



Hose couplings

System "Storz" - TW DIN 28 450 - KAMLOK DIN 2828

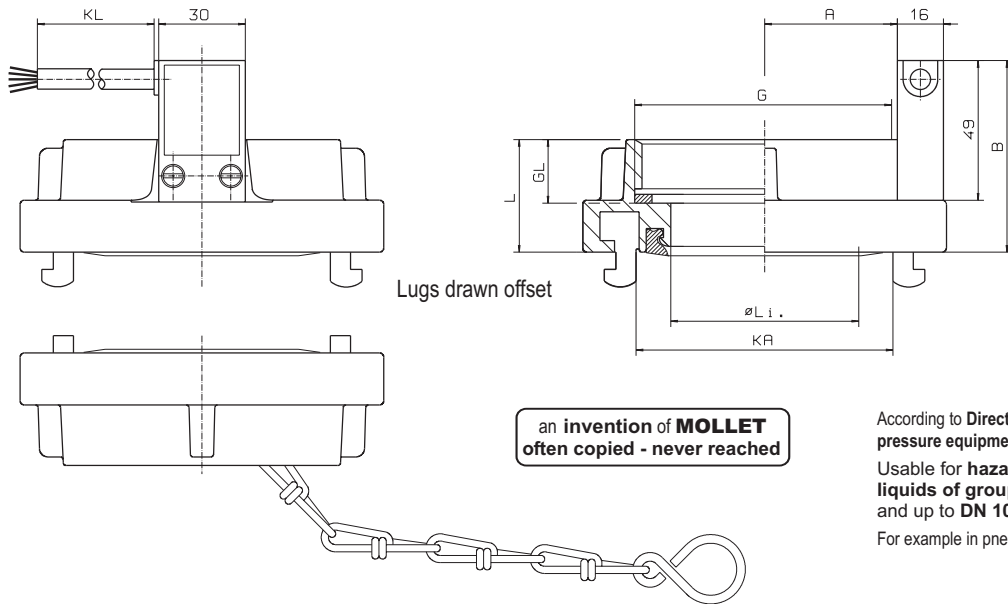
with built-in limit switch to signalize during the filling process of silos or tanks and at coupling stations (Blank caps do not actuate the limit switch)



Appliance information

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Measurements



| Type | NG | G | W | KL | KA | Li. | L | GL | A | B |
|-------------|------|----|---|-----|------|-----|----|----|----|----|
| KE - SZ 052 | IG2 | AL | 2 | 66 | 44,5 | 40 | 20 | 32 | 66 | 66 |
| KE - SZ 065 | IG2 | AL | 2 | 81 | 45 | 37 | 20 | 42 | 66 | 66 |
| KE - SZ 065 | IG2½ | AL | 2 | 81 | 58 | 52 | 20 | 42 | 66 | 66 |
| KE - SZ 075 | IG2 | AL | 2 | 89 | 50 | 38 | 20 | 42 | 67 | 67 |
| KE - SZ 075 | IG2½ | AL | 2 | 89 | 64,5 | 42 | 20 | 42 | 67 | 67 |
| KE - SZ 075 | IG3 | AL | 2 | 89 | 64,5 | 39 | 22 | 45 | 67 | 67 |
| KE - SZ 090 | IG3 | AL | 2 | 105 | 78 | 40 | 22 | 50 | 68 | 68 |
| KE - SZ 100 | IG4 | AL | 2 | 115 | 89,5 | 47 | 25 | 50 | 71 | 71 |
| KE - SZ 110 | IG4 | AL | 2 | 133 | 100 | 48 | 25 | 68 | 71 | 71 |
| KE - SZ 110 | IG4½ | AL | 2 | 133 | 100 | 48 | 25 | 68 | 71 | 71 |
| KE - SZ 125 | IG5 | AL | 2 | 148 | 115 | 52 | 28 | 75 | 73 | 73 |
| KE - SZ 150 | IG6 | AL | 2 | 160 | 130 | 60 | 30 | 85 | 75 | 75 |

According to Directive 97/23/EC 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

Result of the evaluation of ignition danger acc. to DIN EN 13463-1:
The couplings have no potential source of ignition on their own and are in accordance with
II 1(i)/2(o)GD c IIC T X

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

ATEX-Option **Gas+Dust**

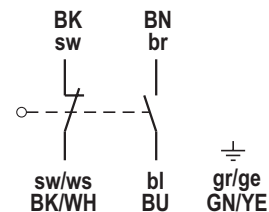
for limit switch with Ex type of protection II 3D T 80 °C IP67 attach B0 behind the order code
for limit switch with Ex type of protection II 3GD EEx nL T6 T 70 °C IP67 attach B8

Technical data

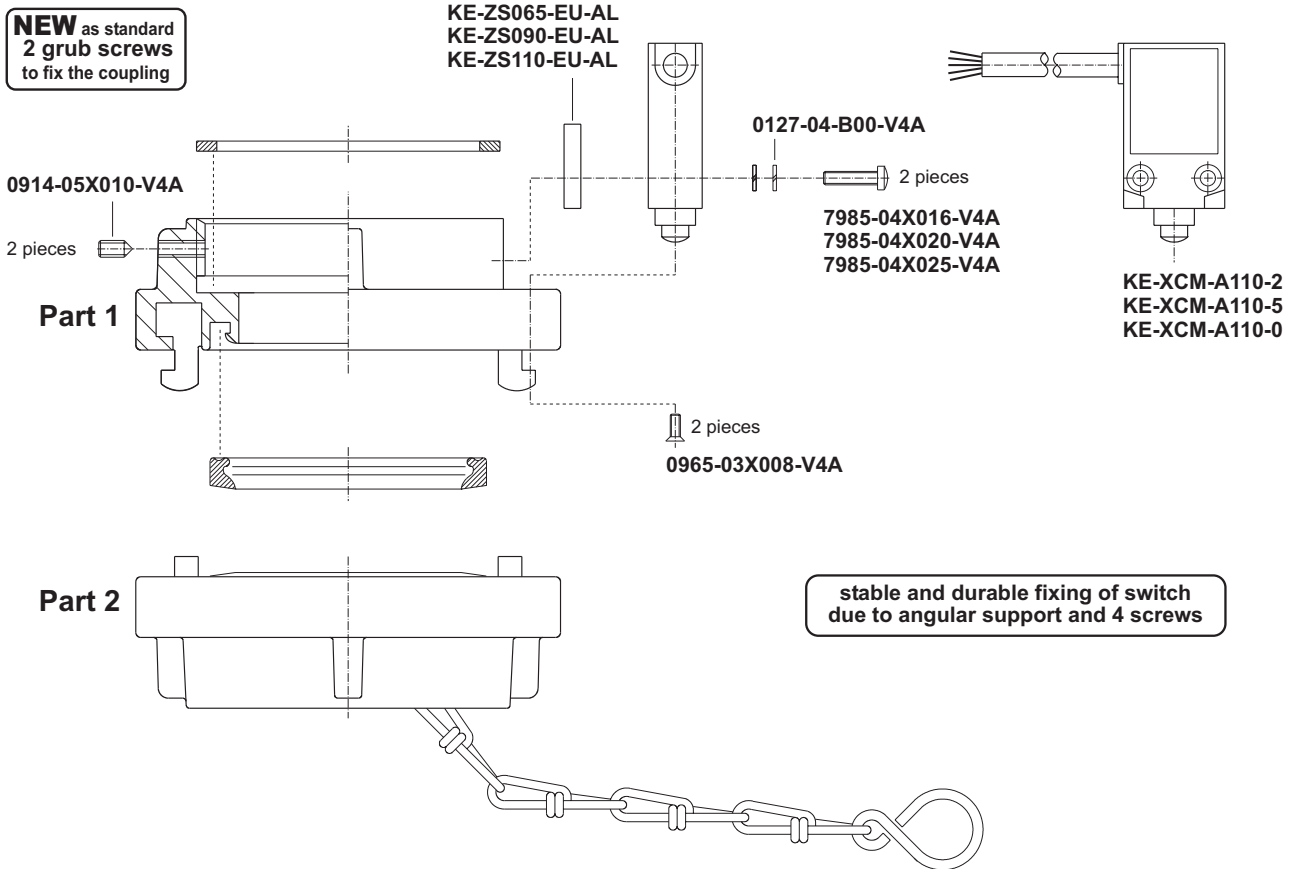
| | | |
|-------------------------|--------|--|
| Materials | (W) | AL = Aluminium AV = Aluminium/1.4571 MS = Brass VA = Stainless steel 316L |
| switch | | Zn-Al alloy |
| Varnish coating | switch | red |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +70 °C |
| Capacity of the contact | | 1,5 A / 250 V AC |
| Switching function | | 1 NC and 1 NO |
| Type of protection | | IP67 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option (switch) | B0 | II 3D T 80 °C IP67 |
| Option (switch) | B8 | II 3GD EEx nL T6 T 70 °C IP67 |

Wiring connection

| | | |
|--------------|------|--------------------------------|
| Cable | | 5 x 0,75 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Components



| Type | NG | G | W | KL |
|-------------|------|----|---|----|
| KE - SZ 052 | IG2 | AL | 2 | |
| KE - SZ 065 | IG2 | AL | 2 | |
| KE - SZ 065 | IG2½ | AL | 2 | |
| KE - SZ 075 | IG2 | AL | 2 | |
| KE - SZ 075 | IG2½ | AL | 2 | |
| KE - SZ 075 | IG3 | AL | 2 | |
| KE - SZ 090 | IG3 | AL | 2 | |
| KE - SZ 100 | IG4 | AL | 2 | |
| KE - SZ 110 | IG4 | AL | 2 | |
| KE - SZ 110 | IG4½ | AL | 2 | |
| KE - SZ 125 | IG5 | AL | 2 | |
| KE - SZ 150 | IG6 | AL | 2 | |

| 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 |

| Part 2 | NG | W |
|--------------------------|----|---|
| K - BSZ052 - 00 - AL - M | | |
| K - BSZ065 - 00 - AL - M | | |
| K - BSZ065 - 00 - AL - M | | |
| K - BSZ075 - 00 - AL - M | | |
| K - BSZ075 - 00 - AL - M | | |
| K - BSZ075 - 00 - AL - M | | |
| K - BSZ075 - 00 - AL - M | | |
| K - BSZ090 - 00 - AL - M | | |
| K - BSZ100 - 00 - AL - M | | |
| K - BSZ110 - 00 - AL - M | | |
| K - BSZ110 - 00 - AL - M | | |
| K - BSZ125 - 00 - AL - M | | |
| K - BSZ150 - 00 - AL - M | | |

Part 1 incl. seal rings

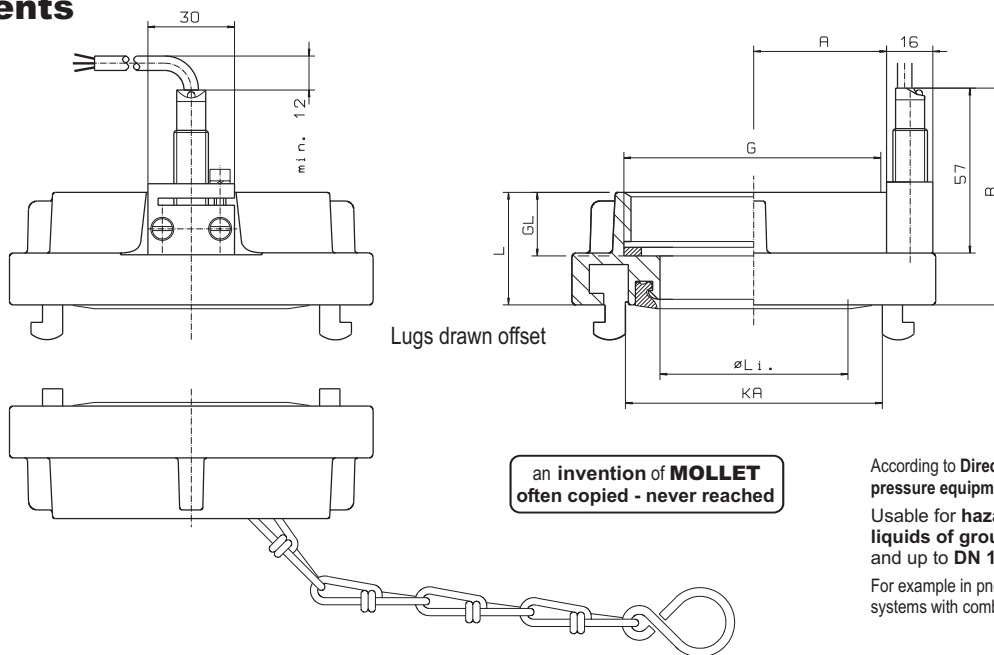
Seal rings and chains depending on the type and acc. to data sheet KE-TD-11

Part 2 incl. seal ring and chain

| Materials | AL | = | Aluminium |
|-----------|----|---|------------------|
| | AV | = | Aluminium/1.4571 |
| | VA | = | 1.4581 |
| | MS | = | Brass |

NG = Nominal size
G = Thread
W = Material

Measurements



| Type | NG | G | W | KL | KA | Li. | L | GL | A | B |
|-------------|------|----|---|-----|------|-----|----|----|----|---|
| KI - SZ 052 | IG2 | AL | 2 | 66 | 44,5 | 40 | 20 | 32 | 74 | |
| KI - SZ 065 | IG2 | AL | 2 | 81 | 45 | 37 | 20 | 42 | 74 | |
| KI - SZ 065 | IG2½ | AL | 2 | 81 | 58 | 52 | 20 | 42 | 74 | |
| KI - SZ 075 | IG2 | AL | 2 | 89 | 50 | 38 | 20 | 42 | 75 | |
| KI - SZ 075 | IG2½ | AL | 2 | 89 | 64,5 | 42 | 20 | 42 | 75 | |
| KI - SZ 075 | IG3 | AL | 2 | 89 | 64,5 | 39 | 22 | 45 | 75 | |
| KI - SZ 090 | IG3 | AL | 2 | 105 | 78 | 40 | 22 | 50 | 76 | |
| KI - SZ 100 | IG4 | AL | 2 | 115 | 89,5 | 47 | 25 | 50 | 79 | |
| KI - SZ 110 | IG4 | AL | 2 | 133 | 100 | 48 | 25 | 68 | 79 | |
| KI - SZ 110 | IG4½ | AL | 2 | 133 | 100 | 48 | 25 | 68 | 79 | |
| KI - SZ 125 | IG5 | AL | 2 | 148 | 115 | 52 | 28 | 75 | 82 | |
| KI - SZ 150 | IG6 | AL | 2 | 160 | 130 | 60 | 30 | 85 | 83 | |

According to Directive 97/23/EC 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 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)D c T X

NG = Nominal size

G = Thread

W = Material

KL = Cable length

KA = Lug distance

Li. = Inner diameter

ATEX-Option **Dust**



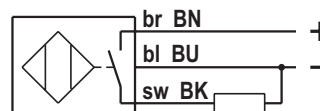
for limit switch with Ex type of protection $\text{Ex II 3D T 90 °C IP67}$
attach **B0** behind the order code

Technical data

| | | |
|------------------------------|-----------|--|
| Materials | (W) | AL = Aluminium AV = Aluminium/1.4571 MS = Brass VA = Stainless steel 316L |
| switch active surface | | CuZn, chromium plated PA12-GF30 |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | 200 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP67 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option (switch) | B0 | $\text{Ex II 3D T 90 °C IP67}$ |

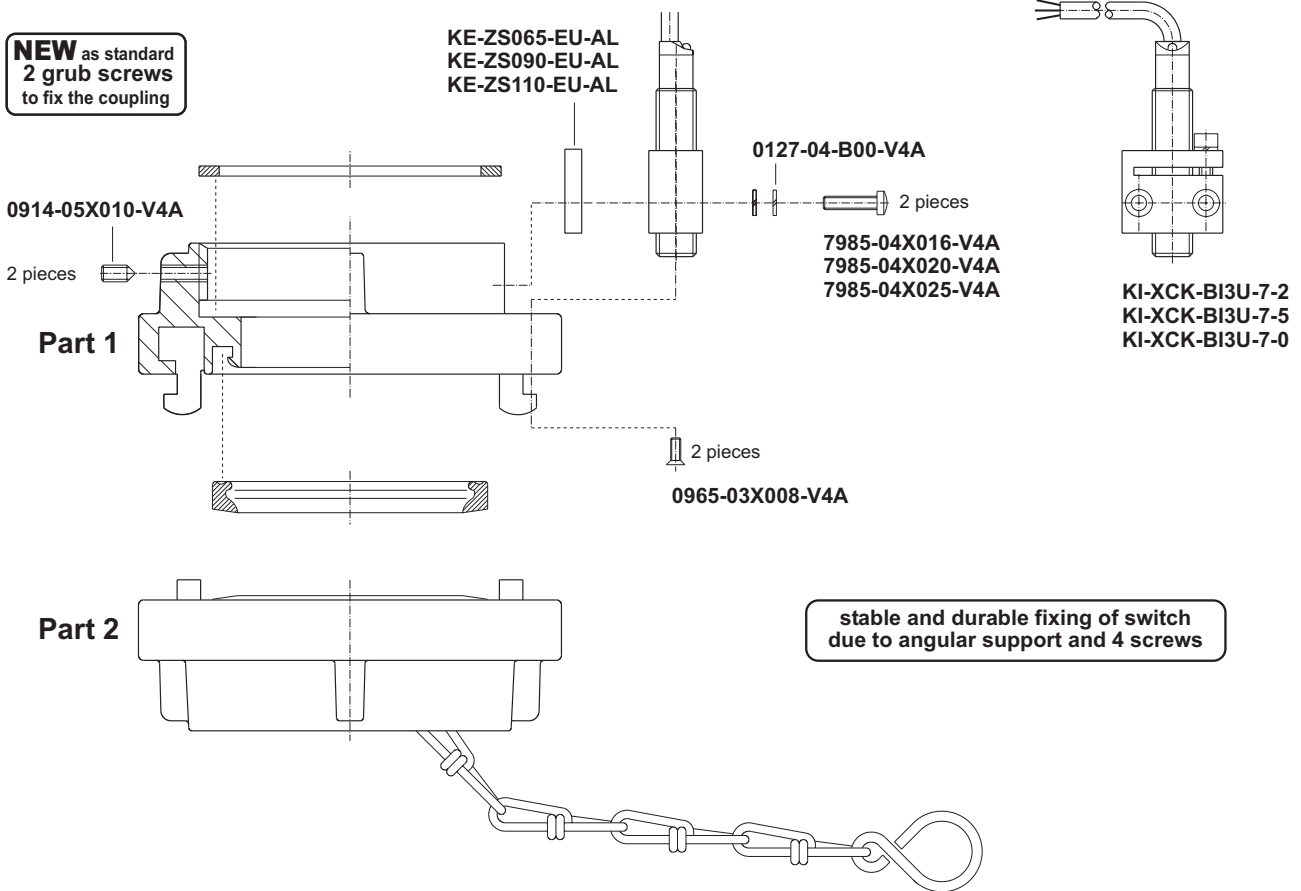
Wiring connection

| | | |
|---------------------|------|--------------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



TURCK BI3U

Components



| Type | NG | G | W | KL | Part 1 | NG | G | W | Part 2 | NG | W |
|-------------|------|----|---|----|-------------|------|----|---|--------------------------|----|---|
| KI - SZ 052 | IG2 | AL | 2 | | K - FSZ 052 | IG2 | AL | E | K - BSZ052 - 00 - AL - M | | |
| KI - SZ 065 | IG2 | AL | 2 | | K - FSZ 065 | IG2 | AL | E | K - BSZ065 - 00 - AL - M | | |
| KI - SZ 065 | IG2½ | AL | 2 | | K - FSZ 065 | IG2½ | AL | E | K - BSZ065 - 00 - AL - M | | |
| KI - SZ 075 | IG2 | AL | 2 | | K - FSZ 075 | IG2 | AL | E | K - BSZ075 - 00 - AL - M | | |
| KI - SZ 075 | IG2½ | AL | 2 | | K - FSZ 075 | IG2½ | AL | E | K - BSZ075 - 00 - AL - M | | |
| KI - SZ 075 | IG3 | AL | 2 | | K - FSZ 075 | IG3 | AL | E | K - BSZ075 - 00 - AL - M | | |
| KI - SZ 090 | IG3 | AL | 2 | | K - FSZ 090 | IG3 | AL | E | K - BSZ090 - 00 - AL - M | | |
| KI - SZ 100 | IG4 | AL | 2 | | K - FSZ 100 | IG4 | AL | E | K - BSZ100 - 00 - AL - M | | |
| KI - SZ 110 | IG4 | AL | 2 | | K - FSZ 110 | IG4 | AL | E | K - BSZ110 - 00 - AL - M | | |
| KI - SZ 110 | IG4½ | AL | 2 | | K - FSZ 110 | IG4½ | AL | E | K - BSZ110 - 00 - AL - M | | |
| KI - SZ 125 | IG5 | AL | 2 | | K - FSZ 125 | IG5 | AL | E | K - BSZ125 - 00 - AL - M | | |
| KI - SZ 150 | IG6 | AL | 2 | | K - FSZ 150 | IG6 | AL | E | K - BSZ150 - 00 - AL - M | | |

Part 1 incl. seal rings

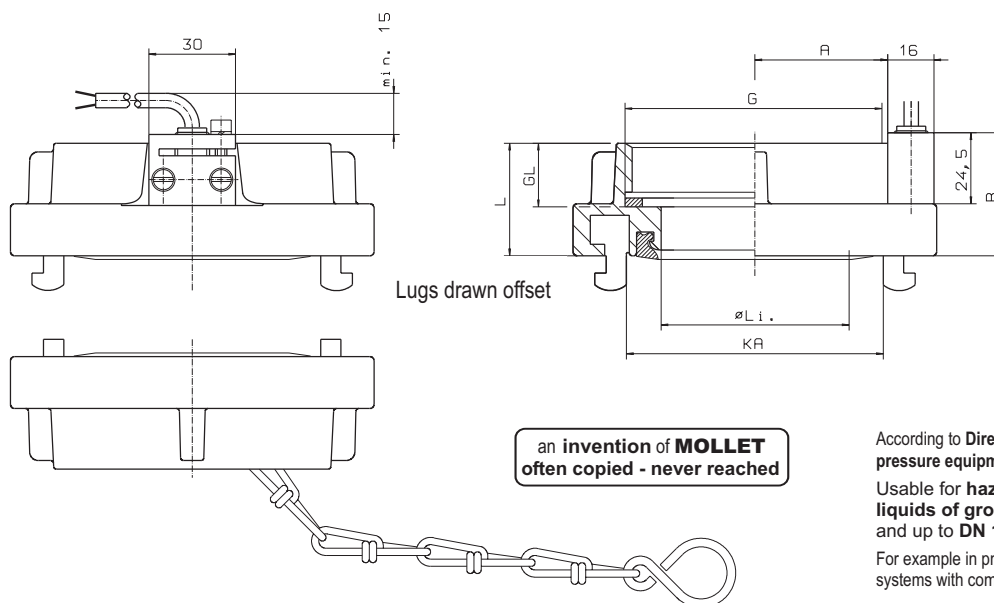
Seal rings and chains depending on the type and acc. to data sheet KE-TD-11.

Part 2 incl. seal ring and chain

| Materials | AL | = | Aluminium |
|-----------|----|---|------------------|
| | AV | = | Aluminium/1.4571 |
| | VA | = | 1.4581 |
| | MS | = | Brass |

NG = Nominal size
G = Thread
W = Material

Measurements



| Type | NG | G | W | KL | KA | Li. | L | GL | A | B |
|-------------|------|----|---|-----|------|-----|----|----|------|---|
| KN - SZ 052 | IG2 | AL | 2 | 66 | 44,5 | 40 | 20 | 32 | 41,5 | |
| KN - SZ 065 | IG2 | AL | 2 | 81 | 45 | 37 | 20 | 42 | 41,5 | |
| KN - SZ 065 | IG2½ | AL | 2 | 81 | 58 | 52 | 20 | 42 | 41,5 | |
| KN - SZ 075 | IG2 | AL | 2 | 89 | 50 | 38 | 20 | 42 | 42,5 | |
| KN - SZ 075 | IG2½ | AL | 2 | 89 | 64,5 | 42 | 20 | 42 | 42,5 | |
| KN - SZ 075 | IG3 | AL | 2 | 89 | 64,5 | 39 | 22 | 45 | 42,5 | |
| KN - SZ 090 | IG3 | AL | 2 | 105 | 78 | 40 | 22 | 50 | 43,5 | |
| KN - SZ 100 | IG4 | AL | 2 | 115 | 89,5 | 47 | 25 | 50 | 46,5 | |
| KN - SZ 110 | IG4 | AL | 2 | 133 | 100 | 48 | 25 | 68 | 46,5 | |
| KN - SZ 110 | IG4½ | AL | 2 | 133 | 100 | 48 | 25 | 68 | 46,5 | |
| KN - SZ 125 | IG5 | AL | 2 | 148 | 115 | 52 | 28 | 75 | 57,5 | |
| KN - SZ 150 | IG6 | AL | 2 | 160 | 130 | 60 | 30 | 85 | 58,5 | |

According to Directive 97/23/EC 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 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)GD c IIC T X

NG = Nominal size

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KL = Cable length

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Gas II 2G EEx ia IIC T6

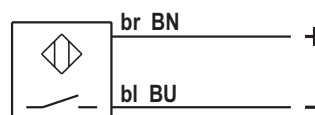
Dust II 1D Ex iaD 20 T... °C

Technical data

| | | |
|------------------------------|--------|--|
| Materials | (W) | AL = Aluminium AV = Aluminium/1.4571 MS = Brass VA = Stainless steel 316L |
| | switch | PBTP (Polybutylenterephthalat) |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +60 °C |
| Nominal voltage | | 8 V DC (Ri approx. 1 k Ω) |
| Power consumption | | activated: 1 mA not activated: 3 mA |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Ex type of protection | | II 2G EEx ia IIC T6 and II 1D Ex iaD 20 T... °C |

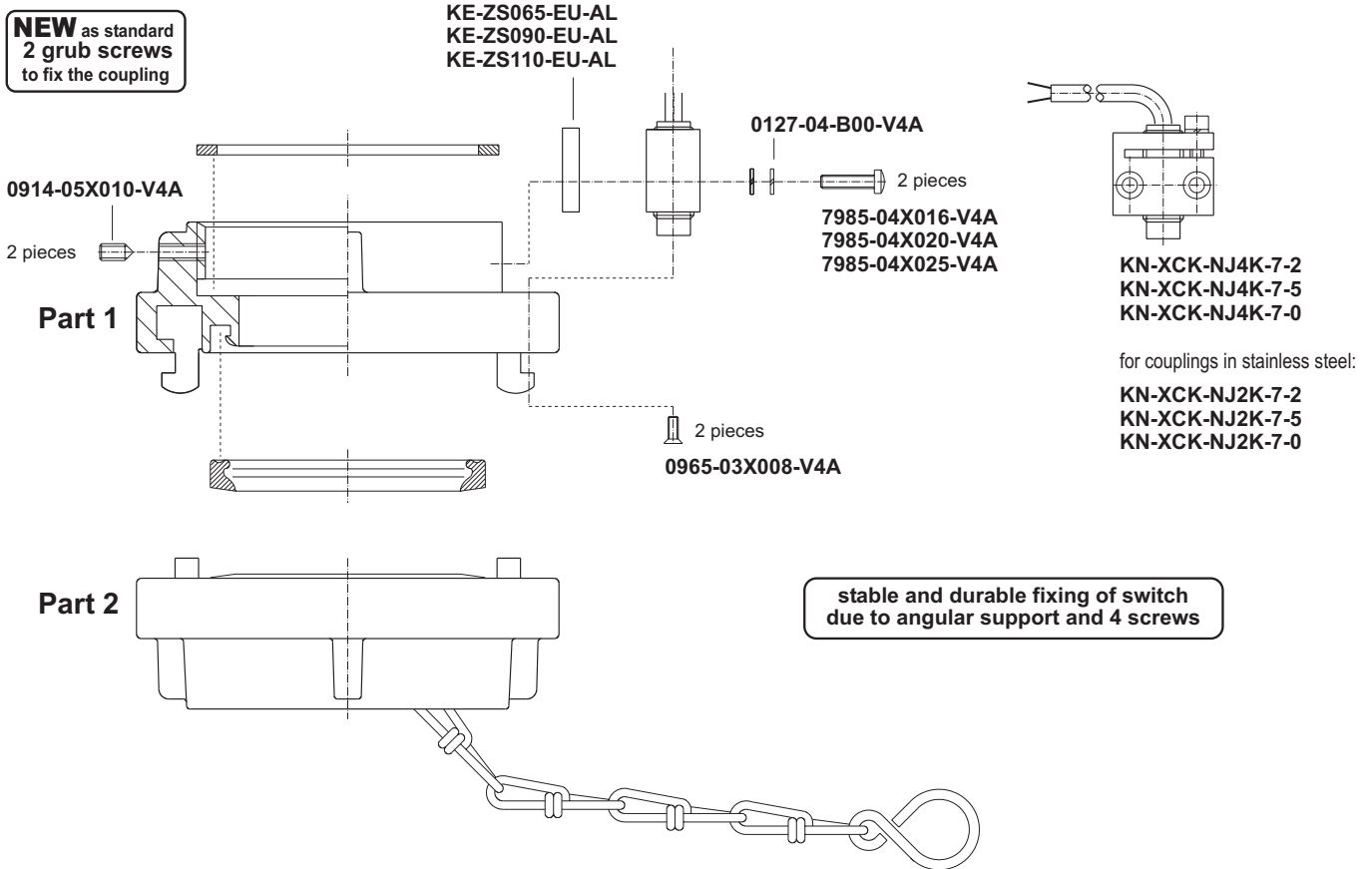
Wiring connection

| | | |
|---------------------|------|--------------------------------|
| Cable | | 2 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs (AL NJ4, VA NJ2)

Components



| Type | NG | G | W | KL | Part 1 | NG | G | W | Part 2 | NG | W |
|-------------|------|----|---|----|-------------|------|----|---|--------------------------|----|---|
| KN - SZ 052 | IG2 | AL | 2 | | K - FSZ 052 | IG2 | AL | E | K - BSZ052 - 00 - AL - M | | |
| KN - SZ 065 | IG2 | AL | 2 | | K - FSZ 065 | IG2 | AL | E | K - BSZ065 - 00 - AL - M | | |
| KN - SZ 065 | IG2½ | AL | 2 | | K - FSZ 065 | IG2½ | AL | E | K - BSZ065 - 00 - AL - M | | |
| KN - SZ 075 | IG2 | AL | 2 | | K - FSZ 075 | IG2 | AL | E | K - BSZ075 - 00 - AL - M | | |
| KN - SZ 075 | IG2½ | AL | 2 | | K - FSZ 075 | IG2½ | AL | E | K - BSZ075 - 00 - AL - M | | |
| KN - SZ 075 | IG3 | AL | 2 | | K - FSZ 075 | IG3 | AL | E | K - BSZ075 - 00 - AL - M | | |
| KN - SZ 090 | IG3 | AL | 2 | | K - FSZ 090 | IG3 | AL | E | K - BSZ090 - 00 - AL - M | | |
| KN - SZ 100 | IG4 | AL | 2 | | K - FSZ 100 | IG4 | AL | E | K - BSZ100 - 00 - AL - M | | |
| KN - SZ 110 | IG4 | AL | 2 | | K - FSZ 110 | IG4 | AL | E | K - BSZ110 - 00 - AL - M | | |
| KN - SZ 110 | IG4½ | AL | 2 | | K - FSZ 110 | IG4½ | AL | E | K - BSZ110 - 00 - AL - M | | |
| KN - SZ 125 | IG5 | AL | 2 | | K - FSZ 125 | IG5 | AL | E | K - BSZ125 - 00 - AL - M | | |
| KN - SZ 150 | IG6 | AL | 2 | | K - FSZ 150 | IG6 | AL | E | K - BSZ150 - 00 - AL - M | | |

Part 1 incl. seal rings

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

Part 2 incl. seal ring and chain

Materials

| | | |
|----|---|------------------|
| AL | = | Aluminium |
| AV | = | Aluminium/1.4571 |
| VA | = | 1.4581 |
| MS | = | Brass |

NG = Nominal size
G = Thread
W = Material



Hose couplings

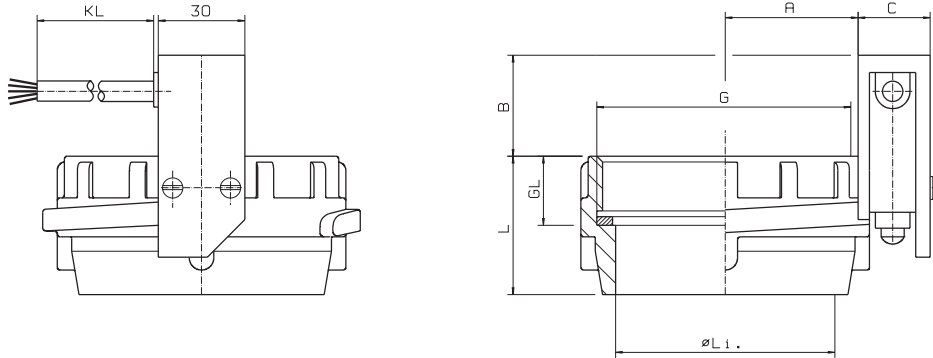


System "Storz" - TW DIN 28 450 - KAMLOK DIN 2828
with built-in limit switch to signalize during the filling process of silos
or tanks and at coupling stations (Blank caps do not actuate the limit switch)

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| Father coupling 80, 100 DIN 28450 with mechanical limit switch | 08 |
| Father coupling 80, 100 DIN 28450 with inductive limit switch | 10 |
| Father coupling 80, 100 DIN 28450 with inductive limit switch NAMUR | 12 |
| Father coupling 50 DIN 28450 with inductive limit switch | 14 |
| Father coupling 50 DIN 28450 with inductive limit switch NAMUR | 15 |
| KAMLOK coupling DIN 2828 with inductive limit switch | 16 |
| KAMLOK coupling DIN 2828 with inductive limit switch NAMUR | 18 |
| KAMLOK coupling DIN 2828 with actuating cam | 20 |
| Technical data sheets limit switches | KE-TD- 01...10 |
| Seals, chains with S-hooks | KE-TD-11 |

Measurements



| Type | NG | G | W | KL | Li. | L | GL | A | B | C |
|-------------|-----|----|---|----|-----|------|------|----|----|---|
| KE - VK 080 | IG3 | AL | 2 | 76 | 47 | 24,5 | 45,7 | 35 | 25 | |
| KE - VK 100 | IG4 | AL | 2 | 95 | 47 | 24,5 | 58,5 | 35 | 30 | |

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

Result of the evaluation of ignition danger acc. to DIN EN 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)GD c IIC T X

According to Directive 97/23/EC 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.

ATEX-Option Gas+Dust



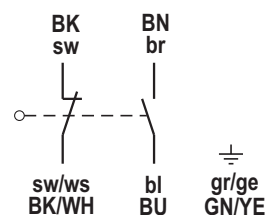
for limit switch with Ex type of protection $\text{Ex II 3D T 80 }^{\circ}\text{C IP67}$ attach **B0** behind the order code
for limit switch with Ex type of protection $\text{Ex II 3GD EEx nL T6 T 70 }^{\circ}\text{C IP67}$ attach **B8**

Technical data

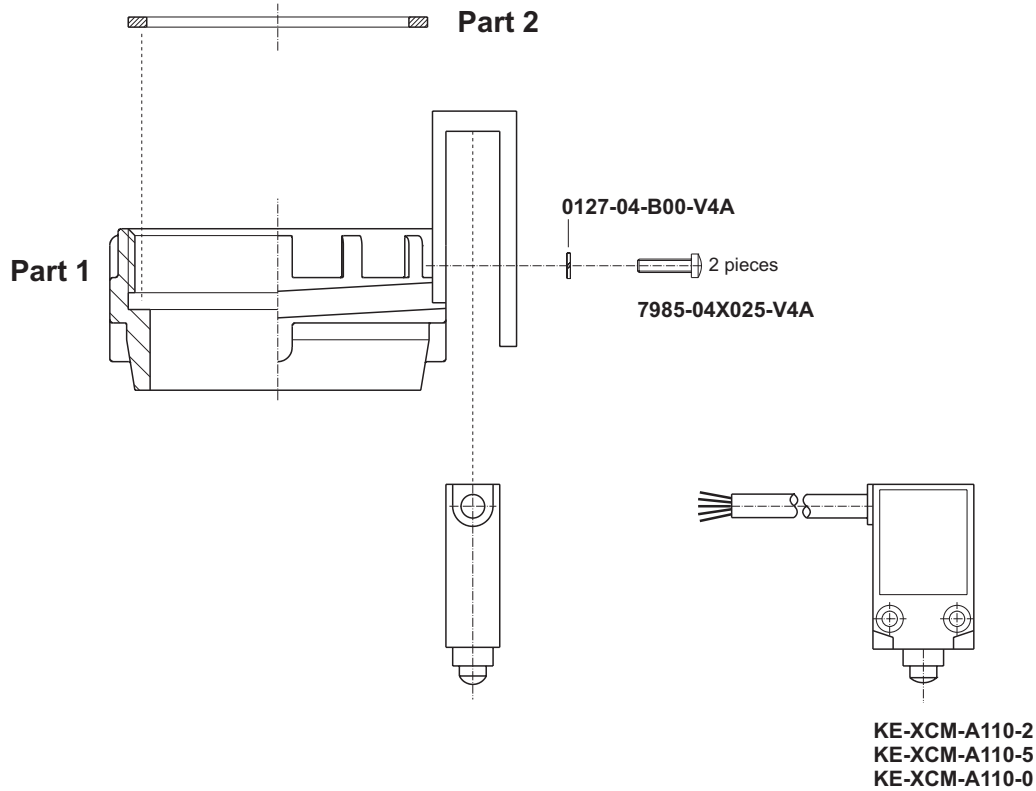
| | |
|-------------------------|---|
| Materials (W) | AL = Aluminium MS = Brass VA = Stainless steel 316L |
| switch | Zn-Al alloy |
| Varnish coating | switch red |
| Mounting position | any |
| Ambient temperature | -25 °C up to +70 °C |
| Capacity of the contact | 1,5 A / 250 V AC |
| Switching function | 1 NC and 1 NO |
| Type of protection | IP67 acc. to DIN EN 60529 |
| Maintenance | none |
| Option (switch) B0 | $\text{Ex II 3D T 80 }^{\circ}\text{C IP67}$ |
| Option (switch) B8 | $\text{Ex II 3GD EEx nL T6 T 70 }^{\circ}\text{C IP67}$ |

Wiring connection

| | |
|-------------------|--------------------------------|
| Cable | 5 x 0,75 mm ² |
| Cable length (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Components



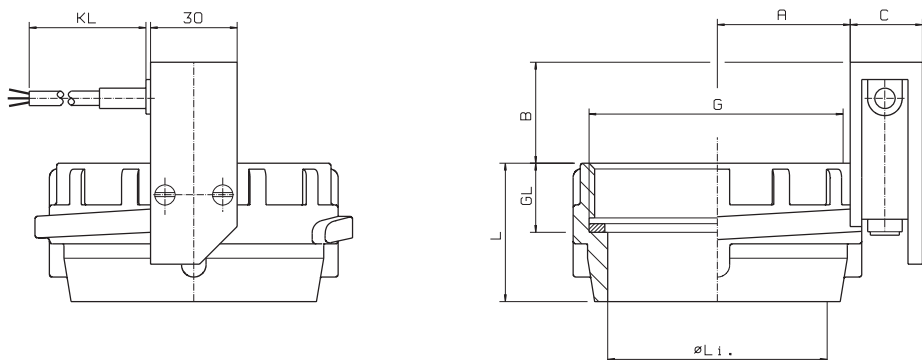
| Type | NG | G | W | Part 1 | NG | G | W | Part 2 | Seal ring |
|-------------|-----|----|---|-------------|-----|----|---|-----------|----------------|
| KE - VK 080 | IG3 | AL | 2 | K - FVK 080 | IG3 | AL | E | VD080/077 | Vulkolan, blue |
| KE - VK 080 | IG3 | MS | 2 | K - FVK 080 | IG3 | MS | E | VD080/077 | Vulkolan, blue |
| KE - VK 080 | IG3 | VA | 2 | K - FVK 080 | IG3 | VA | E | TD080/077 | Teflon, white |
| KE - VK 100 | IG4 | MS | 2 | K - FVK 100 | IG4 | MS | E | VD114/100 | Vulkolan, blue |
| KE - VK 100 | IG4 | VA | 2 | K - FVK 100 | IG4 | VA | E | TD114/100 | Teflon, white |

Part 1 incl. seal ring

Materials AL = Aluminium
MS = Brass
VA = 1.4408

NG = Nominal size
G = Thread
W = Material

Measurements



| Type | NG | G | W | KL | Li. | L | GL | A | B | C | |
|-------------|-----|----|---|----|-----|------|------|----|----|---|--|
| KI - VK 080 | IG3 | AL | 3 | 76 | 47 | 24,5 | 45,7 | 35 | 25 | | |
| KI - VK 100 | IG4 | AL | 3 | 95 | 47 | 24,5 | 58,5 | 35 | 30 | | |

NG = Nominal size
G = Thread
W = Material
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Li. = Inner diameter

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The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)D c T X

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For example in pneumatic conveyor systems with combustible dusts etc.

ATEX-Option **Dust**



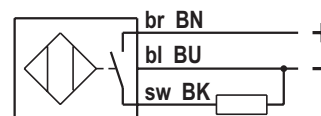
for limit switch with Ex type of protection Ex II 3D T 90 °C IP68
attach B0 behind the order code

Technical data

| | |
|-----------------------|---|
| Materials (W) | AL = Aluminium MS = Brass VA = Stainless steel 316L |
| switch active surface | CuZn, nickel plated PA12 |
| Mounting position | any |
| Ambient temperature | -20 °C up to +60 °C |
| Supply voltage | 10 ... 30 V DC |
| Load current capacity | 130 mA, constant current |
| Switching function | PNP, Normally open |
| Type of protection | IP68 acc. to DIN EN 60529 |
| Maintenance | none |
| Option (switch) B0 | Ex II 3D T 90 °C IP68 |

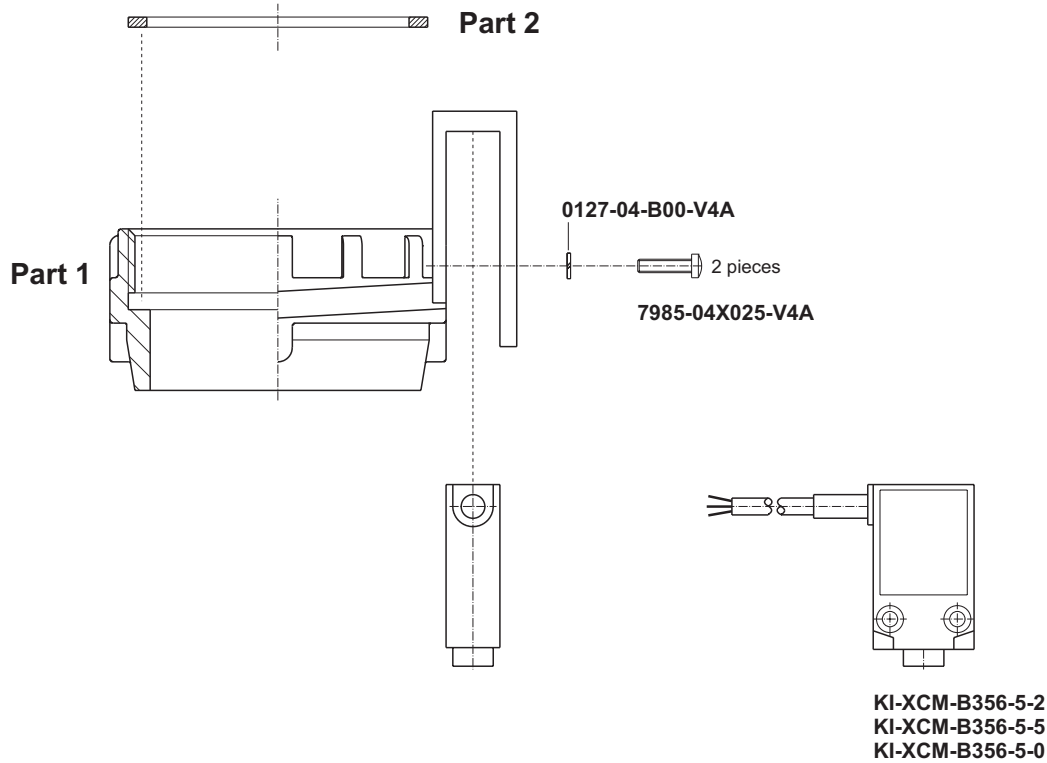
Wiring connection

| | |
|-------------------|--------------------------------|
| Cable | 3 x 0,34 mm ² |
| Cable length (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



BALLUFF 356

Components



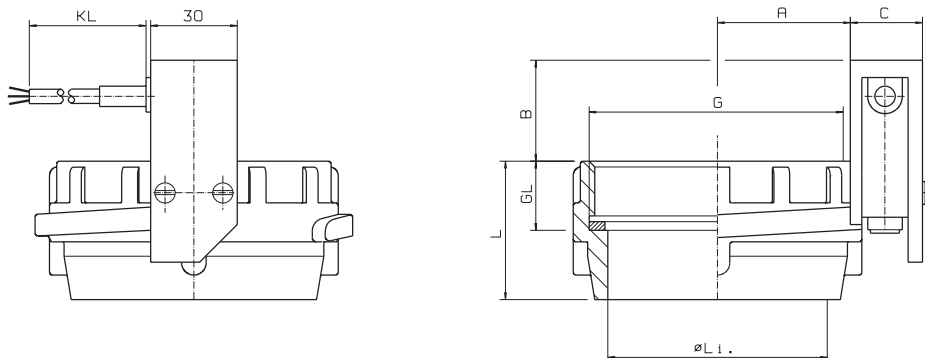
| Type | NG | G | W | Part 1 | NG | G | W | Part 2 | Seal ring |
|-------------|----|-----|------|-------------|-----|----|---|-----------|----------------|
| KI - VK 080 | | IG3 | AL 2 | K - FVK 080 | IG3 | AL | E | VD080/077 | Vulkolan, blue |
| KI - VK 080 | | IG3 | MS 2 | K - FVK 080 | IG3 | MS | E | VD080/077 | Vulkolan, blue |
| KI - VK 080 | | IG3 | VA 2 | K - FVK 080 | IG3 | VA | E | TD080/077 | Teflon, white |
| KI - VK 100 | | IG4 | MS 2 | K - FVK 100 | IG4 | MS | E | VD114/100 | Vulkolan, blue |
| KI - VK 100 | | IG4 | VA 2 | K - FVK 100 | IG4 | VA | E | TD114/100 | Teflon, white |

Part 1 incl. seal ring

| Materials | AL | MS | VA |
|-----------|-------------|---------|----------|
| | = Aluminium | = Brass | = 1.4408 |

NG = Nominal size
G = Thread
W = Material

Measurements



| Type | NG | G | W | KL | Li. | L | GL | A | B | C | |
|-------------|-----|----|---|----|-----|------|------|----|----|---|--|
| KN - VK 080 | IG3 | AL | 2 | 76 | 47 | 24,5 | 45,7 | 35 | 25 | | |
| KN - VK 100 | IG4 | AL | 2 | 95 | 47 | 24,5 | 58,5 | 35 | 30 | | |

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

Result of the evaluation of ignition danger acc. to DIN EN 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)GD c IIC T X

According to Directive 97/23/EC 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.

Gas  II 2G EEx ia IIC T6

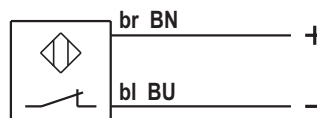
Dust  II 1D Ex iaD 20 T... °C

Technical data

| | |
|-----------------------|--|
| Materials (W) | AL = Aluminium MS = Brass VA = Stainless steel 316L |
| switch | PBTP (Polybutylenterephthalat) |
| Mounting position | any |
| Ambient temperature | -25 °C up to +60 °C |
| Nominal voltage | 8 V DC (Ri approx. 1 k) |
| Power consumption | activated: 1 mA not activated: 3 mA |
| Type of protection | IP68 acc. to DIN EN 60529 |
| Maintenance | none |
| Ex type of protection |  II 2G EEx ia IIC T6 and  II 1D Ex iaD 20 T... °C |

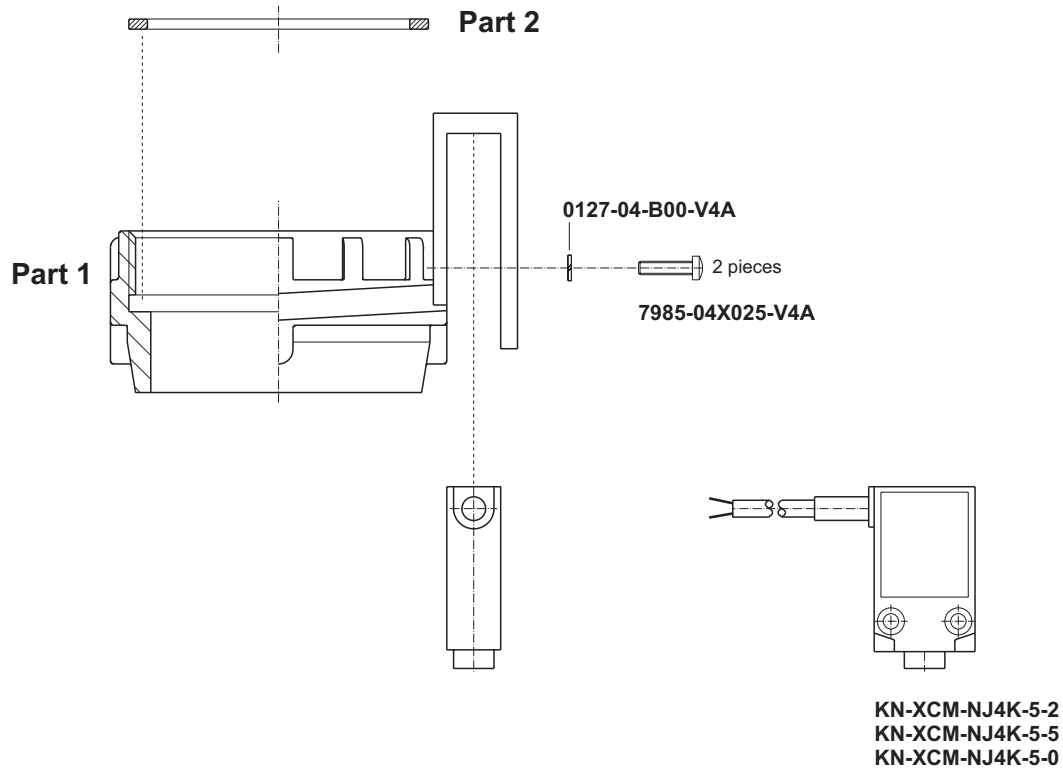
Wiring connection

| | |
|-------------------|--------------------------------|
| Cable | 2 x 0,34 mm ² |
| Cable length (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs NJ4

Components



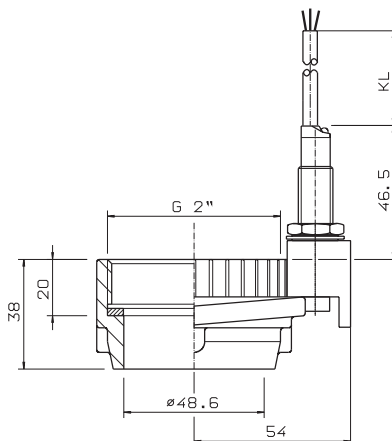
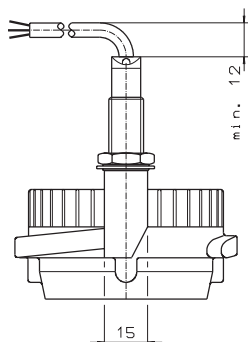
| Type | NG | G | W | Part 1 | NG | G | W | Part 2 | Seal ring |
|-------------|-----|----|---|-------------|-----|----|---|-----------|----------------|
| KN - VK 080 | IG3 | AL | 2 | K - FVK 080 | IG3 | AL | E | VD080/077 | Vulkolan, blue |
| KN - VK 080 | IG3 | MS | 2 | K - FVK 080 | IG3 | MS | E | VD080/077 | Vulkolan, blue |
| KN - VK 080 | IG3 | VA | 2 | K - FVK 080 | IG3 | VA | E | TD080/077 | Teflon, white |
| KN - VK 100 | IG4 | MS | 2 | K - FVK 100 | IG4 | MS | E | VD114/100 | Vulkolan, blue |
| KN - VK 100 | IG4 | VA | 2 | K - FVK 100 | IG4 | VA | E | TD114/100 | Teflon, white |

Part 1 incl. seal ring

| Materials | AL | = | Aluminium |
|-----------|----|---|-----------|
| | MS | = | Brass |
| | VA | = | 1.4408 |

NG = Nominal size
G = Thread
W = Material

Measurements



According to Directive 97/23/EC 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 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)D c T X

| Type | NG | G | W | KL |
|---------|-----|-----|----|----|
| KI - VK | 050 | IG2 | MS | 2 |
| KI - VK | 050 | IG2 | VA | 2 |

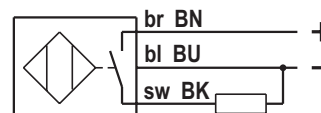
NG = Nominal size
G = Thread
W = Material
KL = Cable length

Technical data

| | |
|-----------------------|---|
| Materials (W) | MS = Brass VA = Stainless steel 316L |
| switch active surface | CuZn, chromium plated PA12-GF30 |
| Mounting position | any |
| Ambient temperature | -20 °C up to +60 °C |
| Supply voltage | 10 ... 30 V DC |
| Load current capacity | 200 mA, constant current |
| Switching function | PNP, Normally open |
| Type of protection | IP67 acc. to DIN EN 60529 |
| Maintenance | none |
| Option (switch) B0 | ⊕ II 3D T 90 °C IP67 |

Wiring connection

| | |
|-------------------|--------------------------------|
| Cable | 3 x 0,34 mm ² |
| Cable length (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |

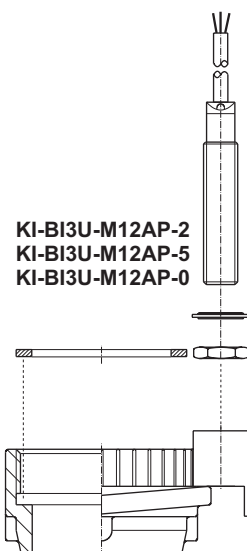


TURCK BI3U

Components

| Type | NG | G | W | Part 1 | NG | G | W | Part 2 | Seal ring |
|---------|-----|-----|----|-------------|-----|----|---|-----------|----------------|
| KI - VK | 050 | IG3 | MS | K - FVK 050 | IG3 | MS | E | VD060/049 | Vulkolan, blue |
| KI - VK | 050 | IG3 | VA | K - FVK 050 | IG3 | VA | E | TD060/049 | Teflon, white |

Part 1 incl. seal ring



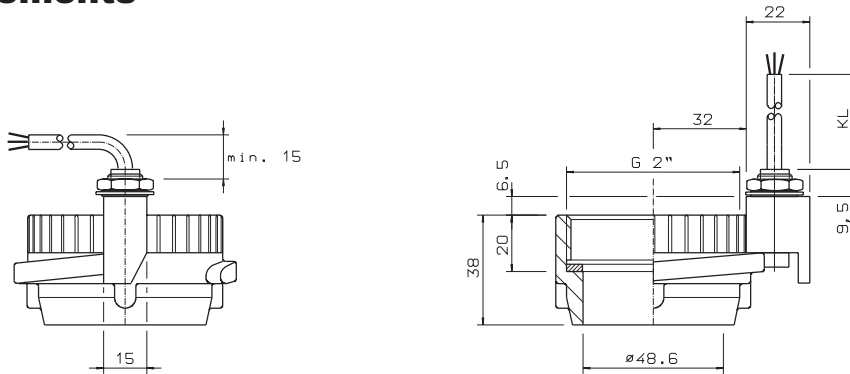
KI-BI3U-M12AP-2
KI-BI3U-M12AP-5
KI-BI3U-M12AP-0

ATEX-Option Dust



for limit switch with Ex type of protection ⊕ II 3D T 90 °C IP67
attach B0 behind the order code

Measurements



According to Directive 97/23/EC 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 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)GD c IIC T X

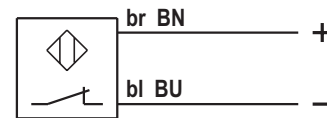
| Type | NG | G | W | KL | NG = Nominal size |
|-------------|-----|----|---|----|-------------------|
| KN - VK 050 | IG2 | MS | 2 | | G = Thread |
| KN - VK 050 | IG2 | VA | 2 | | W = Material |
| | | | | | KL = Cable length |

Technical data

| | | |
|-----------------------|--------|--|
| Materials | (W) | MS = brass VA = Stainless steel 316L |
| | switch | PBTP (Polybutylenterephthalat) |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +60 °C |
| Nominal voltage | | 8 V DC (Ri approx. 1 k) |
| Power consumption | | activated: 1 mA not activated: 3 mA |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Ex type of protection | | ⊕ II 2G EEx ia IIC T6 and ⊕ II 1D Ex iaD 20 T... °C |

Wiring connection

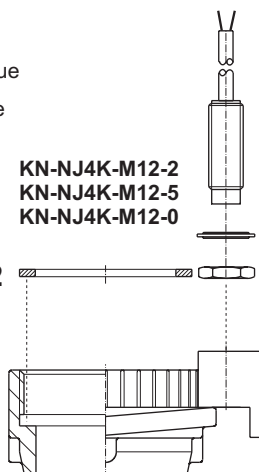
| | | |
|--------------|------|--------------------------------|
| Cable | | 2 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs NJ4

Components

| Type | NG | G | W | Part 1 | NG | G | W | Part 2 | Seal ring |
|-------------|-----|----|---|------------------------|-----|----|---|-----------|----------------|
| KN - VK 050 | IG3 | MS | 2 | K - FVK 050 | IG3 | MS | E | VD060/049 | Vulkolan, blue |
| KN - VK 050 | IG3 | VA | 2 | K - FVK 050 | IG3 | VA | E | TD060/049 | Teflon, white |
| | | | | Part 1 incl. seal ring | | | | | |



Gas II 2G EEx ia IIC T6

Dust II 1D Ex iaD 20 T... °C



Hose couplings

System "Storz" - TW DIN 28 450 - KAMLOK DIN 2828

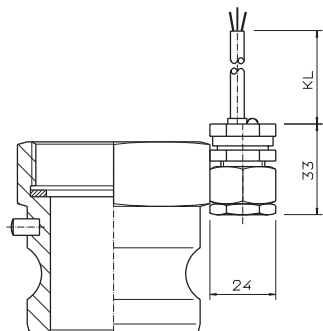
with built-in limit switch to signalize during the filling process of silos or tanks and at coupling stations (Blank caps do not actuate the limit switch)



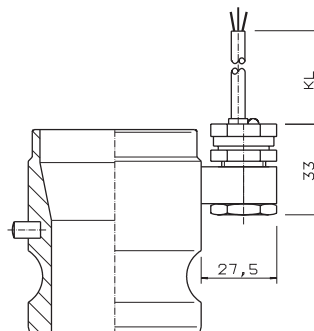
Appliance information

| Index | Page |
|---|----------------|
| Coupling with inside thread System "Storz" with mechanical limit switch | 02 |
| Coupling with inside thread System "Storz" with inductive limit switch | 04 |
| Coupling with inside thread System "Storz" with inductive limit switch NAMUR | 06 |
| Father coupling 80, 100 DIN 28450 with mechanical limit switch | 08 |
| Father coupling 80, 100 DIN 28450 with inductive limit switch | 10 |
| Father coupling 80, 100 DIN 28450 with inductive limit switch NAMUR | 12 |
| Father coupling 50 DIN 28450 with inductive limit switch | 14 |
| Father coupling 50 DIN 28450 with inductive limit switch NAMUR | 15 |
| KAMLOK coupling DIN 2828 with inductive limit switch | 16 |
| KAMLOK coupling DIN 2828 with inductive limit switch NAMUR | 18 |
| KAMLOK coupling DIN 2828 with actuating cam | 20 |
| Technical data sheets limit switches | KE-TD- 01...10 |
| Seals, chains with S-hooks | KE-TD-11 |

Measurements



| Type | NG | W | KL |
|-----------|-----|----|----|
| KI - AVKI | 025 | VA | 2 |
| KI - AVKI | 032 | VA | 2 |
| KI - AVKI | 040 | VA | 2 |
| KI - AVKI | 050 | VA | 2 |
| KI - AVKI | 065 | VA | 2 |
| KI - AVKI | 080 | VA | 2 |
| KI - AVKI | 100 | VA | 2 |



| Type | NG | W | KL |
|-----------|-----|----|----|
| KI - AVKR | 025 | VA | 2 |
| KI - AVKR | 032 | VA | 2 |
| KI - AVKR | 040 | VA | 2 |
| KI - AVKR | 050 | VA | 2 |
| KI - AVKR | 065 | VA | 2 |
| KI - AVKR | 080 | VA | 2 |
| KI - AVKR | 100 | VA | 2 |

Result of the evaluation of ignition danger acc. to DIN EN 13463-1:

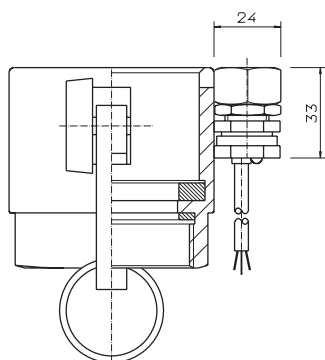
The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)D c T X

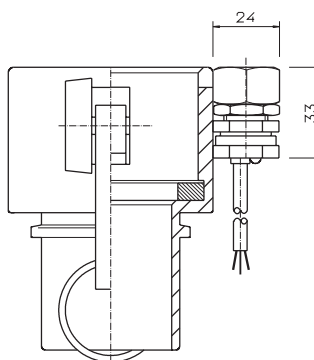
ATEX-Option **Dust**



for limit switch with Ex type of protection **Ex II 3D T 90 °C IP68**
attach **B0** behind the order code



| Type | NG | W | KL |
|-----------|-----|----|----|
| KI - AMKI | 025 | VA | 2 |
| KI - AMKI | 032 | VA | 2 |
| KI - AMKI | 040 | VA | 2 |
| KI - AMKI | 050 | VA | 2 |
| KI - AMKI | 065 | VA | 2 |
| KI - AMKI | 080 | VA | 2 |
| KI - AMKI | 100 | VA | 2 |



| Type | NG | W | KL |
|-----------|-----|----|----|
| KI - AMKS | 025 | VA | 2 |
| KI - AMKS | 032 | VA | 2 |
| KI - AMKS | 040 | VA | 2 |
| KI - AMKS | 050 | VA | 2 |
| KI - AMKS | 065 | VA | 2 |
| KI - AMKS | 080 | VA | 2 |
| KI - AMKS | 100 | VA | 2 |

Result of the evaluation of ignition danger acc. to DIN EN 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)D c T X

ATEX-Option **Dust**



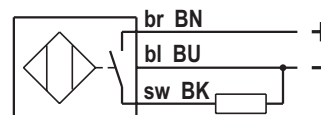
for limit switch with Ex type of protection **Ex II 3D T 90 °C IP68**
attach **B0** behind the order code

Technical data

| | | |
|------------------------------|-----------|----------------------------------|
| Materials | (W) | VA = Stainless steel 316L |
| switch active surface | | CuZn, nickel plated PA12 |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | 130 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option (switch) | B0 | Ex II 3D T 90 °C IP68 |

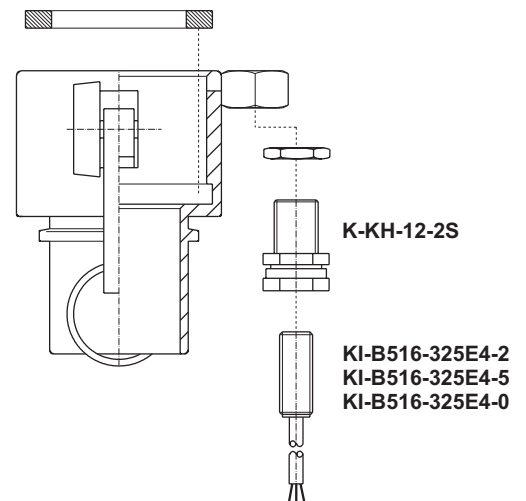
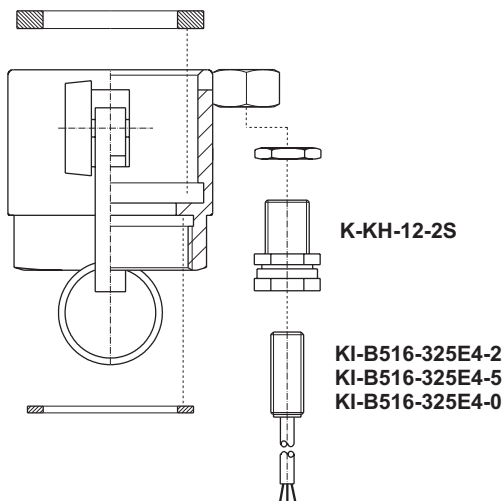
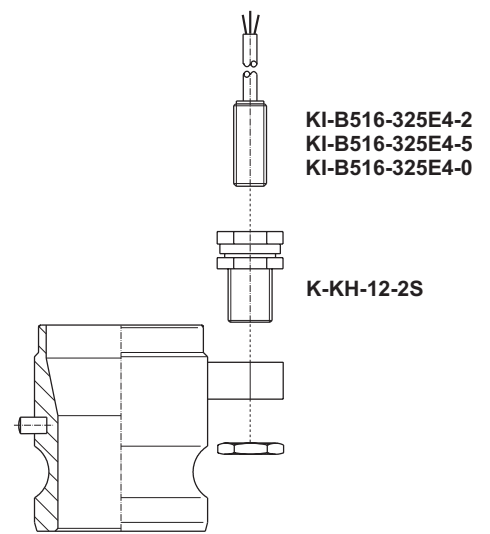
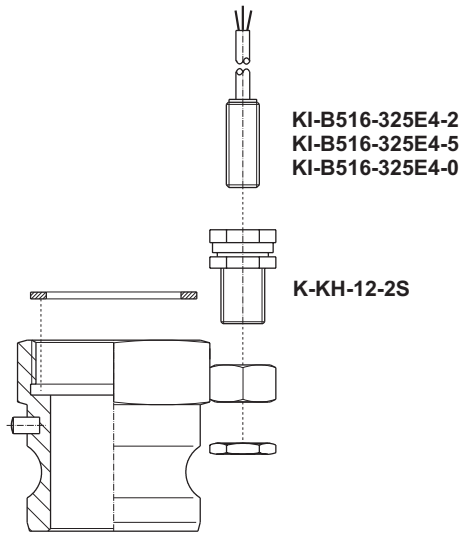
Wiring connection

| | | |
|---------------------|------|--------------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



BALLUFF 325

Components



According to Directive 97/23/EC 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.

Couplings

depending on the type (see under offer resp. order)

Measurements

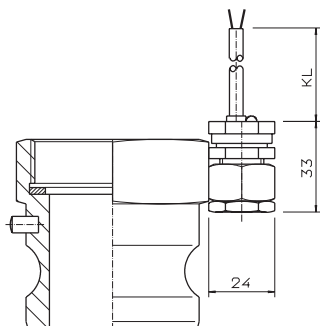
acc. to DIN 2828 and the data sheets of ELAFLEX

Seal rings

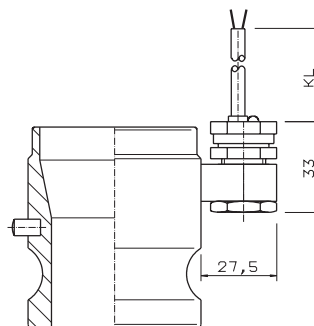
acc. to the data sheets of ELAFLEX

You can get the **data sheets** under www.elaflex.de

Measurements



| Type | NG | W | KL |
|---------------|----|---|----|
| KN - AVKI 025 | VA | 2 | |
| KN - AVKI 032 | VA | 2 | |
| KN - AVKI 040 | VA | 2 | |
| KN - AVKI 050 | VA | 2 | |
| KN - AVKI 065 | VA | 2 | |
| KN - AVKI 080 | VA | 2 | |
| KN - AVKI 100 | VA | 2 | |



| Type | NG | W | KL |
|---------------|----|---|----|
| KN - AVKR 025 | VA | 2 | |
| KN - AVKR 032 | VA | 2 | |
| KN - AVKR 040 | VA | 2 | |
| KN - AVKR 050 | VA | 2 | |
| KN - AVKR 065 | VA | 2 | |
| KN - AVKR 080 | VA | 2 | |
| KN - AVKR 100 | VA | 2 | |

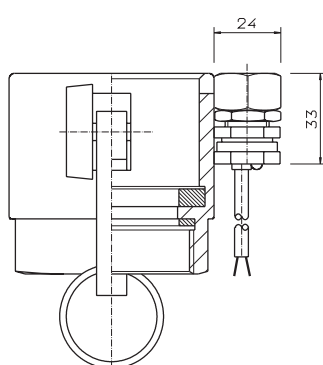
Gas II 2G EEx ia IIC T6

Dust II 1D Ex iaD 20 T... °C

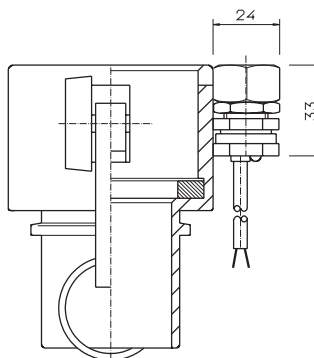
Result of the evaluation of ignition danger acc. to DIN EN 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

II 1(i)/2(o)GD c IIC T X



| Type | NG | W | KL |
|---------------|----|---|----|
| KN - AMKI 025 | VA | 2 | |
| KN - AMKI 032 | VA | 2 | |
| KN - AMKI 040 | VA | 2 | |
| KN - AMKI 050 | VA | 2 | |
| KN - AMKI 065 | VA | 2 | |
| KN - AMKI 080 | VA | 2 | |
| KN - AMKI 100 | VA | 2 | |



| Type | NG | W | KL |
|---------------|----|---|----|
| KN - AMKS 025 | VA | 2 | |
| KN - AMKS 032 | VA | 2 | |
| KN - AMKS 040 | VA | 2 | |
| KN - AMKS 050 | VA | 2 | |
| KN - AMKS 065 | VA | 2 | |
| KN - AMKS 080 | VA | 2 | |
| KN - AMKS 100 | VA | 2 | |

Gas II 2G EEx ia IIC T6

Dust II 1D Ex iaD 20 T... °C

Result of the evaluation of ignition danger acc. to DIN EN 13463-1:

The couplings have no potential source of ignition on their own and are in accordance with

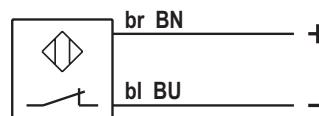
II 1(i)/2(o)GD c IIC T X

Technical data

| | | |
|------------------------------|------------|---|
| Materials | (W) switch | VA = Stainless steel 316L PBTP (Polybutylenterephthalat) |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +60 °C |
| Nominal voltage | | 8 V DC (Ri approx. 1 k) |
| Power consumption | | activated: 1 mA not activated: 3 mA |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Ex type of protection | | II 2G EEx ia IIC T6 and II 1D Ex iaD 20 T... °C |

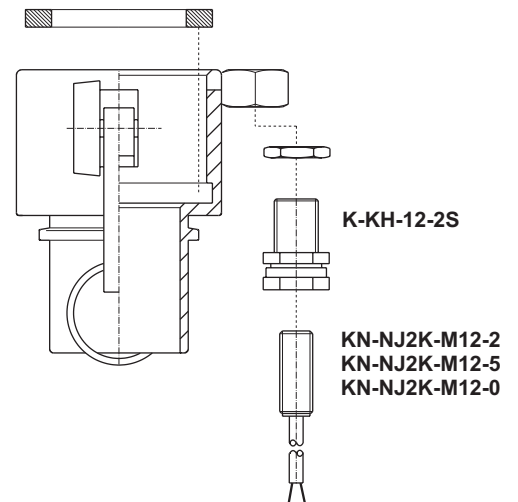
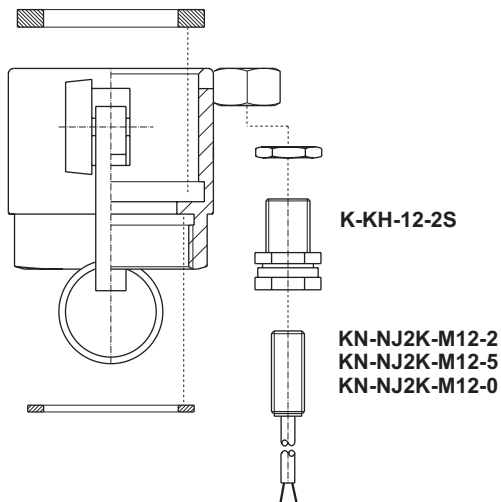
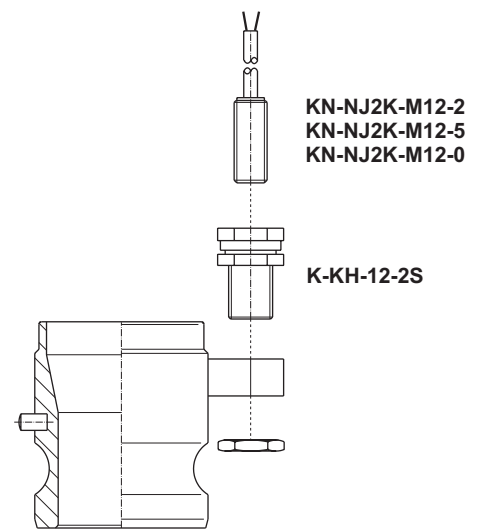
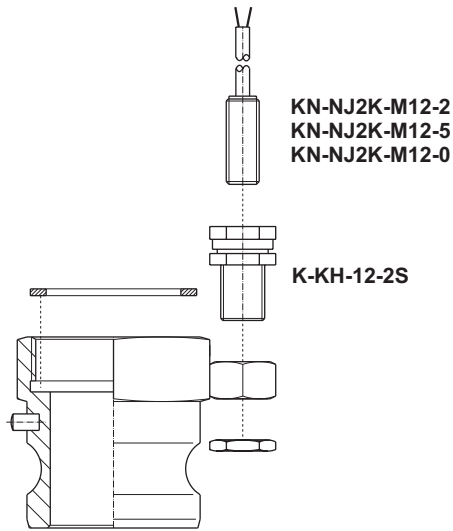
Wiring connection

| | | |
|---------------------|------|--------------------------------|
| Cable | | 2 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs NJ2

Components



According to Directive 97/23/EC for pressure equipment:

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

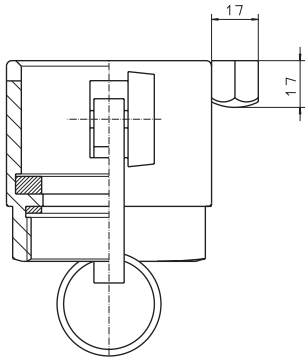
For example in pneumatic conveyor systems with combustible dusts etc.

Coupling depending on the type (see under offer resp. order)
Measurements acc. to DIN 2828 and the data sheets of ELAFLEX
Seal ring acc. to the data sheets of ELAFLEX

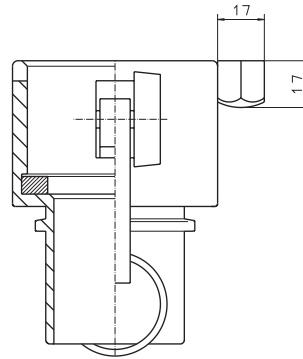
You can get the **data sheets** under www.elaflex.de

Measurements

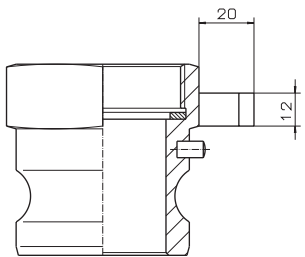
NG = Nominal size
W = Material
KL = Cable length



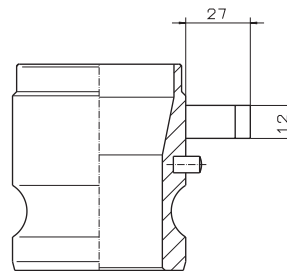
| Type | NG | W | KL |
|---------------|----|---|----|
| KF - AMKI 025 | VA | 2 | |
| KF - AMKI 032 | VA | 2 | |
| KF - AMKI 040 | VA | 2 | |
| KF - AMKI 050 | VA | 2 | |
| KF - AMKI 065 | VA | 2 | |
| KF - AMKI 080 | VA | 2 | |
| KF - AMKI 100 | VA | 2 | |



| Type | NG | W | KL |
|---------------|----|---|----|
| KF - AMKS 025 | VA | 2 | |
| KF - AMKS 032 | VA | 2 | |
| KF - AMKS 040 | VA | 2 | |
| KF - AMKS 050 | VA | 2 | |
| KF - AMKS 065 | VA | 2 | |
| KF - AMKS 080 | VA | 2 | |
| KF - AMKS 100 | VA | 2 | |



| Type | NG | W | KL |
|---------------|----|---|----|
| KF - AVKI 025 | VA | 2 | |
| KF - AVKI 032 | VA | 2 | |
| KF - AVKI 040 | VA | 2 | |
| KF - AVKI 050 | VA | 2 | |
| KF - AVKI 065 | VA | 2 | |
| KF - AVKI 080 | VA | 2 | |
| KF - AVKI 100 | VA | 2 | |



| Type | NG | W | KL |
|---------------|----|---|----|
| KF - AVKR 025 | VA | 2 | |
| KF - AVKR 032 | VA | 2 | |
| KF - AVKR 040 | VA | 2 | |
| KF - AVKR 050 | VA | 2 | |
| KF - AVKR 065 | VA | 2 | |
| KF - AVKR 080 | VA | 2 | |
| KF - AVKR 100 | VA | 2 | |

According to Directive 97/23/EC 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.

Coupling depending on the type (see under offer resp. order)

Measurements acc. to DIN 2828 and the data sheets of ELAFLEX

Seal ring acc. to the data sheets of ELAFLEX

You can get the **data sheets** under www.elaflex.de



Hose couplings

System "Storz" - TW DIN 28 450 - KAMLOK DIN 2828

with built-in limit switch to signalize during the filling process of silos or tanks and at coupling stations (Blank caps do not actuate the limit switch)



Appliance information

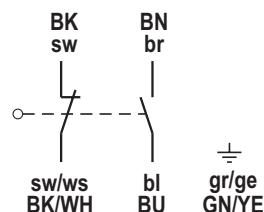
| Index | Page |
|---|-----------------------|
| Coupling with inside thread System "Storz" with mechanical limit switch | 02 |
| Coupling with inside thread System "Storz" with inductive limit switch | 04 |
| Coupling with inside thread System "Storz" with inductive limit switch NAMUR | 06 |
| Father coupling 80, 100 DIN 28450 with mechanical limit switch | 08 |
| Father coupling 80, 100 DIN 28450 with inductive limit switch | 10 |
| Father coupling 80, 100 DIN 28450 with inductive limit switch NAMUR | 12 |
| Father coupling 50 DIN 28450 with inductive limit switch | 14 |
| Father coupling 50 DIN 28450 with inductive limit switch NAMUR | 15 |
| KAMLOK coupling DIN 2828 with inductive limit switch | 16 |
| KAMLOK coupling DIN 2828 with inductive limit switch NAMUR | 18 |
| KAMLOK coupling DIN 2828 with actuating cam | 20 |
| Technical data sheets limit switches | KE-TD- 01...10 |
| Seals, chains with S-hooks | KE-TD-11 |

Technical data

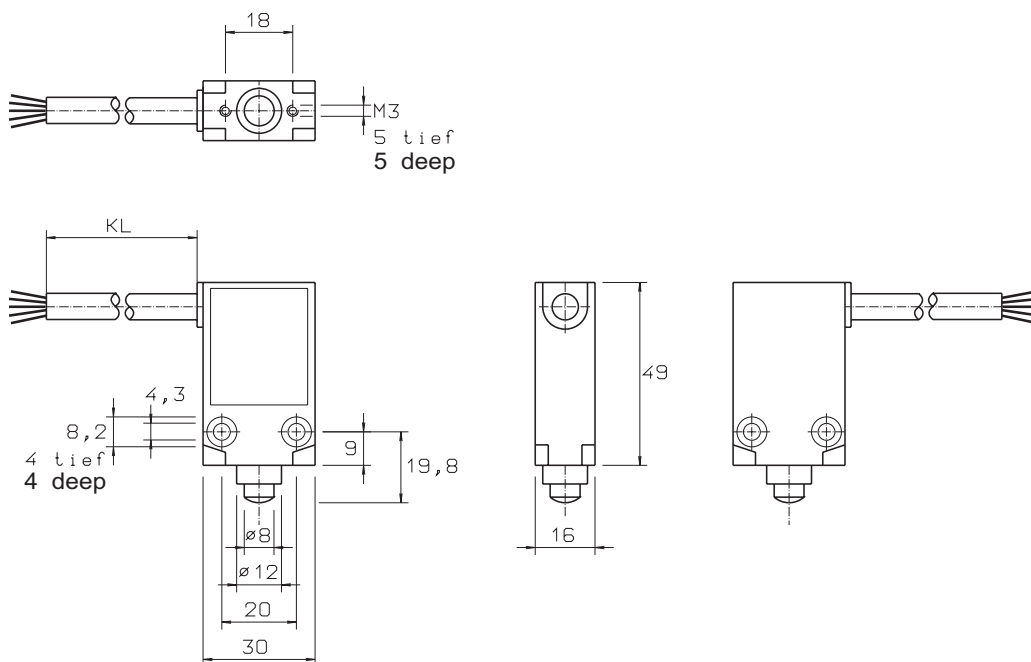
| | |
|-------------------------|--|
| Materials | Zn-Al alloy |
| Varnish coating | red |
| Mounting position | any |
| Ambient temperature | -25 °C up to +70 °C |
| Capacity of the contact | 1,5 A / 250 V AC |
| Switching function | 1 NC and 1 NO |
| Type of protection | IP67 acc. to DIN EN 60529 |
| Maintenance | none |
| Option | B0 Ⓢ II 3D T 80 °C IP67 |
| Option | B8 Ⓢ II 3GD EEx nL T6 T70 °C IP67 |

Wiring connection

| | |
|-------------------|--------------------------|
| Cable | 5 x 0,75 mm ² |
| Cable length (KL) | 2 = 2 m |
| | 5 = 5 m |
| | 0 = 10 m |



Measurements



Order code

| | |
|----------------------|----------------|
| KE-XCM-A110-2 | for 2 m cable |
| KE-XCM-A110-5 | for 5 m cable |
| KE-XCM-A110-0 | for 10 m cable |

ATEX-Option **Dust**



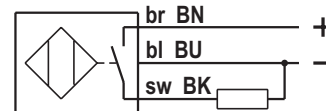
for limit switch with Ex type of protection Ⓢ II 3D T 80 °C IP67 attach **B0** behind the order code
for limit switch with Ex type of protection Ⓢ II 3GD EEx nL T6 T70 °C IP67 attach **B8**

Technical data

| | | |
|------------------------------|-----------------------|---------------------------------|
| Materials | switch active surface | CuZn, chromium plated PA12-GF30 |
| | clamping bracket | AlMgSi1 |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | ≤ 200 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP67 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option | B0 | ⊕ II 3D T 90 °C IP67 |

Wiring connection

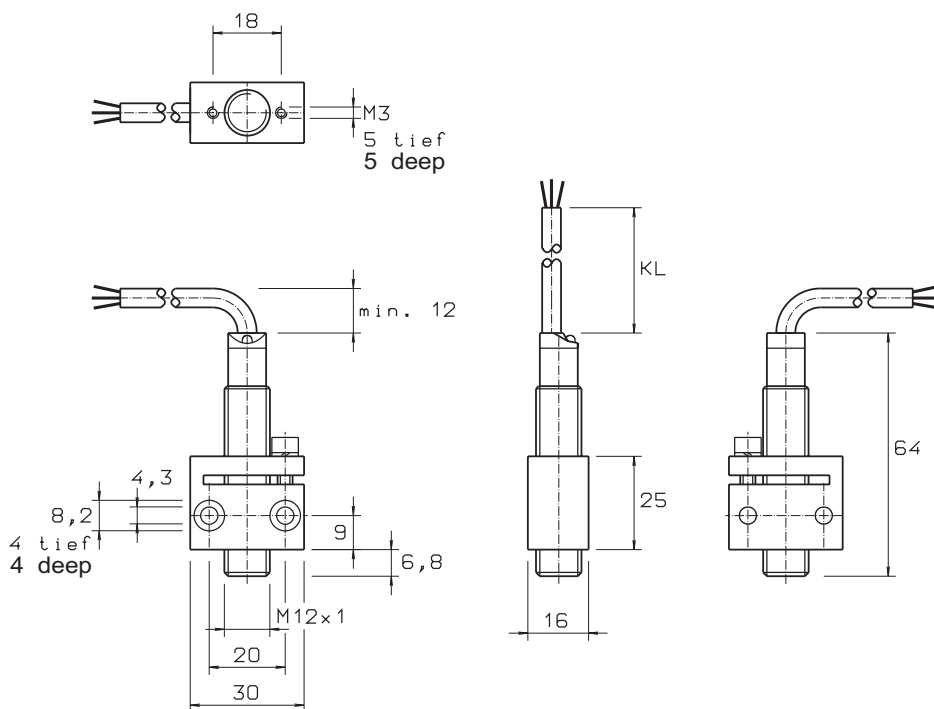
| | | |
|--------------------------|----------|--------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length (KL) | 2 | = 2 m |
| | 5 | = 5 m |
| | 0 | = 10 m |



TURCK Bi3U

Measurements

KI-XCK-BI3U-7- .

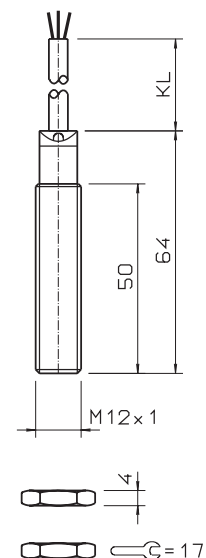


Order code

| | |
|------------------------|----------------|
| KI-XCK-BI3U-7-2 | for 2 m cable |
| KI-XCK-BI3U-7-5 | for 5 m cable |
| KI-XCK-BI3U-7-0 | for 10 m cable |

KI-BI3U-M12AP- .

| | |
|------------------|---------------|
| Brand | TURCK |
| Type | Bi3U-M12-AP6X |
| Ident no. | 16 341 00 |



Order code

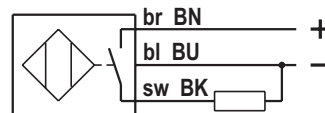
| | |
|------------------------|----------------|
| KI-BI3U-M12AP-2 | for 2 m cable |
| KI-BI3U-M12AP-5 | for 5 m cable |
| KI-BI3U-M12AP-0 | for 10 m cable |

Technical data

| | | |
|------------------------------|-----------------------|----------------------------|
| Materials | switch active surface | CuZn, nickel plated PA12 |
| | housing | Zn-Al alloy |
| Varnish coating | | red |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | ≤ 200 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option | B0 | ⊕ II 3D T 90 °C IP68 |

Wiring connection

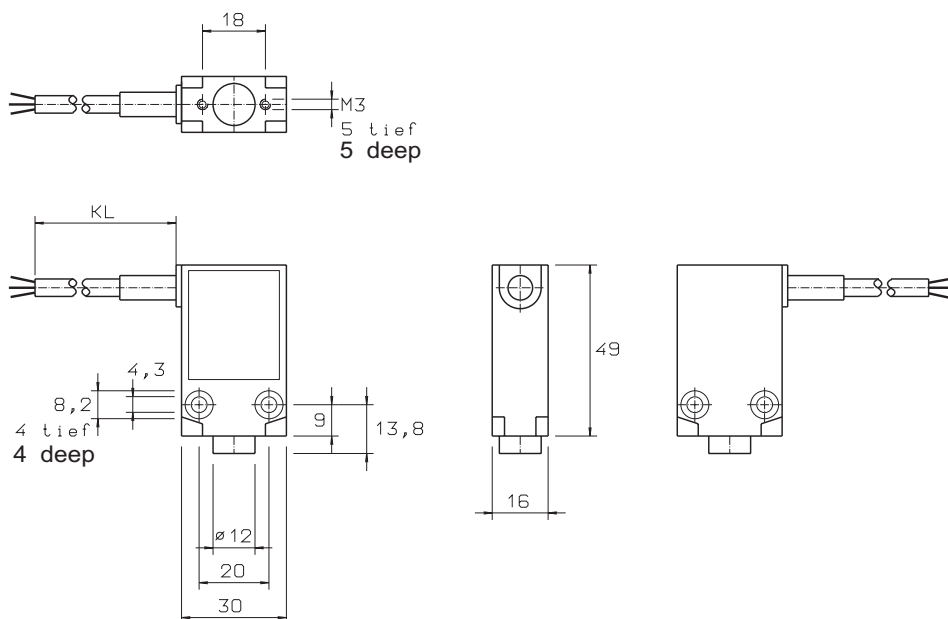
| | | |
|--------------------------|----------|--------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length (KL) | 2 | 2 m |
| | 5 | 5 m |
| | 0 | 10 m |



BALLUFF 356

Measurements

KI-XCM-B356-5- .

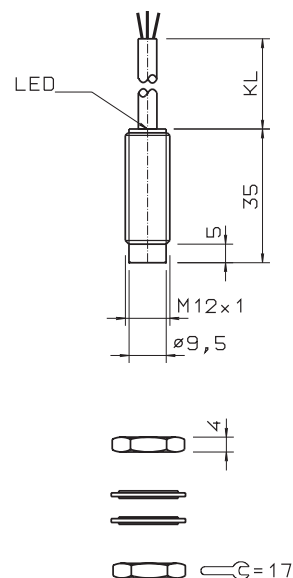


Order code

| | |
|------------------------|----------------|
| KI-XCM-B356-5-2 | for 2 m cable |
| KI-XCM-B356-5-5 | for 5 m cable |
| KI-XCM-B356-5-0 | for 10 m cable |

KI-B516-356E4- .

| | |
|--------------|--------------------|
| Brand | BALLUFF |
| Type | BES 516-356-E4-... |



Order code

| | |
|------------------------|----------------|
| KI-B516-356E4-2 | for 2 m cable |
| KI-B516-356E4-5 | for 5 m cable |
| KI-B516-356E4-0 | for 10 m cable |

ATEX-Option **Dust**



for Ex type of protection ⊕ II 3D T 90 °C IP68
 attach **B0** behind the order code

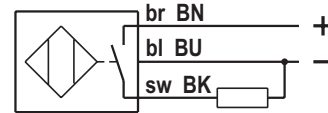
further technical data you can get under
www.balluff.de

Technical data

| | | |
|------------------------------|-----------------|----------------------------|
| Materials | housing | CuZn, nickel plated |
| | active surface | PA12 |
| | adjusting screw | CuZn, nickel plated |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | ≤ 200 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option | B0 | ⊕ II 3D T 90 °C IP68 |

Wiring connection

| | | |
|--------------------------|----------|--------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length (KL) | 2 | = 2 m |
| | 5 | = 5 m |
| | 0 | = 10 m |

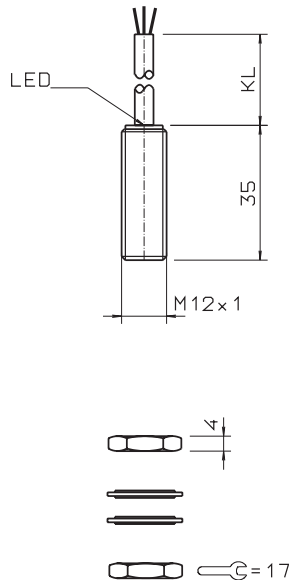


BALLUFF 325

Measurements

KI-B516-325-E4- .

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

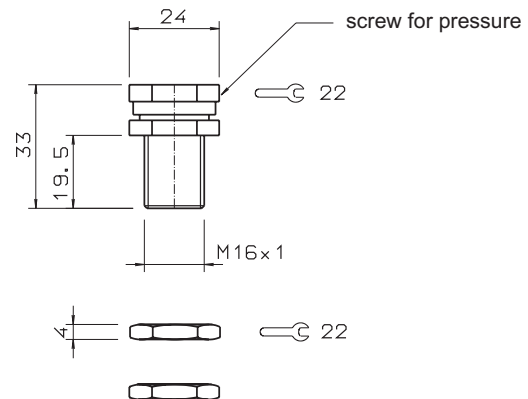


Order code

| | |
|-------------------------|----------------|
| 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

ATEX-Option Dust

for Ex type of protection II 3D T 90 °C IP68
 attach **B0** behind the order code

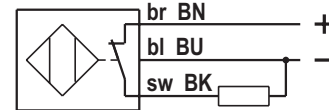
further technical data you can get under
www.balluff.de

Technical data

| | | |
|------------------------------|-----------------------|----------------------------|
| Materials | switch active surface | CuZn, nickel plated PA12 |
| | housing | Zn-Al alloy |
| Varnish coating | | red |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | ≤ 200 mA, constant current |
| Switching function | | PNP, Normally closed |
| Type of protection | | IP68 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option | B0 | II 3D T 90 °C IP68 |

Wiring connection

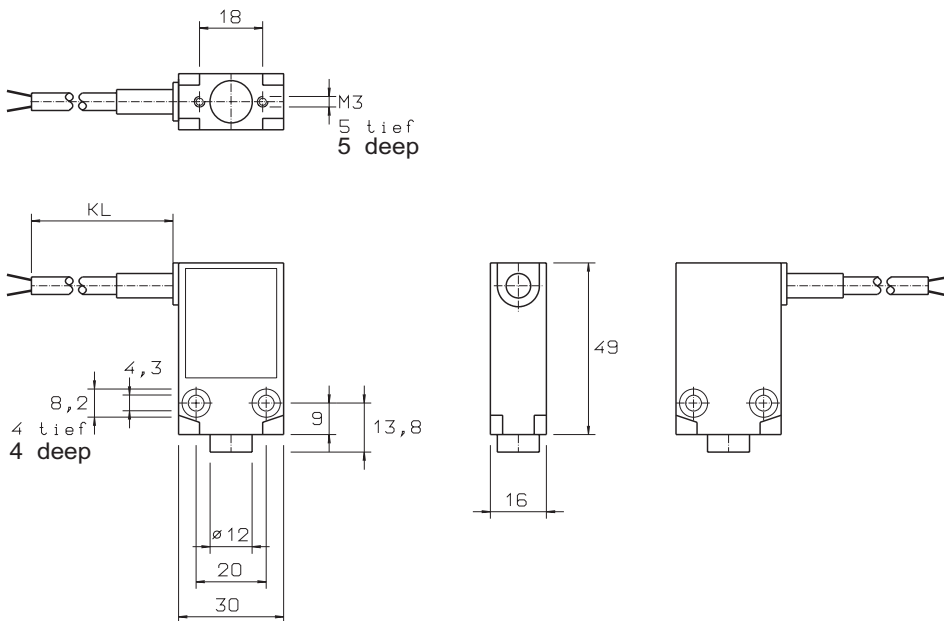
| | | |
|--------------------------|----------|--------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length (KL) | 2 | = 2 m |
| | 5 | = 5 m |
| | 0 | = 10 m |



BALLUFF 3019

Measurements

KI-XCM-3019-5- .

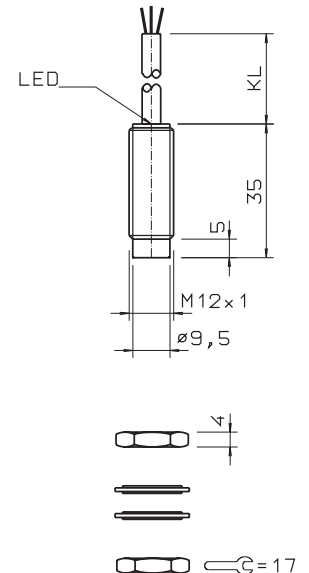


Order code

| | |
|------------------------|----------------|
| KI-XCM-3019-5-2 | for 2 m cable |
| KI-XCM-3019-5-5 | for 5 m cable |
| KI-XCM-3019-5-0 | for 10 m cable |

KI-B516-3019E- .

| | |
|--------------|--------------------|
| Brand | BALLUFF |
| Type | BES 516-3019-E4-Y- |



Order code

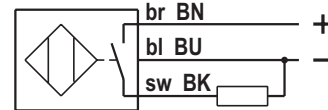
| | |
|------------------------|----------------|
| KI-B516-3019E-2 | for 2 m cable |
| KI-B516-3019E-5 | for 5 m cable |
| KI-B516-3019E-0 | for 10 m cable |

Technical data

| | | |
|------------------------------|------------------|----------------------------|
| Materials | switch | CuZn, chromium plated |
| | active surface | PA12-GF30 |
| | clamping bracket | AlMgSi1 |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | ≤ 200 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP67 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option | B0 | ⊕ II 3D T 90 °C IP67 |

Wiring connection

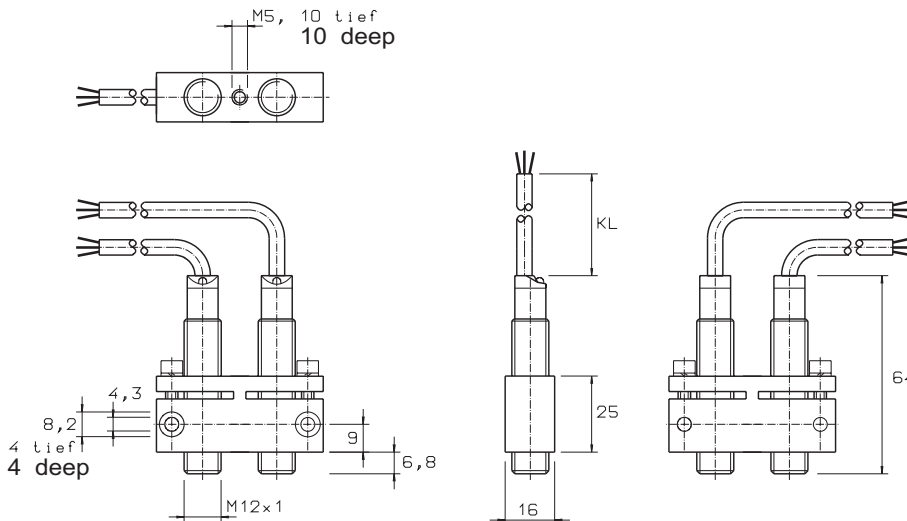
| | | |
|--------------------------|----------|--------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length (KL) | 2 | = 2 m |
| | 5 | = 5 m |
| | 0 | = 10 m |



TURCK BI3U

Measurements

KI2XCK-BI3U-7- .

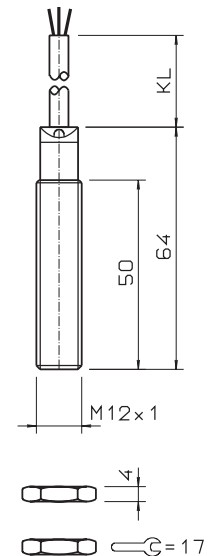


Order code

| | |
|------------------------|----------------|
| KI2XCK-BI3U-7-2 | for 2 m cable |
| KI2XCK-BI3U-7-5 | for 5 m cable |
| KI2XCK-BI3U-7-0 | for 10 m cable |

KI-BI3U-M12AP- .

| | |
|------------------|---------------|
| Brand | TURCK |
| Type | Bi3U-M12-AP6X |
| Ident no. | 16 341 00 |



Order code

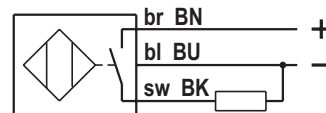
| | |
|------------------------|----------------|
| KI-BI3U-M12AP-2 | for 2 m cable |
| KI-BI3U-M12AP-5 | for 5 m cable |
| KI-BI3U-M12AP-0 | for 10 m cable |

Technical data

| | | |
|------------------------------|-----------------------|---------------------------------|
| Materials | switch active surface | CuZn, chromium plated PA12-GF30 |
| | clamping bracket | AlMgSi1 |
| Mounting position | | any |
| Ambient temperature | | -20 °C up to +60 °C |
| Supply voltage | | 10 ... 30 V DC |
| Load current capacity | | ≤ 200 mA, constant current |
| Switching function | | PNP, Normally open |
| Type of protection | | IP67 acc. to DIN EN 60529 |
| Maintenance | | none |
| Option | B0 | ⊕ II 3D T 90 °C IP67 |

Wiring connection

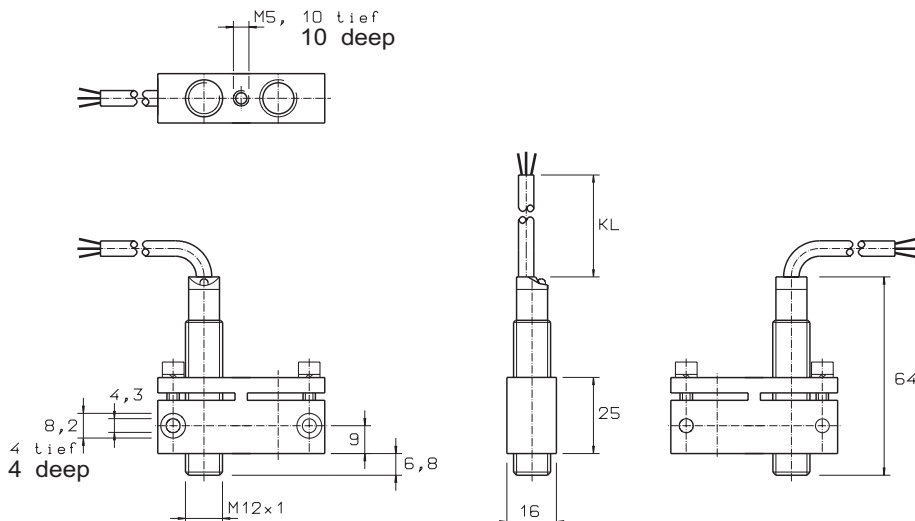
| | | |
|--------------------------|---|--------------------------|
| Cable | | 3 x 0,34 mm ² |
| Cable length (KL) | 2 | = 2 m |
| | 5 | = 5 m |
| | 0 | = 10 m |



TURCK Bi3U

Measurements

KI1XCK-BI3U-7- .

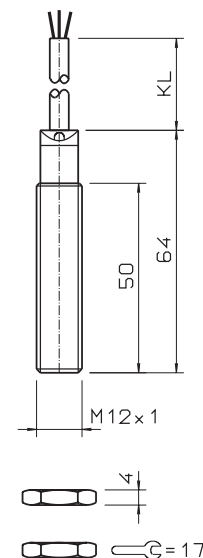


Order code

| | |
|------------------------|----------------|
| KI1XCK-BI3U-7-2 | for 2 m cable |
| KI1XCK-BI3U-7-5 | for 5 m cable |
| KI1XCK-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 |

ATEX-Option Dust  for Ex type of protection  II 3D T 90 °C IP67 attach B0 behind the order code

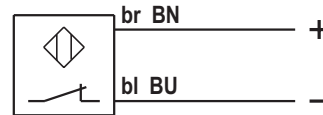
further **technical data** you can get under www.turck.de

Technical data

| | | |
|------------------------------|------------------|--|
| Materials | switch | PBTP (Polybutylenterephthalat) |
| | clamping bracket | AlMgSi1 |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +60 °C |
| Nominal voltage | | 8 V DC (Ri approx. 1 k Ω) |
| Power consumption | activated: | 1 mA |
| | not activated: | 3 mA |
| Type of protection | | IP68 acc. DIN EN 60529 |
| Maintenance | | none |
| Ex type of protection | | ⊕ II 2G EEx ia IIC T6 and ⊕ II 1D Ex iaD 20 T... °C |

Wiring connection

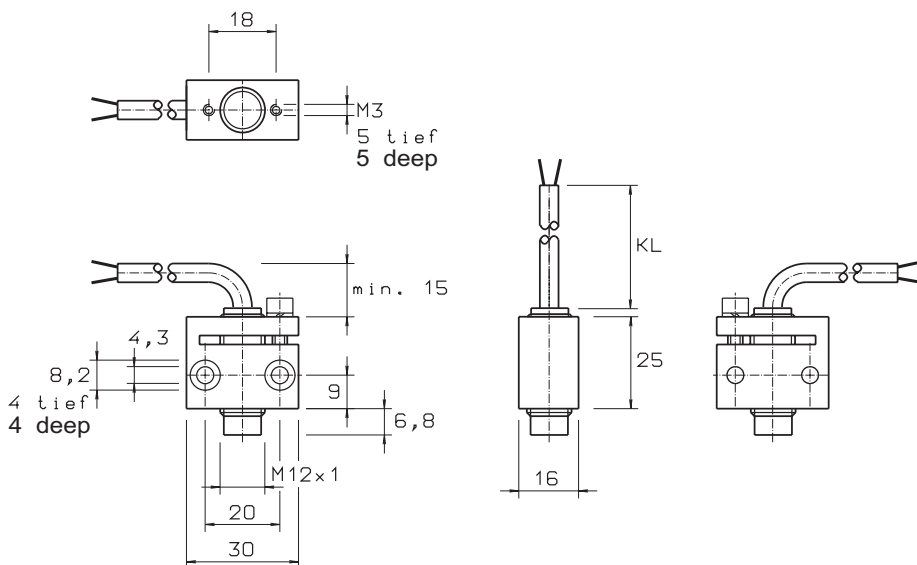
| | | |
|---------------------|------|--------------------------------|
| Cable | | 2 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs NJ4

Measurements

KN-XCK-NJ4K-7- .

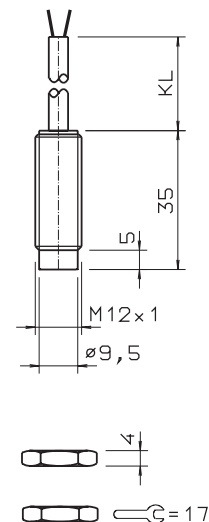


Order code

KN-XCK-NJ4K-7-2 for 2 m cable
KN-XCK-NJ4K-7-5 for 5 m cable
KN-XCK-NJ4K-7-0 for 10 m cable

KN-NJ4K-M12- .

Brand Pepperl+Fuchs
Type NJ4-12GK-N



Order code

KN-NJ4K-M12-2 for 2 m cable
KN-NJ4K-M12-5 for 5 m cable
KN-NJ4K-M12-0 for 10 m cable

Gas II 2G EEx ia IIC T6

Dust II 1D Ex iaD 20 T... °C

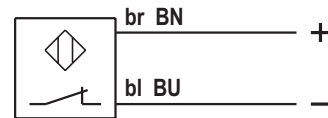
further technical data you can get under
www.pepperl-fuchs.de

Technical data

| | | |
|------------------------------|------------------|--|
| Materials | switch | PBTP (Polybutylenterephthalat) |
| | clamping bracket | AlMgSi1 |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +60 °C |
| Nominal voltage | | 8 V DC (Ri approx. 1 k Ω) |
| Power consumption | activated: | 1 mA |
| | not activated: | 3 mA |
| Type of protection | | IP68 acc. DIN EN 60529 |
| Maintenance | | none |
| Ex type of protection | | ⊕ II 2G EEx ia IIC T6 and ⊕ II 1D Ex iaD 20 T... °C |

Wiring connection

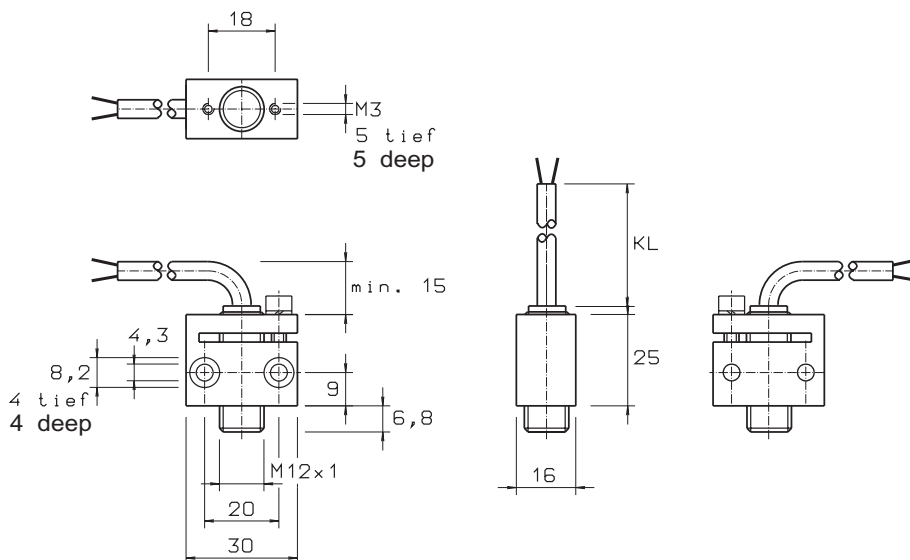
| | | |
|---------------------|------|--------------------------------|
| Cable | | 2 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs NJ2

Measurements

KN-XCK-NJ2K-7- .

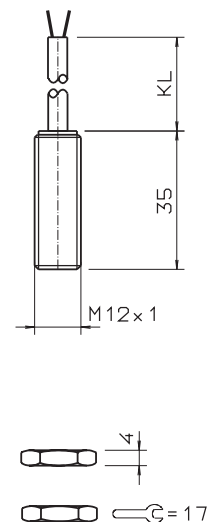


Order code

KN-XCK-NJ2K-7-2 for 2 m cable
KN-XCK-NJ2K-7-5 for 5 m cable
KN-XCK-NJ2K-7-0 for 10 m cable

KN-NJ2K-M12- .

Brand Pepperl+Fuchs
Type NJ2-12GK-N



Order code

KN-NJ2K-M12-2 for 2 m cable
KN-NJ2K-M12-5 for 5 m cable
KN-NJ2K-M12-0 for 10 m cable

further technical data you can get under
www.pepperl-fuchs.de

Gas II 2G EEx ia IIC T6

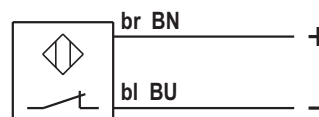
Dust II 1D Ex iaD 20 T... °C

Technical data

| | | |
|------------------------------|----------------|--|
| Materials | switch | PBTP (Polybutylenterephthalat) |
| | housing | Zn-Al alloy |
| Varnish coating | | red |
| Mounting position | | any |
| Ambient temperature | | -25 °C up to +60 °C |
| Nominal voltage | | 8 V DC (Ri approx. 1 k) |
| Power consumption | activated: | 1 mA |
| | not activated: | 3 mA |
| Type of protection | | IP68 acc. DIN EN 60529 |
| Maintenance | | none |
| Ex type of protection | | ⊕ II 2G EEx ia IIC T6 and ⊕ II 1D Ex iaD 20 T... °C |

Wiring connection

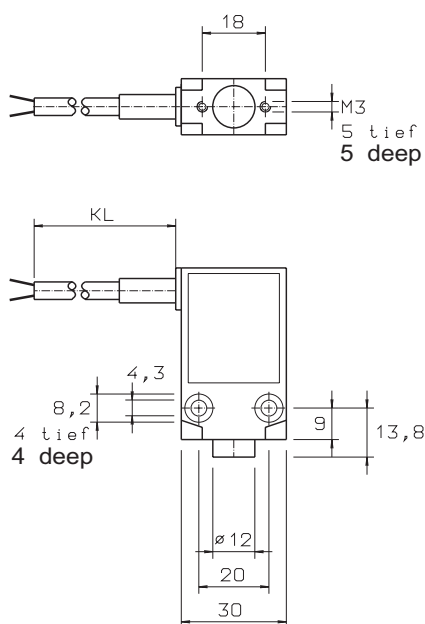
| | | |
|---------------------|------|--------------------------------|
| Cable | | 2 x 0,34 mm ² |
| Cable length | (KL) | 2 = 2 m 5 = 5 m 0 = 10 m |



Pepperl+Fuchs NJ4

Measurements

KN-XCM-NJ4K-5- .

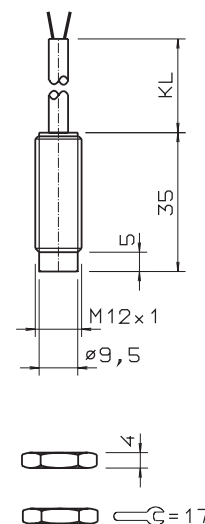


Order code

| | |
|------------------------|----------------|
| KN-XCM-NJ4K-5-2 | for 2 m cable |
| KN-XCM-NJ4K-5-5 | for 5 m cable |
| KN-XCM-NJ4K-5-0 | for 10 m cable |

KN-NJ4K-M12- .

| | |
|--------------|---------------|
| Brand | Pepperl+Fuchs |
| Type | NJ4-12GK-N |



Order code

| | |
|----------------------|----------------|
| KN-NJ4K-M12-2 | for 2 m cable |
| KN-NJ4K-M12-5 | for 5 m cable |
| KN-NJ4K-M12-0 | for 10 m cable |

Gas II 2G EEx ia IIC T6

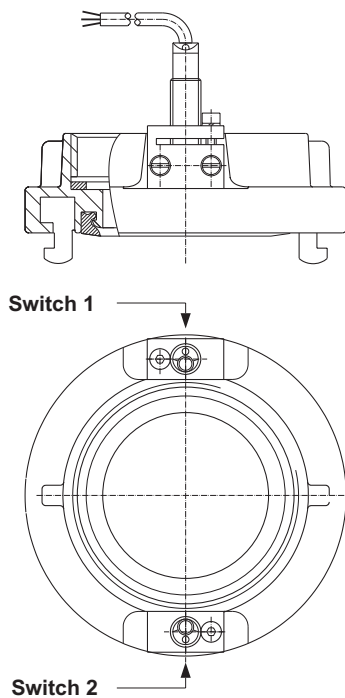
Dust II 1D Ex iaD 20 T... °C

further technical data you can get under
www.pepperl-fuchs.de

Appliance information

| Index | Page |
|---|------|
| Couplings - System "Storz" coding 1/2 with 2 limit switches | 02 |
| Couplings - System "Storz" coding 1/3 with 2 limit switches | 03 |
| Couplings - System "Storz" coding with 3 resp. 4 limit switches | 04 |

Illustrations



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 hose (or blank cap) has been coupled at the moment.

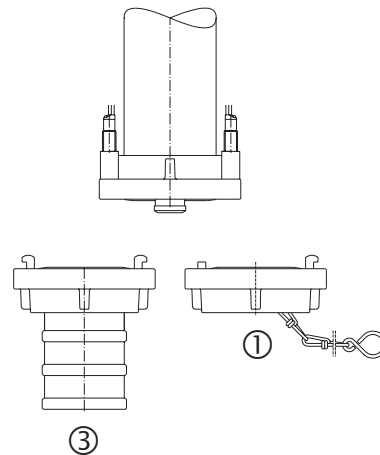
Versions

The coding can be carried out resp. is available in the following three limit switch varieties KE, KI and KN.

Measurements, technical data, ATEX options and connection see under:

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

Example of application 1

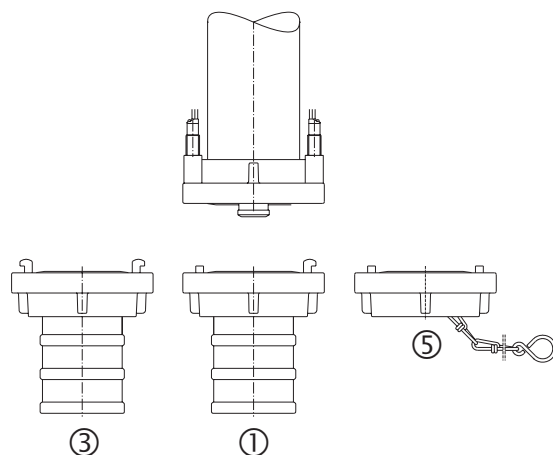


Silo filling process

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.

Example of application 2



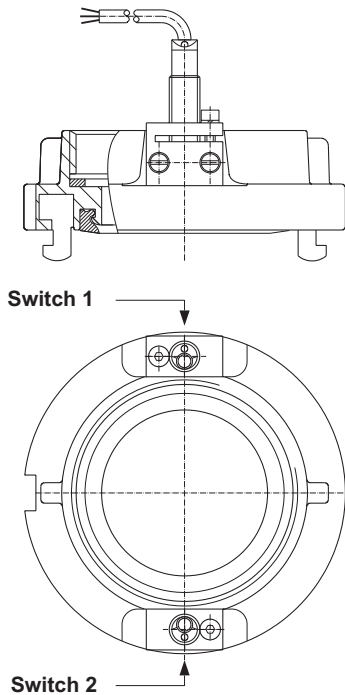
Silo filling process

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 activates no switch

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.

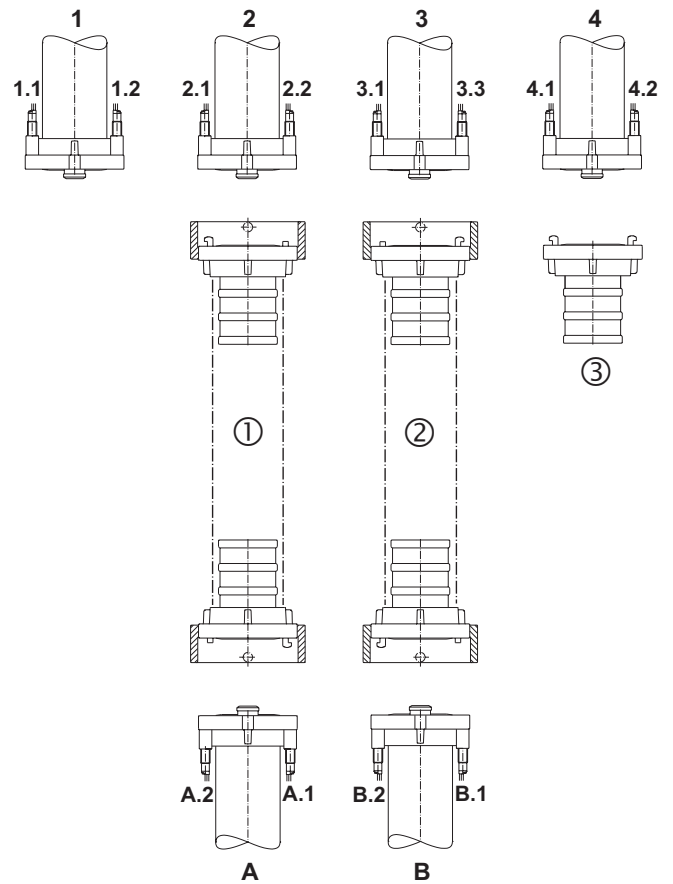
Versions

The coding can be carried out in the following three limit switch varieties KE, KI and KN.

Measurements, technical data, ATEX options and connection see under:

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

Example of application



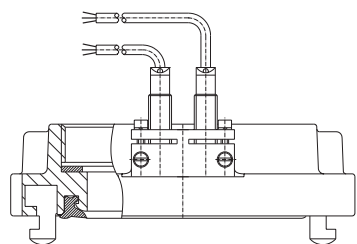
Coupling station 4/2+1

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

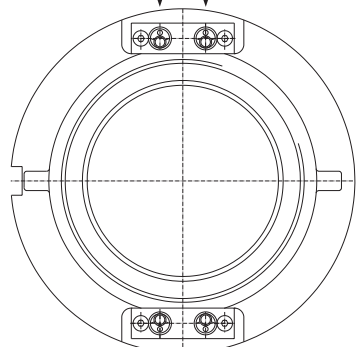
- hose coupling ① actuates only the switch Nr. x.1
- hose coupling ② actuates only the switch Nr. x.2
- silo trailer ③ actuates the switch x.1 and x.2

Further applications on demand.

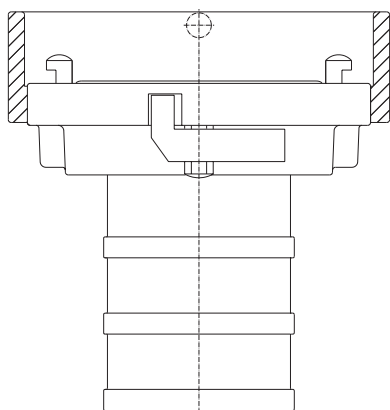
Illustrations



Switch 1 Switch 2



Switch 3 Switch 4



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

During the coupling of a counter coupling a combination of limit switches will be actuated.

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

Versions

The coding can be carried out with the limit switch varieties KI and KN.

Measurements, technical data, ATEX options and connection see under:

KI inductive limit switch **KE-GI-04**
 KN inductive limit switch NAMUR **KE-GI-06**

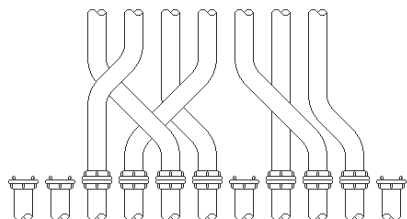
Order code

Hose coupling

| Hose coupling | actuates switch | | | |
|--------------------------|-----------------|---|---|---|
| | 4 | 3 | 2 | 1 |
| K-SSZ110-XXX-SP-CG-AL-01 | | | | ● |
| K-SSZ110-XXX-SP-CG-AL-02 | | | ● | |
| K-SSZ110-XXX-SP-CG-AL-03 | | | ● | ● |
| K-SSZ110-XXX-SP-CG-AL-04 | | ● | | |
| K-SSZ110-XXX-SP-CG-AL-05 | | ● | | ● |
| K-SSZ110-XXX-SP-CG-AL-06 | | ● | ● | |
| K-SSZ110-XXX-SP-CG-AL-07 | | ● | ● | ● |
| <hr/> | | | | |
| K-SSZ110-XXX-SP-CG-AL-08 | ● | | | |
| K-SSZ110-XXX-SP-CG-AL-09 | ● | | | ● |
| K-SSZ110-XXX-SP-CG-AL-10 | ● | | ● | |
| K-SSZ110-XXX-SP-CG-AL-11 | ● | | ● | ● |
| K-SSZ110-XXX-SP-CG-AL-12 | ● | ● | | |
| K-SSZ110-XXX-SP-CG-AL-13 | ● | ● | | ● |
| K-SSZ110-XXX-SP-CG-AL-14 | ● | ● | ● | |
| K-SSZ110-XXX-SP-CG-AL-15 | ● | ● | ● | ● |

↑ fill out Ø of hose nozzle e.g. 080 for Ø 80 mm

Example of application 1

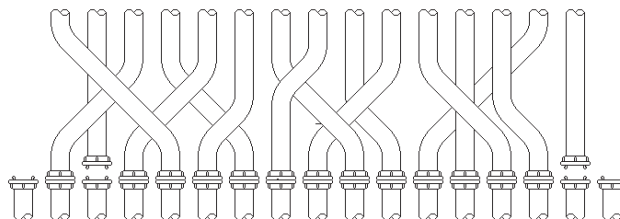


Coupling station 11/7

Couplings with inside thread KI3-SZ110 ... with 3 switches (max. 7 hose couplings)

Signalling: Which hose has been coupled at which coupling?

Example of application 2



Coupling station 17/15

Couplings with inside thread KI4-SZ110 ... with 4 switches (max. 15 hose couplings)

Signalling: Which hose has been coupled at which coupling?