



# Hose couplings

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

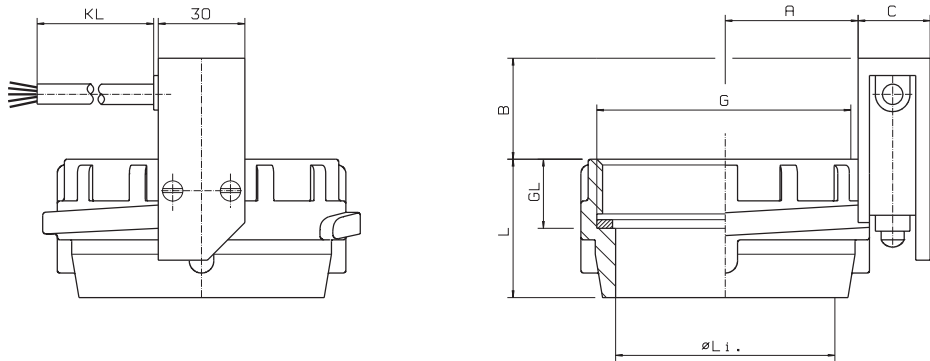
with built-in limit switch to signalize during the filling process of silos or tanks and at coupling stations (Blank caps do not actuate the limit switch)



## 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	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



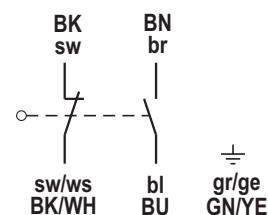
for limit switch with Ex type of protection  $\text{Ex II 3D T 80 °C IP67}$  attach **B0** behind the order code  
for limit switch with Ex type of protection  $\text{Ex II 3GD EEx nL T6 T 70 °C IP67}$  attach **B8**

## Technical data

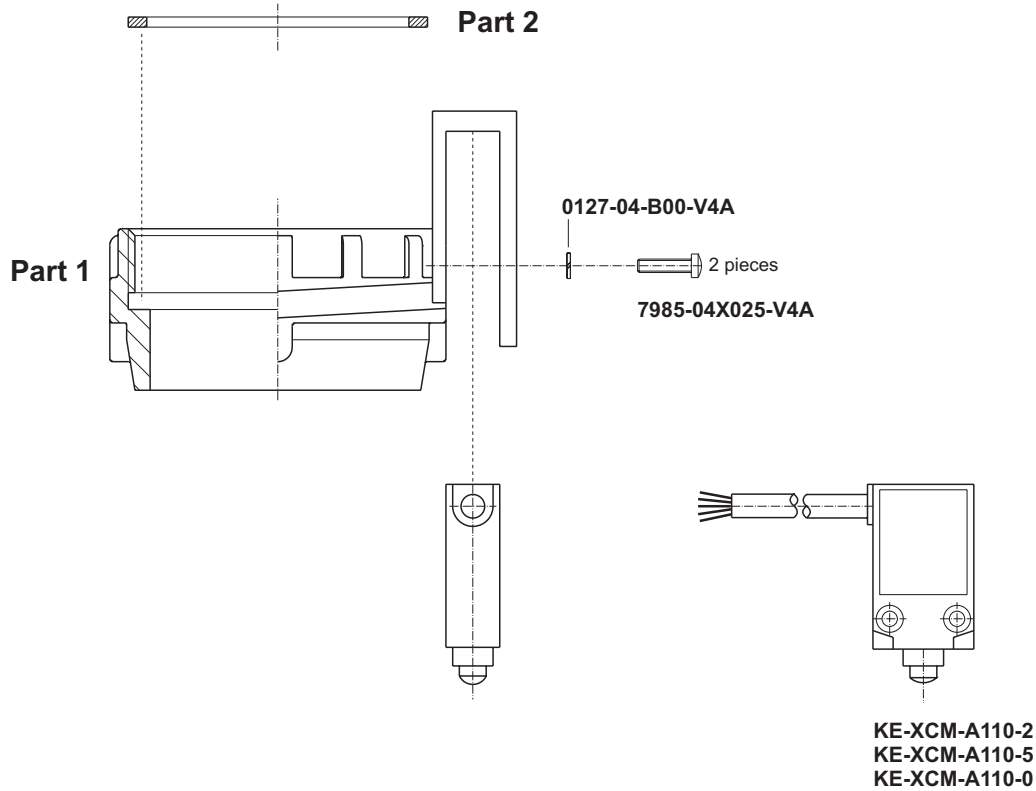
Materials (W)	AL = Aluminium MS = Brass VA = Stainless steel 316L
switch	Zn-Al alloy
Varnish coating	switch red
Mounting position	any
Ambient temperature	-25 °C up to +70 °C
Capacity of the contact	1,5 A / 250 V AC
Switching function	1 NC and 1 NO
Type of protection	IP67 acc. to DIN EN 60529
Maintenance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

## Wiring connection

Cable	5 x 0,75 mm <sup>2</sup>
Cable length (KL)	2 = 2 m 5 = 5 m 0 = 10 m



**Components**



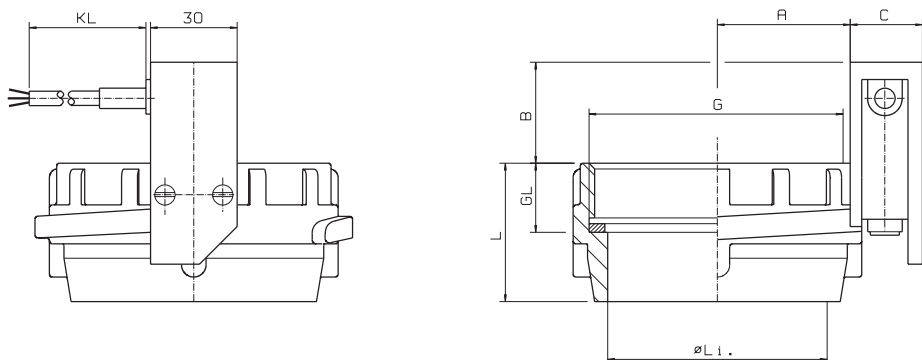
Type	NG	G	W	Part 1	NG	G	W	Part 2	Seal ring
KE - VK 080	IG3	AL	2	K - FVK 080	IG3	AL	E	VD080/077	Vulkolan, blue
KE - VK 080	IG3	MS	2	K - FVK 080	IG3	MS	E	VD080/077	Vulkolan, blue
KE - VK 080	IG3	VA	2	K - FVK 080	IG3	VA	E	TD080/077	Teflon, white
KE - VK 100	IG4	MS	2	K - FVK 100	IG4	MS	E	VD114/100	Vulkolan,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



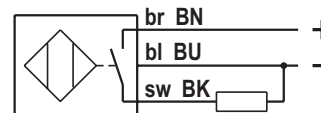
for limit switch with Ex type of protection  $\text{Ex II 3D T 90 }^\circ\text{C IP68}$  attach **B0** behind the order code

## 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	$\text{Ex II 3D T 90 }^\circ\text{C IP68}$

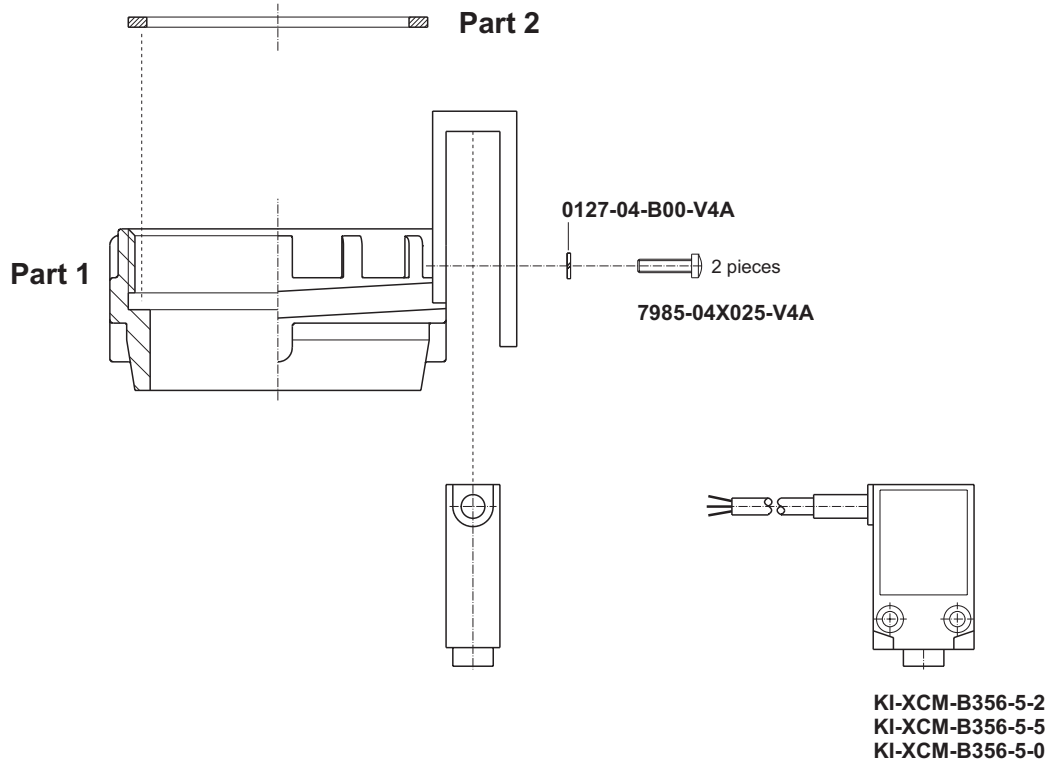
## Wiring connection

Cable	3 x 0,34 mm <sup>2</sup>
Cable length (KL)	2 = 2 m 5 = 5 m 0 = 10 m



BALLUFF 356

**Components**



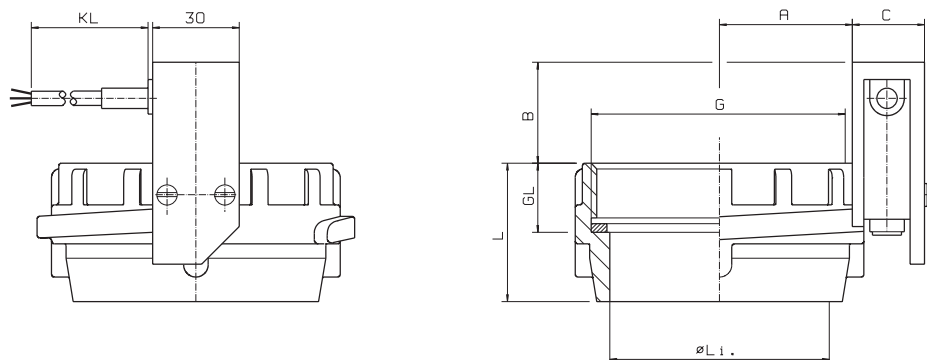
Type	NG	G	W	Part 1	NG	G	W	Part 2	Seal ring
KI - VK 080		IG3	AL 2	K - FVK 080		IG3	AL E	VD080/077	Vulkolan, blue
KI - VK 080		IG3	MS 2	K - FVK 080		IG3	MS E	VD080/077	Vulkolan, blue
KI - VK 080		IG3	VA 2	K - FVK 080		IG3	VA E	TD080/077	Teflon, white
KI - VK 100		IG4	MS 2	K - FVK 100		IG4	MS E	VD114/100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

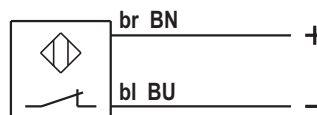
Dust  II 1D Ex iaD 20 T... °C

## 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

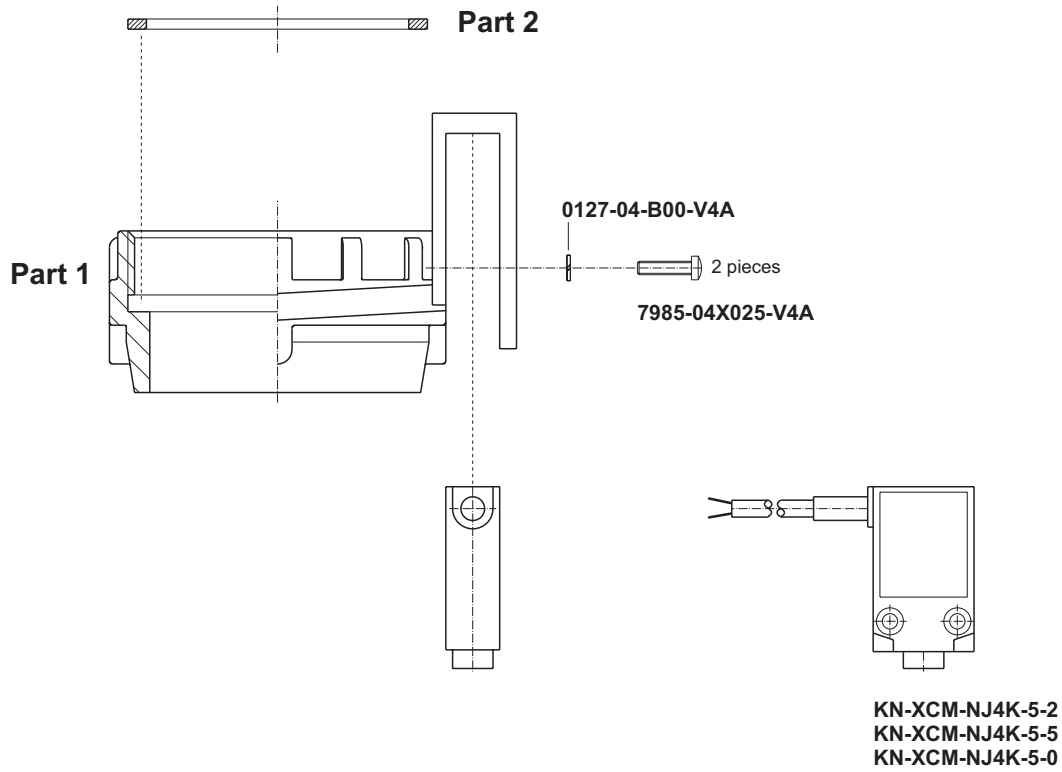
## Wiring connection

Cable		2 x 0,34 mm <sup>2</sup>
Cable length	(KL)	2 = 2 m 5 = 5 m 0 = 10 m



Pepperl+Fuchs NJ4

**Components**



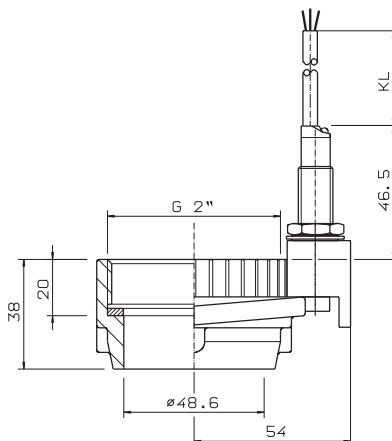
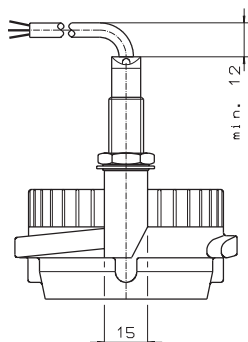
Type	NG	G	W	Part 1	NG	G	W	Part 2	Seal ring
KN - VK 080	IG3	AL	2	K - FVK 080	IG3	AL	E	VD080/077	Vulkolan, blue
KN - VK 080	IG3	MS	2	K - FVK 080	IG3	MS	E	VD080/077	Vulkolan, blue
KN - VK 080	IG3	VA	2	K - FVK 080	IG3	VA	E	TD080/077	Teflon, white
KN - VK 100	IG4	MS	2	K - FVK 100	IG4	MS	E	VD114/100	Vulkolan,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

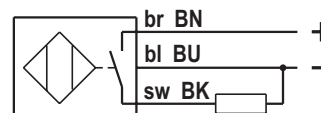
NG = Nominal size  
G = Thread  
W = Material  
KL = Cable length

## 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 <sup>2</sup>
Cable length	(KL)	2 = 2 m 5 = 5 m 0 = 10 m

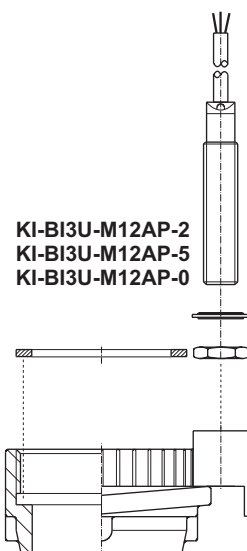


TURCK BI3U

## 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

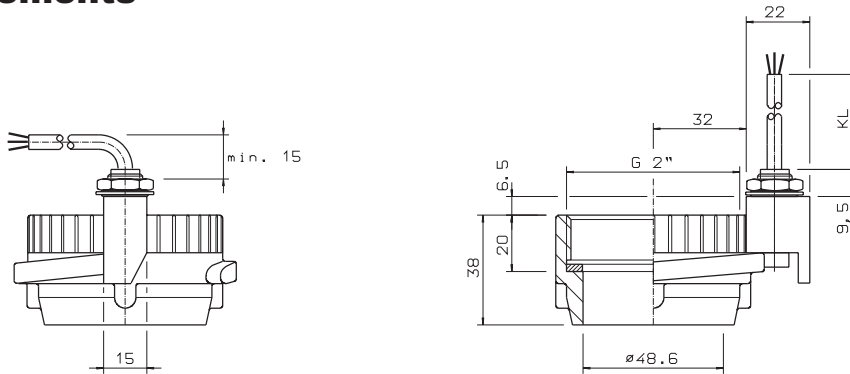


ATEX-Option **Dust**



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

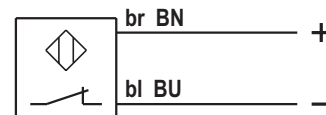
Type	NG	G	W	KL	NG = Nominal size
KN - VK 050	IG2	MS	2		G = Thread
KN - VK 050	IG2	VA	2		W = Material
					KL = Cable length

## 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

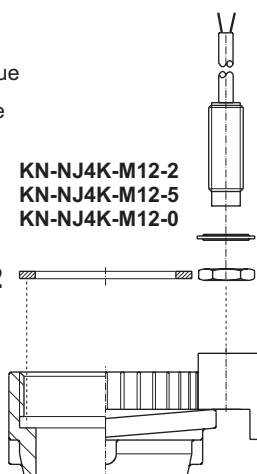
Cable		2 x 0,34 mm <sup>2</sup>
Cable length	(KL)	2 = 2 m 5 = 5 m 0 = 10 m



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