

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 data 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 safety instructions first.

2. Safety instructions for couplings with built-in limit switch

- 2.1 The installation, initial operation and maintenance may be done by a qualified expert with electrical know-how only.
- 2.2 Comply with the electrical connection take notice of the local and statutory rules and regulations and/or the VDE 0100.
- 2.3 Before electrical connection, compare the supply voltage with the details at the data plate.

for the version KE - ...

- 2.4 A fuse (with max. 4 A) has to be connected in series to the voltage supply.
- 2.5 Protect the signal contacts from voltage peaks when inductive loads are connected.

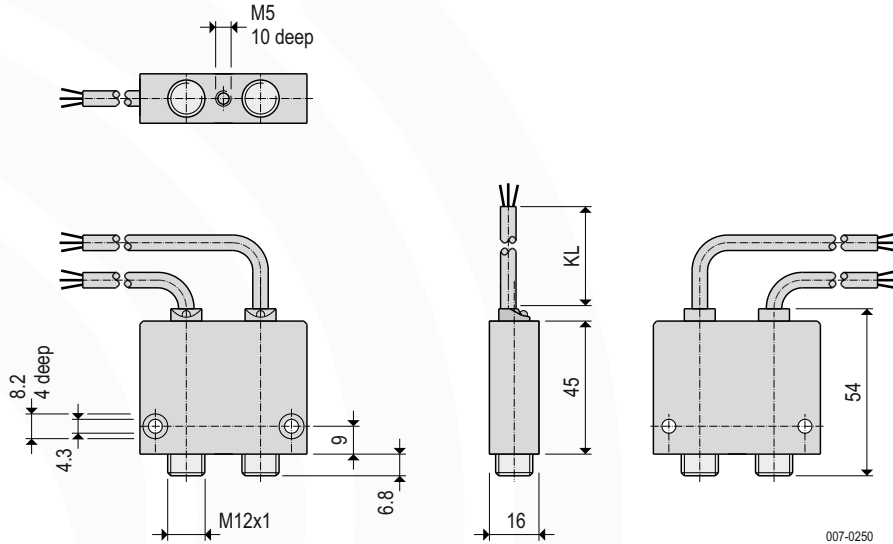
for the version KI - ...

- 2.6 A fuse (with max. 4 A) has to be connected in series to the voltage supply.

Technical data

Dimensions

KI2-XBK-BI3U-7- .
KID-XBK-BI3U-7- .



Order code

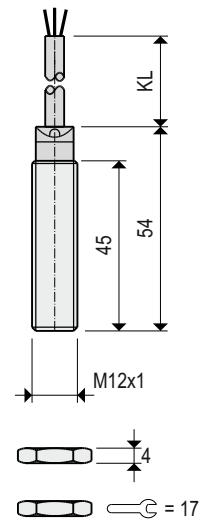
KI2-XBK-BI3U-7-2 for 2 m cable
KI2-XBK-BI3U-7-5 for 5 m cable
KI2-XBK-BI3U-7-0 for 10 m cable

Order code

KID-XBK-BI3U-7-2 for 2 m cable
KID-XBK-BI3U-7-5 for 5 m cable
KID-XBK-BI3U-7-0 for 10 m cable

KI-BI3U-M12AP- .

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



007-0245

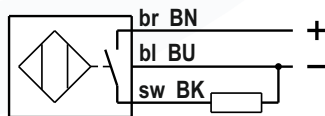
Order code

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

Wiring connection

Cable 3 x 0.34 mm²
Cable length (KL) 2 = 2 m
5 = 5 m
0 = 10 m



TURCK BI3U

007-AP01

Technical data

Materials switch CuZn, chromium plated
active surface PA12-GF30
clamp mounting 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

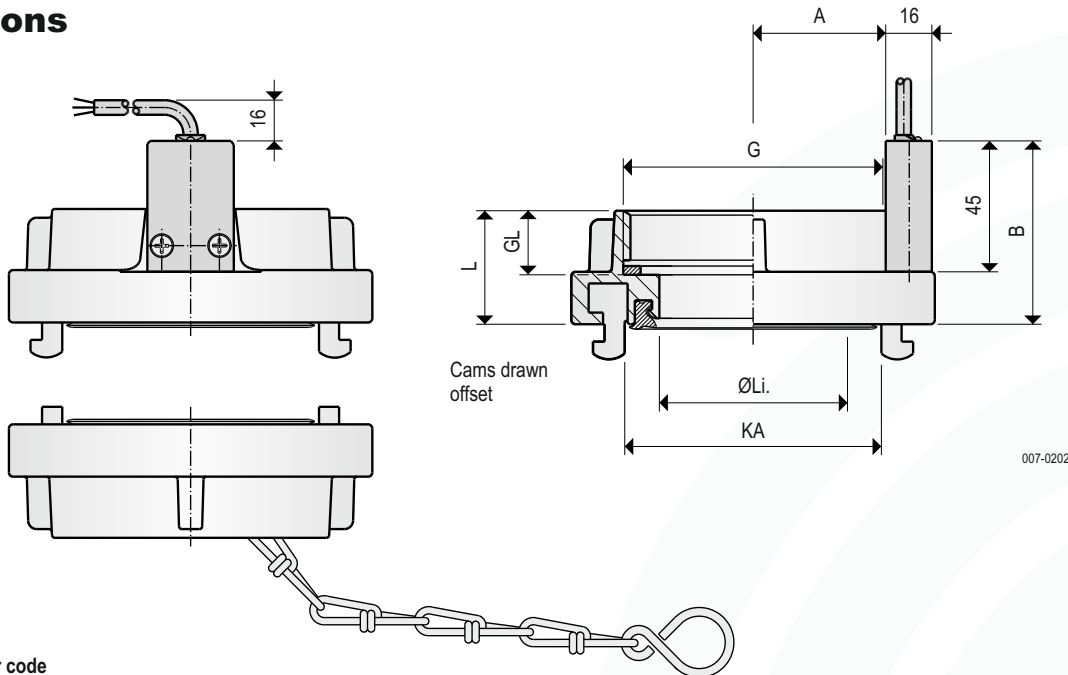
Maintenance none

ATEX option

B0 **Dust**  **II 3D Ex tc IIIC T110 °C Dc**

Appliance information

Dimensions



Order code

Type	NG	G	W	KL	M	KA	Li.	L	GL	A	B
KI - SZ 052	IG2	AL	2	M2		66	44,5	40	20	32	62
KI - SZ 065	IG2	AL	2	M2		81	45	37	20	42	62
KI - SZ 065	IG2½	AL	2	M2		81	58	52	20	42	62
KI - SZ 075	IG2	AL	2	M2		89	50	38	20	42	63
KI - SZ 075	IG2½	AL	2	M2		89	64,5	42	20	42	63
KI - SZ 075	IG3	AL	2	M2		89	64,5	39	22	45	63
KI - SZ 090	IG3	AL	2	M2		105	78	40	22	50	64
KI - SZ 100	IG4	AL	2	M2		115	89,5	47	25	50	67
KI - SZ 110	IG4	AL	2	M2		133	100	48	25	68	67
KI - SZ 110	IG4½	AL	2	M2		133	100	48	25	68	67
KI - SZ 125	IG5	AL	2	M2		148	115	52	28	75	70
KI - SZ 150	IG6	AL	2	M2		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
- M = Lugs removed

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

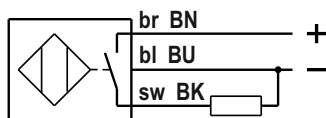
For example in pneumatic conveyor systems with combustible dusts etc.

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 mm²
- Cable length (KL) 2 = 2 m
- 5 = 5 m
- 0 = 10 m



TURCK BI3U

007-AP01

Technical data

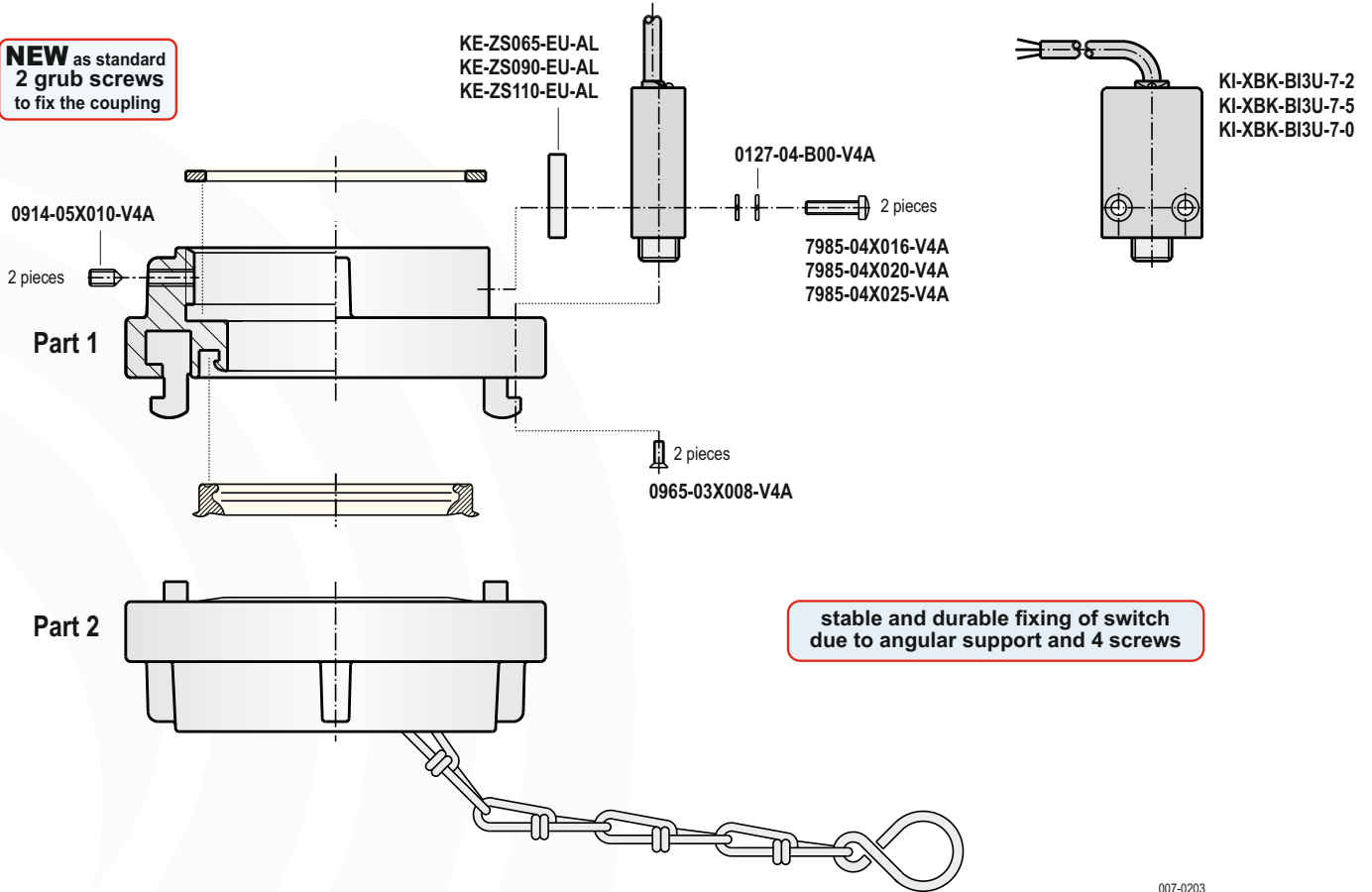
- Materials** (W) AL = Aluminium
- AV = Aluminium/1.4581 / 318 or 1.457X
- MS = Brass
- VA = 1.4581 / 318 or 1.457X
- Switch active surface** CuZn, chromium plated PA12-GF30
- Mounting position** any
- Ambient temperature** -20 °C ... +60 °C
- Supply voltage** 10 ... 30 V DC
- Load current capacity** ≥ 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 Dc

Single parts

NEW as standard
2 grub screws
to fix the coupling



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	M
K - BSZ052	AL	-	M2
K - BSZ065	AL	-	M2
K - BSZ065	AL	-	M2
K - BSZ075	AL	-	M2
K - BSZ075	AL	-	M2
K - BSZ075	AL	-	M2
K - BSZ075	AL	-	M2
K - BSZ090	AL	-	M2
K - BSZ100	AL	-	M2
K - BSZ110	AL	-	M2
K - BSZ110	AL	-	M2
K - BSZ125	AL	-	M2
K - BSZ150	AL	-	M2

NG = Nominal size
G = Thread
W = Material
M = Lugs removed

incl. seal rings

incl. seal rings and chain

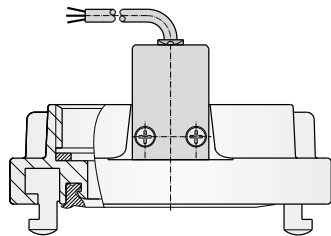
Seal rings and chains depending on the type and acc. to data sheet
K-TD-06 in MOLOSp-info „Hose couplings and accessories“

Materials (W)

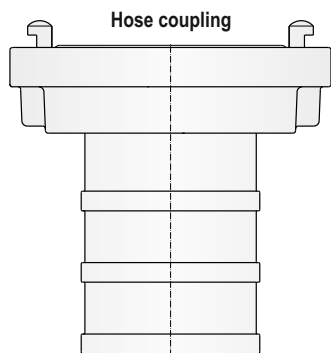
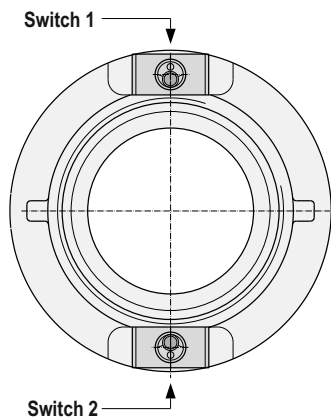
AL = Aluminium
AV = Aluminium/1.4581 / 318 or 1.457X
VA = 1.4581 / 318 or 1.457X
MS = Brass

Appliance information

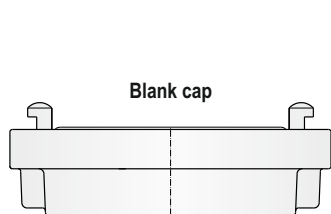
Illustrations



Fixed coupling



Hose coupling



Blank cap

Counter coupling

007-0234

The coupling with inside thread has two built-in limit switches.

During the coupling of a counter coupling either one or two limit switches will be actuated.

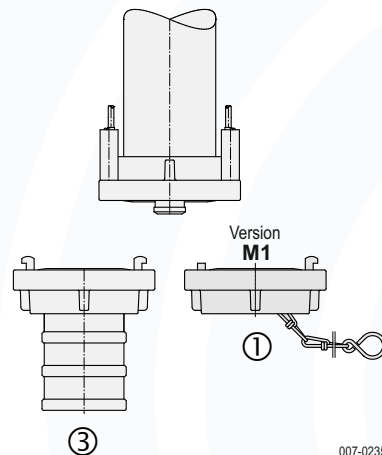
So, in this way can be identified which counter coupling has been coupled at the moment.

Example of application

Silo filling process 1

Sensing whether silo trailer ③ or blanc cap ① has been coupled.

- Coupling ③ of the silo trailer is actuating two switches
- Blank cap ① actuates one switch.



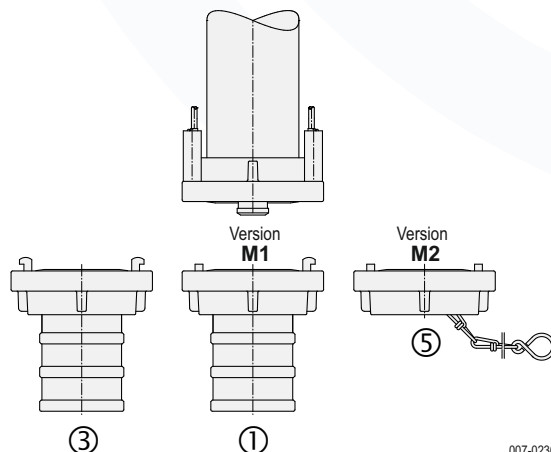
007-0235

Silo filling process 2

Sensing whether silo trailer ③ or coupling ① has been coupled.

E.g. coupling ① is interoffice production inert gas - or dry air overlay

- Silo trailer ③ actuates two switches
- Coupling ① actuates one switch
- The blanc cap ⑤ actuates no switch



007-0236

Versions

The coding can be carried out with all three limit switch variants KE, KI and KN and can be mounted at couplings of all sizes.

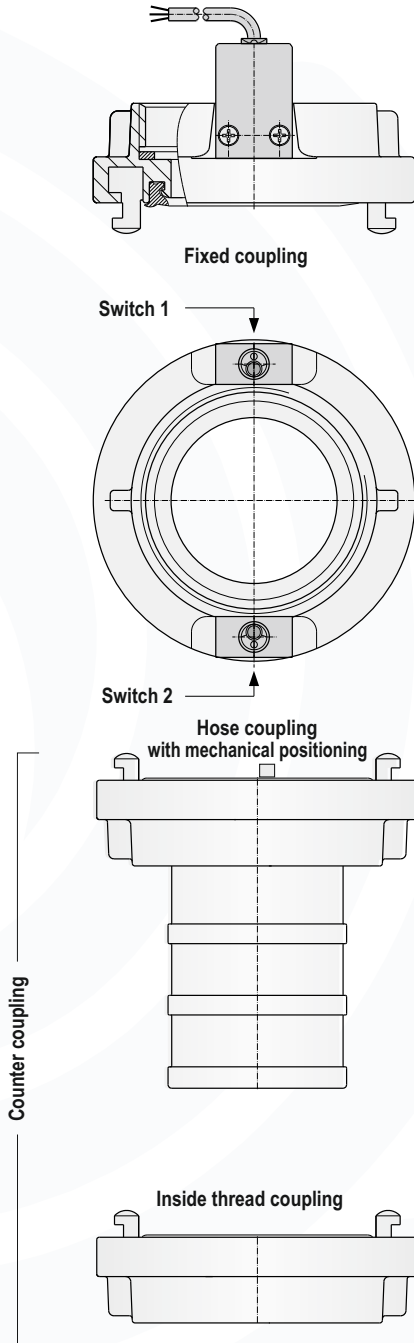
Dimensions, technical data, ATEX options and connections see under:

KE mechanical limit switch	KEIN-GI-02
KI inductive limit switch	KEIN-GI-04
KN inductive limit switch NAMUR	KEIN-GI-06

2 inductive limit switches can also be mounted at VK and AVK couplings.

Appliance information

Illustrations



The coupling with inside thread has two built-in limit switches and a blocking. The blocking allows a coupling at one position only.

During the coupling of a counter coupling the switch 1, switch 2 or both switches will be actuated.

So, in this way can be identified which hose coupling has been coupled at the moment.

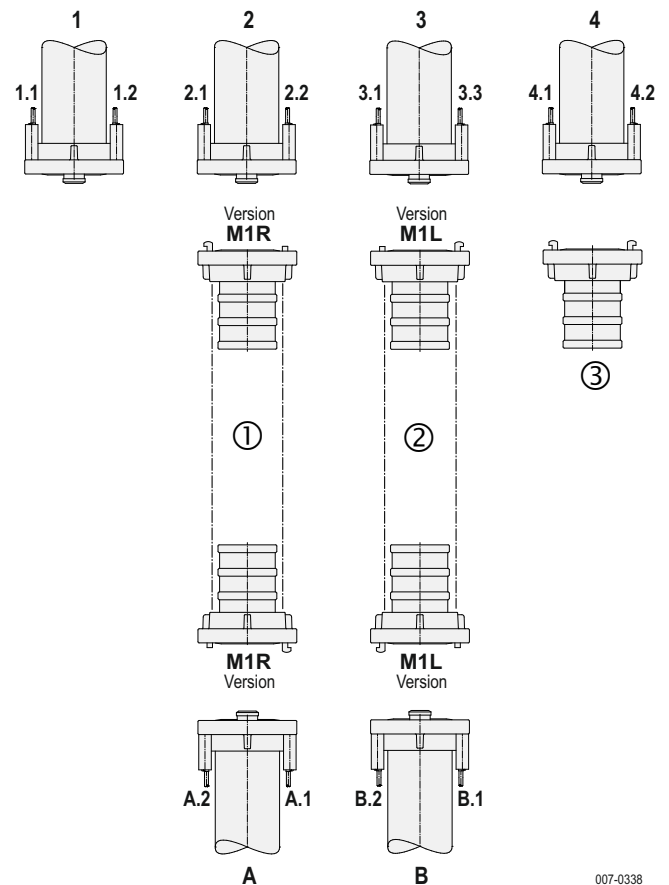
Example of application

Coupling station 4/2+1

Sensing whether hose ①, hose ② or the silo trailer ③ has been coupled.

- Hose coupling ① actuates only the switch Nr. x.1
- Hose coupling ② actuates only the switch Nr. x.2
- Silo trailer ③ actuates the switch x.1 and x.2

Further applications on demand.



Versions

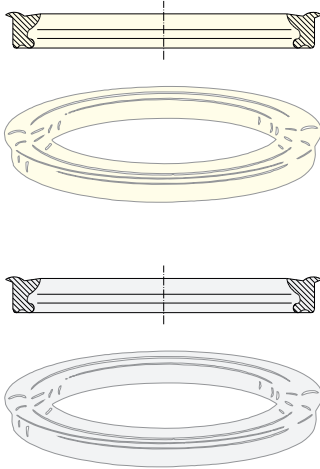
The coding can be carried out with all three limit switch variants KE, KI and KN and can be mounted at couplings of all sizes.

Dimensions, technical data, ATEX options and connections see under:

KE	mechanical limit switch	KEIN-GI-02
KI	inductive limit switch	KEIN-GI-04
KN	inductive limit switch NAMUR	KEIN-GI-06

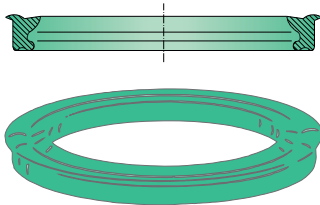
2 inductive limit switches can also be mounted at KAMLOK - couplings (AVK).

Technical data



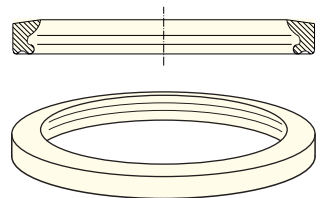
DRK seal rings for high and low pressure operation (DS)

Size	Dimensions (mm)	NBR (white)	Silikon (transparent)
		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)	



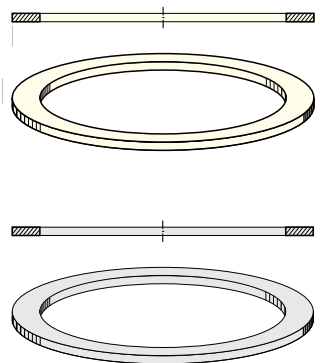
DRK seal rings for high and low pressure operation (DS)

Size	Dimensions (mm)	VITON (green)
		Article no.
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.
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

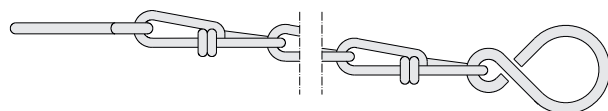


DRG thread flat seal rings

Size	Dimensions (mm)	NBR (white)	PTFE (white)
		Article-no.	Article-no.
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.
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





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-Kupplungen mit den elektrischen Betriebsmitteln:
Endschalter, Codeträger, Lesekopf, Lesestation, Expanderkarte
der Typenreihe:

Hose couplings with the electrical equipment:
limit switch, code carrier, read head, read station,
processor unit, expander card of type:

KE ... , KI ... , KN ... ,

KE ... , KI ... , KN ... ,

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 2014/35/EU (NSR-Richtlinie)
Richtlinie 2014/30/EU (EMV-Richtlinie)

Directive 2014/35/EU (Directive LVD)
Directive 2014/30/EU (Directive EMC)

und

and

DIN EN 61010-1:2020
DIN EN 60529:2014

DIN EN 61010-1:2020
DIN EN 60529:2014

DIN EN IEC 60947-5-2:2021

DIN EN IEC 60947-5-2:2021

Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt gemäß den Bestimmungen der Richtlinien und durch Einhaltung der Normen soweit es im Rahmen des Lieferumfanges möglich ist.

The Essential Health and Safety Requirements are assured by compliance with the directive and observance of the normative documents, as far as the scope of delivery allows.

Osterburken, 20. Juni 2022

Osterburken, June 20th 2022



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

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

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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... (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- ..

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