

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.

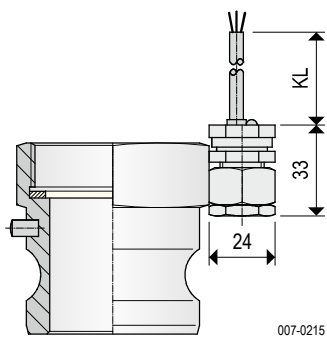


Notes

The page contains a large grid area for taking notes. On the left side of the grid, there is a faint, large circular watermark logo consisting of several concentric curved lines, which is a stylized representation of the MOLLET logo.

Geräteinformation

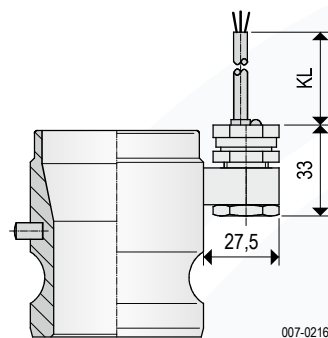
Abmessungen



007-0215

Bestellcode			
Typ	NG	W	KL
KI - AVKI	025	VA	3
KI - AVKI	032	VA	3
KI - AVKI	040	VA	3
KI - AVKI	050	VA	3
KI - AVKI	065	VA	3
KI - AVKI	080	VA	3
KI - AVKI	100	VA	3

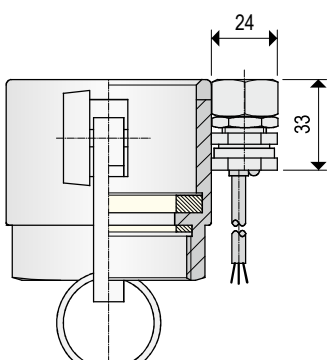
NG = Nenngröße
W = Werkstoff
KL = Kabellänge



007-0216

Bestellcode			
Typ	NG	W	KL
KI - AVKR	025	VA	3
KI - AVKR	032	VA	3
KI - AVKR	040	VA	3
KI - AVKR	050	VA	3
KI - AVKR	065	VA	3
KI - AVKR	080	VA	3
KI - AVKR	100	VA	3

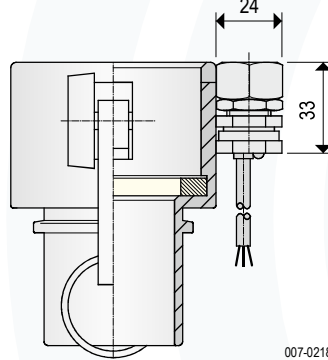
NG = Nenngröße
W = Werkstoff
KL = Kabellänge



007-0217

Bestellcode			
Typ	NG	W	KL
KI - AMKI	025	VA	3
KI - AMKI	032	VA	3
KI - AMKI	040	VA	3
KI - AMKI	050	VA	3
KI - AMKI	065	VA	3
KI - AMKI	080	VA	3
KI - AMKI	100	VA	3

NG = Nenngröße
W = Werkstoff
KL = Kabellänge



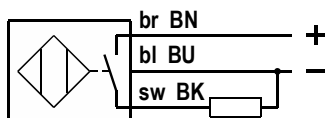
007-0218

Bestellcode			
Typ	NG	W	KL
KI - AMKS	025	VA	3
KI - AMKS	032	VA	3
KI - AMKS	040	VA	3
KI - AMKS	050	VA	3
KI - AMKS	065	VA	3
KI - AMKS	080	VA	3
KI - AMKS	100	VA	3

NG = Nenngröße
W = Werkstoff
KL = Kabellänge

Elektrischer Anschluss

Kabel 3 x 0,34 mm²
Kabellänge (KL) 3 = 3 m
5 = 5 m
0 = 10 m



BALLUFF 356

007-AP01

Technische Daten

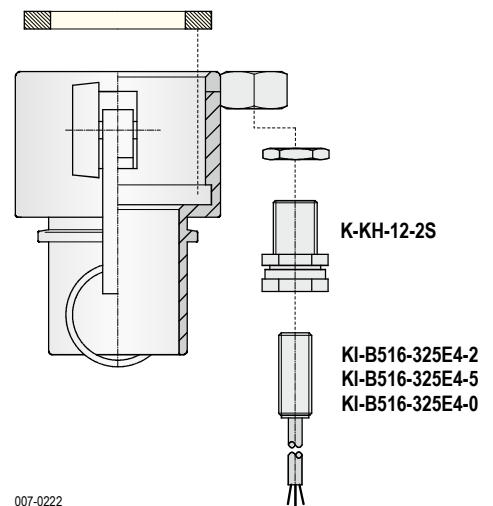
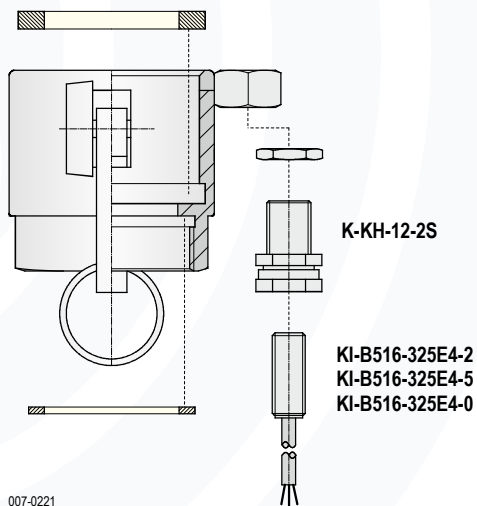
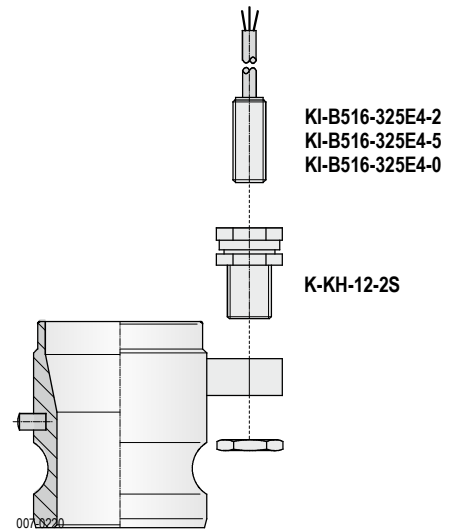
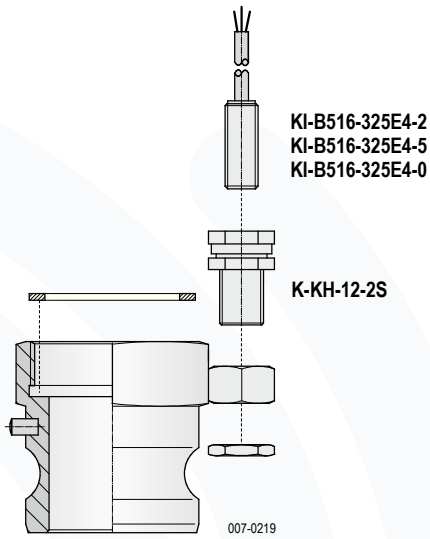
Werkstoffe (W) AVK VA = 1.4571
(W) AMK VA = 1.4401
Schalter CuZn, vernickelt, / aktive Fläche PA12
Einbaulage beliebig
Umgebungstemperatur -20 °C ... +60 °C
Betriebsspannung 10 ... 30 V DC
Belastbarkeit ≥ 130 mA, Dauerstrom
Schaltfunktion PNP, Schließer
Schutzart IP68/IP65 nach DIN EN 60529
Wartung keine

ATEX-Option

B0 Staub  II 3D Ex tc IIIB T90 °C

Eine Zündgefahrenbewertung nach DIN EN ISO 80079-36 ergab:
Die Kupplungen selbst (ohne Schalter) verfügen über keine potenziellen Zündquellen.

Einzelteile



Nach Druckgeräterichtlinie 2014/68/EU:
bis 10 bar und bis DN 100 für
gefährliche Gase und Flüssigkeiten der
Gruppe 1 einsetzbar.
z.B. in pneumatischen Förderanlagen von
brennbaren Stäuben usw.

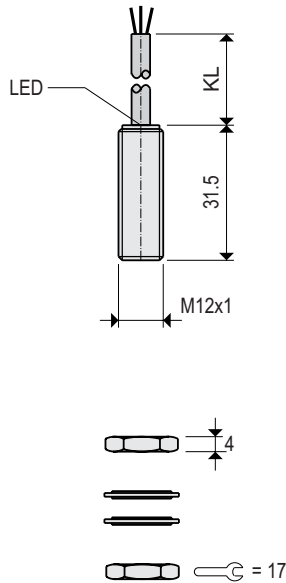
Kupplung je nach Ausführung (siehe Angebot bzw. Auftrag)
Abmessungen nach DIN EN 14420-7 (DIN 2828) und K-TD-12 ... K-TD-14
Dichtringe je nach Auftrag und nach K-TD-15

Technical data

Dimensions

KI-B516-325-E4- .

Brand BALLUFF
Type BES 516-325-E4-...

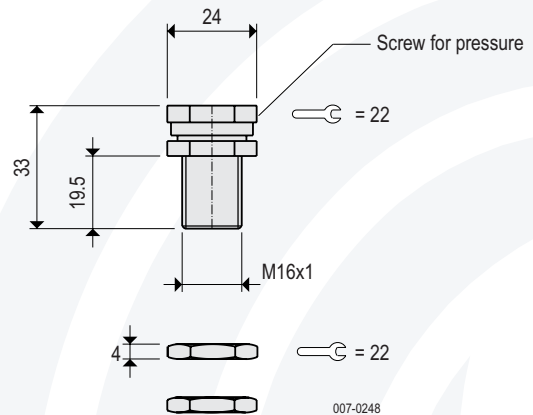


Order code

KI-B516-325-E4-2 for 2 m cable
KI-B516-325-E4-5 for 5 m cable
KI-B516-325-E4-0 for 10 m cable

Adjusting screw K-KH-12-2S

Brand BALLUFF
Type KH-12-2S



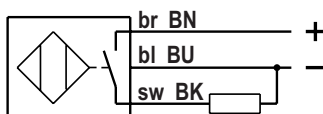
Order code

K-KH-12-2S

further technical data you can get under
www.balluff.de

Wiring connection

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



BALLUFF 325

007-AP01

Technical data

Materials Housing active surface CuZn, nickel plated PA12
Adjusting screw CuZn, nickel plated

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 IIIB T90 °C



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:

Induktive Näherungsschalter

Inductive limit switch

Typ KI-XCM-B356-5-.B0, KI-B516-356E4-.B0
KI-B516-325-E4-.B0,
KI-XCM-B3019-5-.B0, KI-B516-3019E-.B0

Type KI-XCM-B356-5-.B0, KI-B516-356E4-.B0
KI-B516-325-E4-.B0,
KI-XCM-B3019-5-.B0, KI-B516-3019E-.B0

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 2014/34/EU (Explosionsschutz-Richtlinie)
Richtlinie 2014/30/EU (EMV-Richtlinie)

Directive 2014/34/EU (Directive ATEX)
Directive 2014/30/EU (Directive EMC)

und

and

DIN EN IEC 60079-0:2019-09,
DIN EN 60079-31:2014-12,
DIN EN 55032, DIN EN 55024

DIN EN IEC 60079-0:2019-09
DIN EN 60079-31:2014-12
DIN EN 55032, DIN EN 55024

Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt gemäß den Bestimmungen der Richtlinien und durch Einhaltung der Normen.

The Essential Health and Safety Requirements are assured by compliance with the directive and observance of the normative documents.

Die Geräte sind mit folgenden Angaben gekennzeichnet:

The marking of the equipment includes the following:

CE  II 3D Ex tc IIIB T 90 °C

$-20\text{ °C} \leq T_a \leq +60\text{ °C}$

Prüfprotokollnummer

ATEX-PP-05-914X

Test report number

Osterburken, den 20.11.2019

Osterburken, November 20th 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

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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weiterverbreitet werden.

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