Order code

Type	NG	G	W	KL	KA	Li.	L	GL	A	B
KI - SZ 052	IG2	AL	2	66	44.5	40	20	32	62	
KI - SZ 065	IG2	AL	2	81	45	37	20	42	62	
KI - SZ 065	IG2½	AL	2	81	58	52	20	42	62	
KI - SZ 075	IG2	AL	2	89	50	38	20	42	63	
KI - SZ 075	IG2½	AL	2	89	64.5	42	20	42	63	
KI - SZ 075	IG3	AL	2	89	64.5	39	22	45	63	
KI - SZ 090	IG3	AL	2	105	78	40	22	50	64	
KI - SZ 100	IG4	AL	2	115	89.5	47	25	50	67	
KI - SZ 110	IG4	AL	2	133	100	48	25	68	67	
KI - SZ 110	IG4½	AL	2	133	100	48	25	68	67	
KI - SZ 125	IG5	AL	2	148	115	52	28	75	70	
KI - SZ 150	IG6	AL	2	160	130	60	30	85	71	

We deliver fundamentally with white DS-Seal rings, for high pressure and low pressure. (acc. to KE-TD-11)

NG = Nominal size  
G = Thread  
W = Material  
KL = Cable length  
KA = Lug distance  
Li. = Inner diameter

According to Directive 2014/68/EU for pressure equipment:

Usable for hazardous gases and liquids of group 1 up to 10 bar and up to DN 100

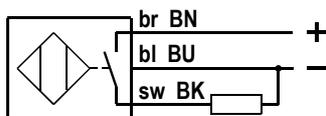
For example in pneumatic conveyor systems with combustible dusts etc.

Result of the evaluation of ignition danger acc. to DIN EN ISO 80079-36:

The couplings (without switches) have no potential source of ignition on their own.

### Wiring connection

Cable 3 x 0.34 mm<sup>2</sup>  
Cable length (KL) 2 = 2 m  
5 = 5 m  
0 = 10 m



TURCK Bi3U

007-AP01

### Technical data

Materials (W) AL = Aluminium  
AV = Aluminium/1.4581 / 318 or 1.457X  
MS = Brass  
VA = 1.4581 / 318 or 1.457X

Switch active surface CuZn, chromium plated  
PA12-GF30

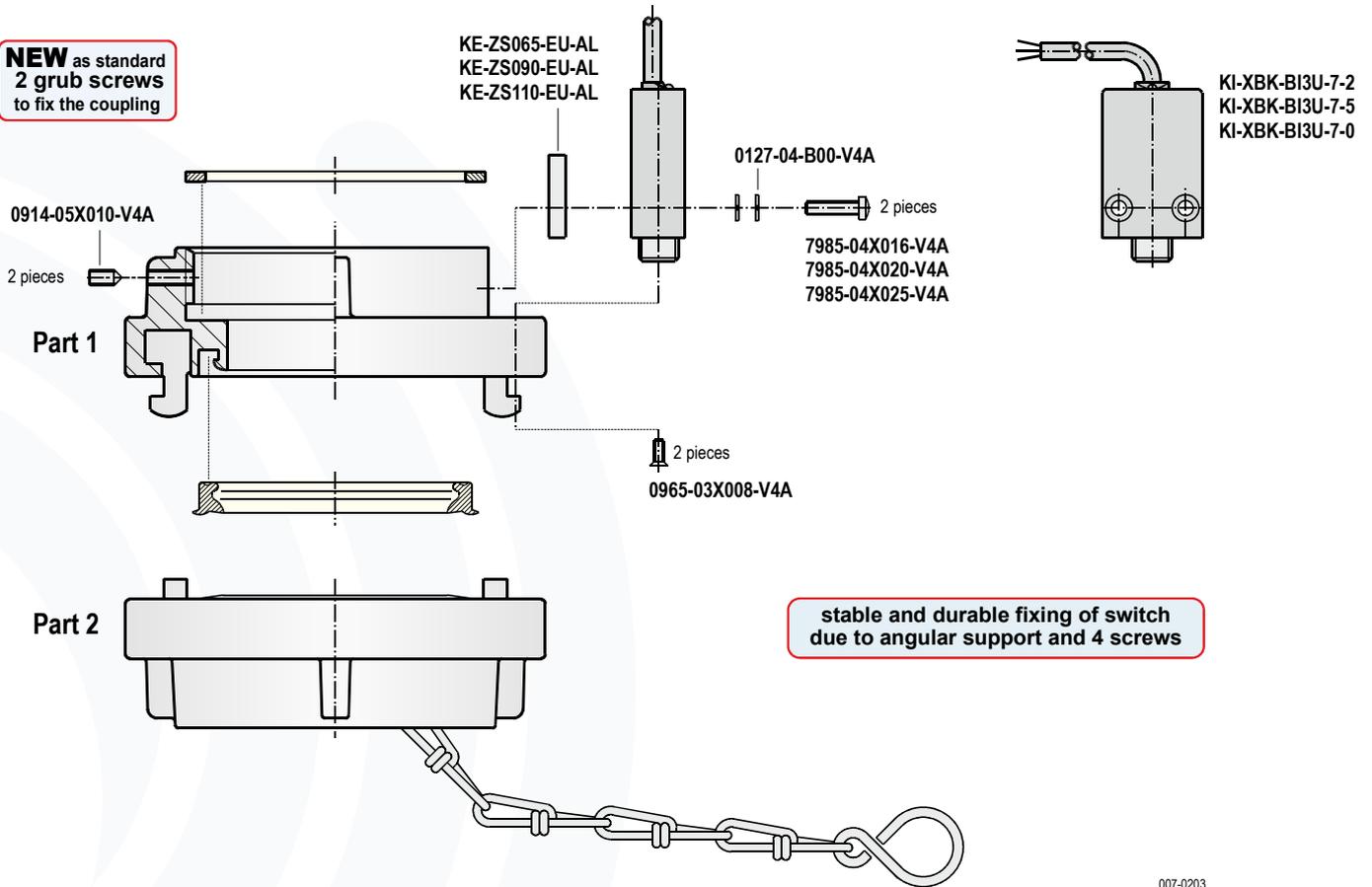
Mounting position any  
Ambient temperature -20 °C ... +60 °C  
Supply voltage 10 ... 30 V DC  
Load current capacity ≥ 200 mA, constant current  
Switching function PNP, Normally open  
Type of protection IP68/IP65 acc. to DIN EN 60529  
Maintenance none

ATEX option

B0 Dust  II 3D Ex tc IIIC T110 °C

## Single parts

**NEW** as standard  
2 grub screws  
to fix the coupling



stable and durable fixing of switch  
due to angular support and 4 screws

007-0203

Order code Part 1

	NG	G	W	
K - FSZ 052	IG2	AL	E	
K - FSZ 065	IG2	AL	E	
K - FSZ 065	IG2½	AL	E	
K - FSZ 075	IG2	AL	E	
K - FSZ 075	IG2½	AL	E	
K - FSZ 075	IG3	AL	E	
K - FSZ 090	IG3	AL	E	
K - FSZ 100	IG4	AL	E	
K - FSZ 110	IG4	AL	E	
K - FSZ 110	IG4½	AL	E	
K - FSZ 125	IG5	AL	E	
K - FSZ 150	IG6	AL	E	

Order code Part 2

	NG	W
K - BSZ052	AL	M
K - BSZ065	AL	M
K - BSZ065	AL	M
K - BSZ075	AL	M
K - BSZ075	AL	M
K - BSZ075	AL	M
K - BSZ075	AL	M
K - BSZ090	AL	M
K - BSZ100	AL	M
K - BSZ110	AL	M
K - BSZ110	AL	M
K - BSZ125	AL	M
K - BSZ150	AL	M

NG = Nominal size

G = Thread

W = Material

incl. Seal rings

Seal rings and chains depending on the type and acc. to data sheet K-TD-11

incl. Seal rings and chain

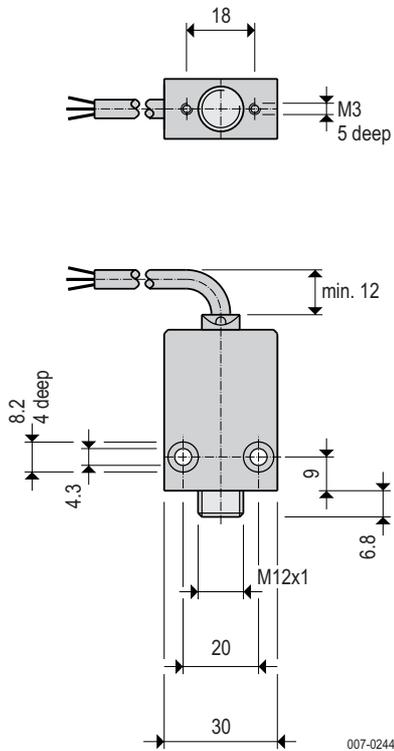
Materials (W)

AL = Aluminium  
AV = Aluminium/1.4581 / 318 or 1.457X  
VA = 1.4581 / 318 or 1.457X  
MS = Brass

## Technical data

### Dimensions

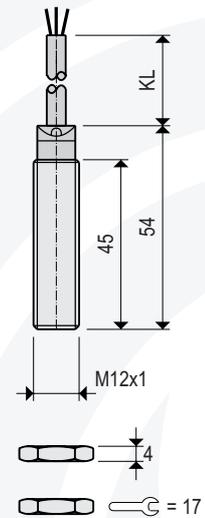
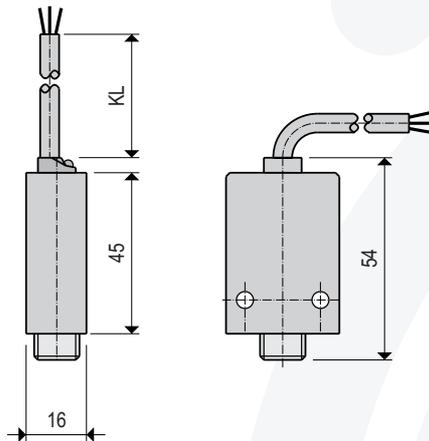
KI-XBK-BI3U-7- .



Order code	
KI-XBK-BI3U-7-2	for 2 m cable
KI-XBK-BI3U-7-5	for 5 m cable
KI-XBK-BI3U-7-0	for 10 m cable

KI-BI3U-M12AP- .

Brand TURCK  
Type BI3U-M12-AP6X  
Ident-no. 16 341 00

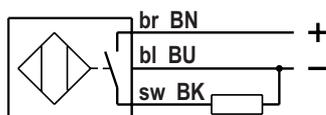


Order code	
KI-BI3U-M12AP-2	for 2 m cable
KI-BI3U-M12AP-5	for 5 m cable
KI-BI3U-M12AP-0	for 10 m cable

further technical data you can get under  
[www.turck.de](http://www.turck.de)

### Wiring connection

Cable 3 x 0.34 mm<sup>2</sup>  
Cable length (KL) 2 = 2 m  
5 = 5 m  
0 = 10 m



TURCK BI3U

007-AP01

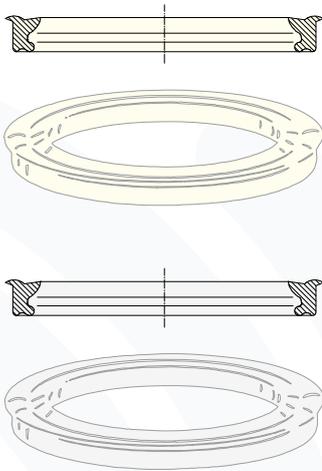
### Technical data

Materials	Switch active surface	CuZn, chromium plated PA12-GF30
	Clamping bracket	AlMgSi1
Mounting position		any
Ambient temperature		-20 °C ... +60 °C
Supply voltage		10 ... 30 V DC
Load current capacity		≤ 200 mA, constant current
Switching function		PNP, Normally open
Type of protection		IP68/IP65 acc. to DIN EN 60529
Maintenance		none

ATEX option

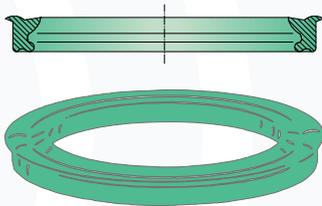
B0 Dust  II 3D Ex tc IIIC T110 °C

## Single parts



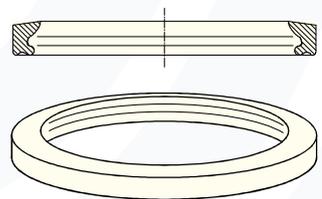
### DRK seal rings for high and low pressure operation (DS)

Size	Dimensions (mm)	NBR (white)		Silikon (transparent)	
		Article-no.	Article-no.	Article-no.	Article-no.
52 C	60x47x10,0	K-SZ052DRKDS-NBR		K-SZ052DRKDS-SIK	
65	75x60x10,0	K-SZ065DRKDS-NBR		K-SZ065DRKDS-SIK	
75 B	82x67x10,5	K-SZ075DRKDS-NBR		K-SZ075DRKDS-SIK	
90	98x93x10,0	K-SZ090DRKDS-NBR		K-SZ090DRKDS-SIK	
100	108x93x10,0	K-SZ100DRKDS-NBR		K-SZ100DRKDS-SIK	
110 A	124x102x12,0	K-SZ110DRKDS-NBR		K-SZ110DRKDS-SIK	
125	139x177x12,5	K-SZ125DRKDS-NBR		K-SZ125DRKDS-SIK	
150	152x132x11,5	K-SZ150DRKDS-NBR		K-SZ150DRKDS-SIK	
165	177x152x12,5	K-SZ165DRKDS-NBR			
205	211x187x16,0	K-SZ205DRKDS-NBR			
250	268,5x240x17	K-SZ250DRKDS-NBR	(black)		



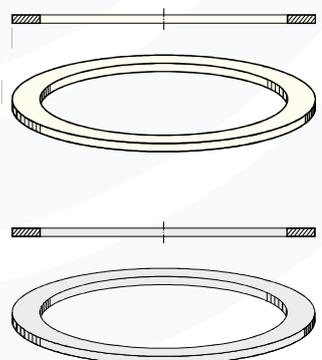
### DRK seal rings for high and low pressure operation (DS)

Size	Dimensions (mm)	VITON (green)	
		Article-no.	Article-no.
52 C	60x47x10,0	K-SZ052DRKDS-VI	
75 B	82x67x10,5	K-SZ075DRKDS-VI	
110 A	124x102x12,0	K-SZ110DRKDS-VI	
125	139x117x12,5	K-SZ125DRKDS-VI	
150	152x132x11,5	K-SZ150DRKDS-VI	



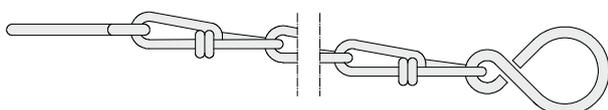
### DRK seal rings for high pressure operation (D)

Size	Dimensions (mm)	NBR (white)	
		Article-no.	Article-no.
52 C	60x47x10,5	K-SZ052DRKD-NBR	
65	75x60x10,5	K-SZ065DRKD-NBR	
75 B	82x67x10,0	K-SZ075DRKD-NBR	
100	106x93x10,5	K-SZ100DRKD-NBR	



### DRG thread flat seal rings

Size	Dimensions (mm)	NBR (white)		PTFE (white)	
		Article-no.	Article-no.	Article-no.	Article-no.
G 2	60x47x3	K-SZIG2 DRG-NBR		K-SZIG2 DRG-PT	
G 2½	76x66x3	K-SZIG2½DRG-NBR		K-SZIG2½DRG-PT	
G 3	88x78x3	K-SZIG3 DRG-NBR		K-SZIG3 DRG-PT	
G 4	113x100x3	K-SZIG4 DRG-NBR		K-SZIG4 DRG-PT	
G 4½	126x105x3	K-SZIG4½DRG-NBR		K-SZIG4½DRG-PT	
G 5	138x118x3	K-SZIG5 DRG-NBR		K-SZIG5 DRG-PT	
G 6	164x152x4	K-SZIG6 DRG-NBR		K-SZIG6 DRG-PT	



### KT knotted-link chain with S-hook

Size	Chain length	Steel, galvanized		Stainless steel V2A	
		Article-no.	Article-no.	Article-no.	Article-no.
052-090	280 mm	K-280KT-STV		K-280KT-V2A	
100-110	390 mm	K-390KT-STV		K-390KT-V2A	
125-205	535 mm	K-535KT-STV		on request	

## ATEX – Prüfbescheinigung

- EU-Richtlinie 2014 / 34 / EU vom 26. Feb. 2014 -

Geräte zur bestimmungsgemäßen Verwendung  
in explosionsgefährdeten Bereichen

**Nummer:** TURCK Ex-10002M X **Ausgabe Nr.:** 1

**Gerät:** Sensoren Typenreihe uprox® und uprox®+:  
DBi/Bi..U-...../3D, Ni..U-...../3D  
DBi/Bi..U-...../3GD, Ni..U-...../3GD

**Hersteller:** Hans Turck GmbH & Co KG  
**Anschrift:** Witzlebenstr. 7 45472 Mülheim an der Ruhr

Die Bauart der Geräte sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Prüfbescheinigung festgelegt.

Die Firma Hans Turck GmbH & Co. KG bescheinigt, dass die grundlegenden Sicherheits- und Gesundheitsanforderungen der EU-Richtlinie 2014 / 34 / EU erfüllt werden durch Übereinstimmung mit:

EN 60079-0:2012/A11:2013 EN 60079-15:2010 EN 60079-31:2014

*Das Zeichen „X“ hinter der Bescheinigungsnummer besagt, dass auf besondere Bedingungen für die sichere Anwendung des Gerätes in der Anlage zu dieser Prüfbescheinigung hingewiesen wird.*

Kennzeichnung:



II 3 G Ex nA IIC T4 Gc  
II 3 D Ex tc IIIC T110°C Dc

Hans Turck GmbH & Co. KG

**TURCK**

Hans Turck GmbH & Co. KG  
Witzlebenstr. 7 | 45472 Mülheim an der Ruhr  
T +49 208 4952-0 | [more@turck.com](mailto:more@turck.com)

Mülheim an der Ruhr, den 20.04.2016

(i.A. W. Dick)  
Zulassungsbeauftragter



# EU-Konformitätserklärung EU-Declaration of Conformity

Wir/We

**MOLLET Füllstandtechnik GmbH**

Industriepark RIO 103  
D-74706 Osterburken  
Tel. 06291 64400 Fax 06291 9846

erklären hiermit, dass die Geräte:

declare that the devices:

**Schlauch- und Rohr-Kupplungen** der Typenreihen:

**Hose and pipe couplings** of type series:

**K...** (MOLOScore, MOLOSconnect, MOLOSwitch, MOLOSlock)  
aus Aluminum, Edelstahl oder Messing

**K...** (MOLOScore, MOLOSconnect, MOLOSwitch, MOLOSlock)  
made of aluminum, stainless steel or brass

**DN 32 bis DN 100**

**DN 32 to DN 100**

auf die sich diese Erklärung bezieht, den folgenden Normen  
oder normativen Dokumenten entsprechen:

to which this declaration relates is in accordance with  
the following standards or other normative documents:

**Richtlinie 2014/68/EU** (Druckgeräte-Richtlinie)

**Directive 2014/68/EU** (Directive Pressure Equipment)

Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt gemäß den Bestimmungen der Richtlinie.

The Essential Health and Safety Requirements are assured by compliance with the directive.

Einstufung:  
**Druckhaltendes Ausrüstungsteil**

Categorization:  
**Pressure-maintaining components**

Mediumeigenschaft nach Artikel 13:  
**Gruppe 1 - gefährlich**

Fluid group acc. to art. 13:  
**Group 1 - dangerous**

Mediumzustand:  
**gasförmig, flüssig oder staubhaltig, wenn pD >0,5 bar**

Condition of fluid:  
**gaseous, liquid or dusty, if pD >0,5 bar**

Angewendetes Konformitätsverfahren:  
**Modul A**

Applied conformity assessment procedures:  
**Modul A**

Diese Konformitätserklärung ist nur gültig in Verbindung mit den aktuellen Sicherheitshinweisen KE-SH- ..

The declaration of conformity is only valid in connection with our current safety instructions KE-SH- ..

Osterburken, 07. Januar 2019

Osterburken, January 7th 2019



Wolfgang Hageleit

Diese Erklärung darf nur unverändert  
weiterverbreitet werden.

This declaration is only allowed to  
hand out in unchanged form.



# EU-Konformitätserklärung EU-Declaration of Conformity

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**Schlauch- und Rohr-Kupplungen** der Typenreihen:

**Hose and pipe couplings** of type series:

**K...** (MOLOScode, MOLOScconnect, MOLOSwitch, MOLOSlOCK)  
aus Aluminum, Edelstahl oder Messing

**K...** (MOLOScode, MOLOScconnect, MOLOSwitch, MOLOSlOCK)  
made of aluminum, stainless steel or brass

**DN 101 bis DN 150**

**DN 101 to DN 150**

auf die sich diese Erklärung bezieht, den folgenden Normen  
oder normativen Dokumenten entsprechen:

to which this declaration relates is in accordance with  
the following standards or other normative documents:

**Richtlinie 2014/68/EU** (Druckgeräte-Richtlinie)

**Directive 2014/68/EU** (Directive Pressure Equipment)

Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt gemäß den Bestimmungen der Richtlinie.

The Essential Health and Safety Requirements are assured by compliance with the directive.

Einstufung:  
**Druckhaltendes Ausrüstungsteil**

Categorization:  
**Pressure-maintaining components**

Mediumeigenschaft nach Artikel 13:  
**Gruppe 2 - andere**

Fluid group acc. to art. 13:  
**Group 2 - others**

Mediumzustand:  
**gasförmig, flüssig oder staubhaltig, wenn pD >0,5 bar**

Condition of fluid:  
**gaseous, liquid or dusty, if pD >0,5 bar**

Angewendetes Konformitätsverfahren:  
**Modul A**

Applied conformity assessment procedures:  
**Modul A**

Diese Konformitätserklärung ist nur gültig in Verbindung mit den aktuellen Sicherheitshinweisen KE-SH- ..

The declaration of conformity is only valid in connection with our current safety instructions KE-SH- ..

Osterburken, 07. Januar 2019

Osterburken, January 7th 2019



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