

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** 

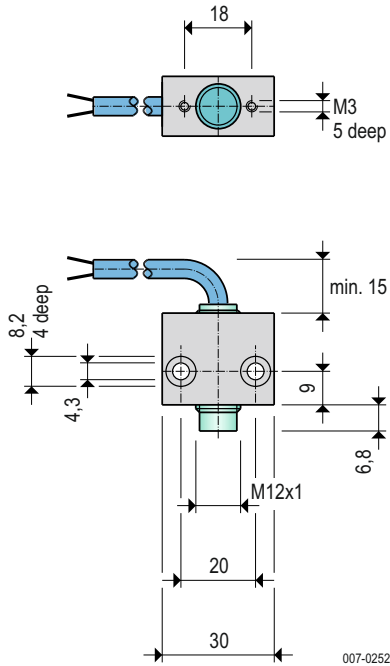
- 4.6 The limit switches can be used in areas classified as zone 1 and zone 20 or lower.
- 4.7 To keep the intrinsically reliability a certified barrier or a certified isolation amplifier with an intrinsically safe circuit according to the present category has to be connected in series for power limitation.



Technical data

Dimensions

KN-XCK-NJ4K-7- .



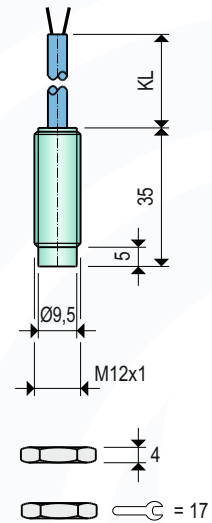
007-0252

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
or NJ4-12GM-N



007-0253

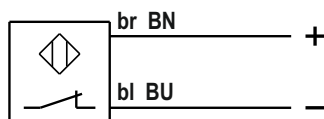
Order code

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

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

Wiring connection

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



Pepperl+Fuchs NJ4

007-AP03

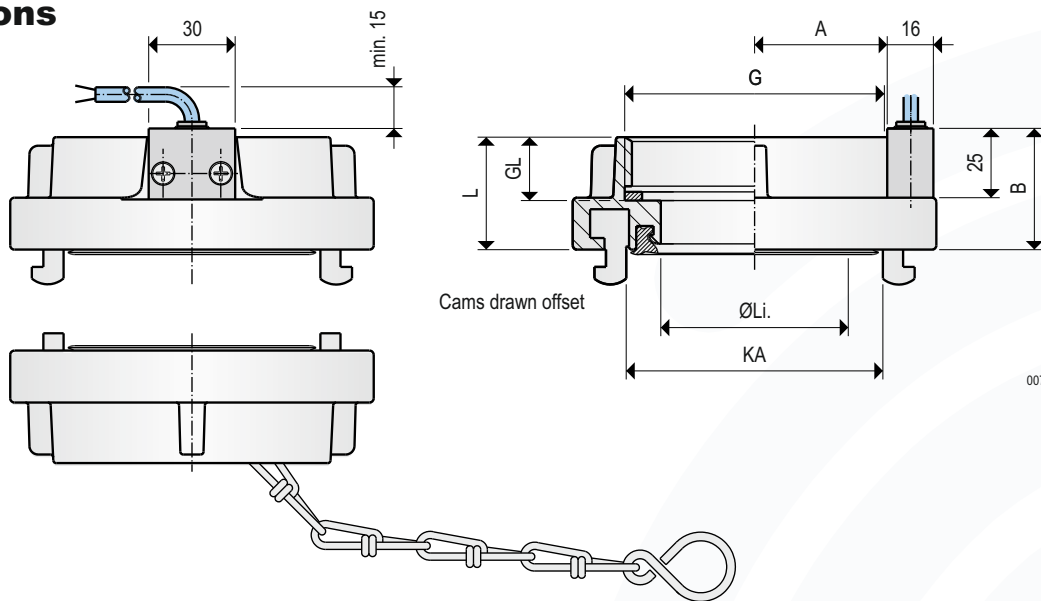
Technical data

Materials	switch	PBTP (Polybutylenterephthalat)
	clamp mounting	AlMgSi1
Mounting position		any
Ambient temperature		-25 °C ... +60 °C
Nominal voltage		8 V DC (Ri approx. 1 kΩ)
Power consumption	activated:	≤ 1 mA
	not activated:	≥ 3 mA
Type of protection		IP68/IP65 acc. DIN EN 60529
Maintenance		none

ATEX option Gas and Dust  II 2G Ex ia IIC T6...T1 Gb
and II 1D Ex ia IIIC T₂₀₀ 135°C Da

Appliance information

Dimensions



007-0204

Order code

Type	NG	G	W	KL	M	KA	Li.	L	GL	A	B
KN - SZ 052	IG2	AL	2	M2		66	44,5	40	20	32	41,5
KN - SZ 065	Ig2	AL	2	M2		81	45	37	20	42	41,5
KN - SZ 065	Ig2½	AL	2	M2		81	58	52	20	42	41,5
KN - SZ 075	Ig2	AL	2	M2		89	50	38	20	42	42,5
KN - SZ 075	Ig2½	AL	2	M2		89	64,5	42	20	42	42,5
KN - SZ 075	Ig3	AL	2	M2		89	64,5	39	22	45	42,5
KN - SZ 090	IG3	AL	2	M2		105	78	40	22	50	43,5
KN - SZ 100	IG4	AL	2	M2		115	89,5	47	25	50	46,5
KN - SZ 110	IG4	AL	2	M2		133	100	48	25	68	46,5
KN - SZ 110	IG4½	AL	2	M2		133	100	48	25	68	46,5
KN - SZ 125	IG5	AL	2	M2		148	115	52	28	75	57,5
KN - SZ 150	IG6	AL	2	M2		160	130	60	30	85	58,5

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

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

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

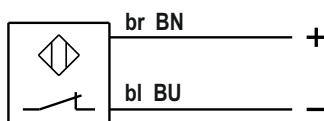
Usable for hazardous gases and liquids of group 1 up to 10 bar and up to DN 100

For example in pneumatic conveyor systems with combustible dusts etc.

Result of the evaluation of ignition danger acc. to DIN EN ISO 80079-36:
The couplings (without switches) have no potential source of ignition on their own.

Wiring connection

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



Pepperl+Fuchs NJ4

007-AP03

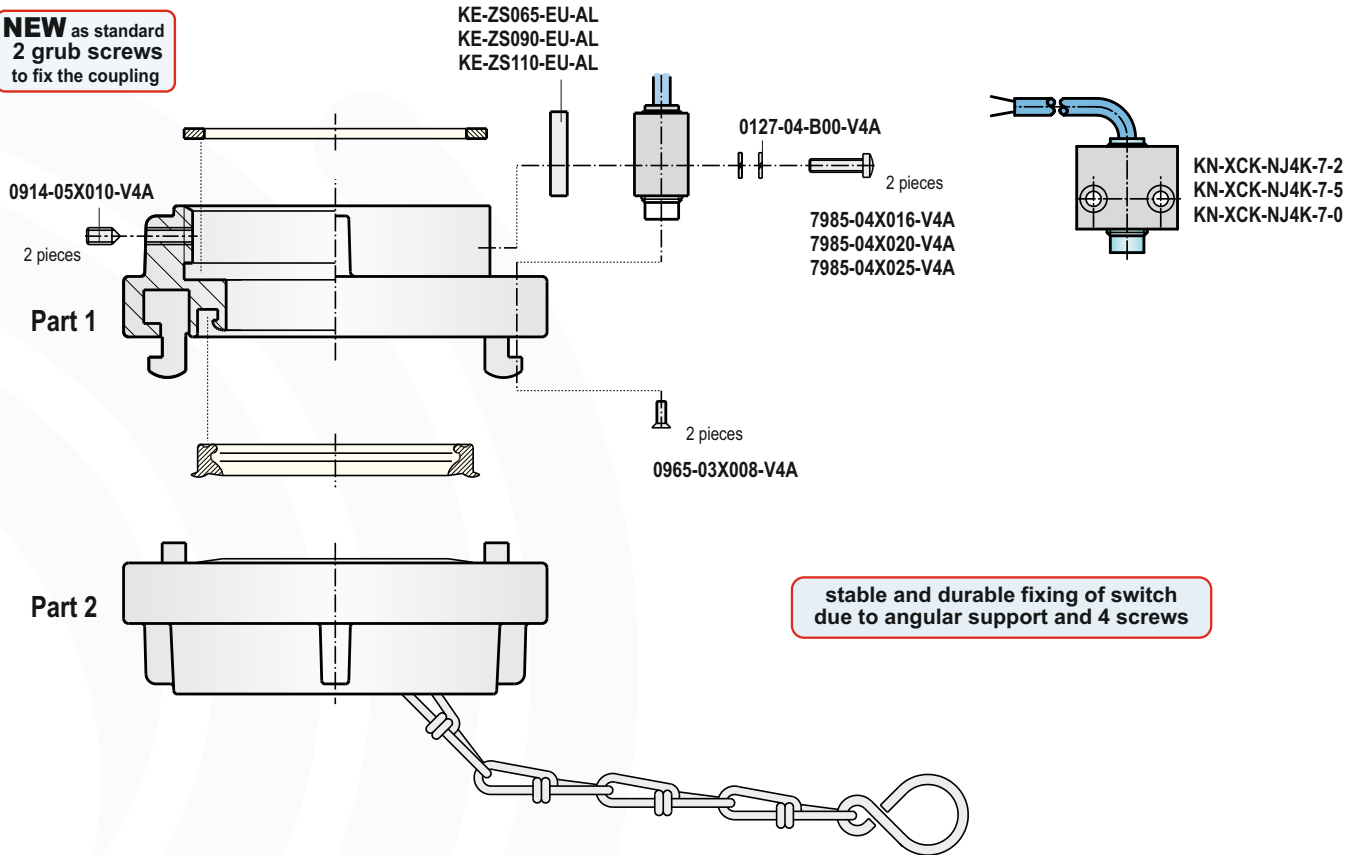
Technical data

Materials	(W)	AL = Aluminium
		AV = Aluminium/1.4581 / 318 or 1.457X
		MS = Brass
		VA = 1.4581 / 318 or 1.457X
Switch		PBTP (Polybutylenterephthalat)
Mounting position		any
Ambient temperature		-25 °C ... +60 °C
Nominal voltage		8 V DC (Ri approx. 1 kΩ)
Power consumption	activated:	≤ 1 mA
	not activated:	≥ 3 mA
Type of protection		IP68/IP65 acc. to DIN EN 60529
Maintenance		none

ATEX option Gas and Dust  II 2G Ex ia IIC T6...T1 Gb
and II 1D Ex ia IIIC T₂₀₀ 135°C Da

Single parts

NEW as standard
2 grub screws
to fix the coupling



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

007-0205

Order code Part 1

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

Order code Part 2

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

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

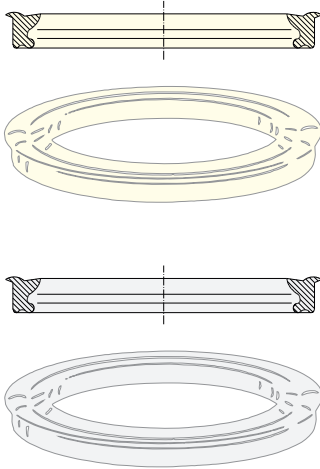
incl. seal rings

incl. seal rings and chain

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

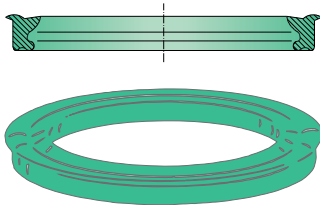
Materials (W)
AL = Aluminium
AV = Aluminium/1.4581 / 318 or 1.457X
VA = 1.4581 / 318 or 1.457X
MS = Brass

Technical data



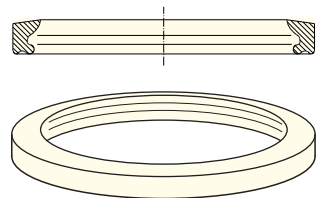
DRK seal rings for high and low pressure operation (DS)

Size	Dimensions (mm)	NBR (white)	Silikon (transparent)
		Article no.	Article no.
52 C	60x47x10.0	K-SZ052DRKDS-NBR	K-SZ052DRKDS-SIK
65	75x60x10.0	K-SZ065DRKDS-NBR	K-SZ065DRKDS-SIK
75 B	82x67x10.5	K-SZ075DRKDS-NBR	K-SZ075DRKDS-SIK
90	98x93x10.0	K-SZ090DRKDS-NBR	K-SZ090DRKDS-SIK
100	108x93x10.0	K-SZ100DRKDS-NBR	K-SZ100DRKDS-SIK
110 A	124x102x12.0	K-SZ110DRKDS-NBR	K-SZ110DRKDS-SIK
125	139x177x12.5	K-SZ125DRKDS-NBR	K-SZ125DRKDS-SIK
150	152x132x11.5	K-SZ150DRKDS-NBR	K-SZ150DRKDS-SIK
165	177x152x12.5	K-SZ165DRKDS-NBR	
205	211x187x16.0	K-SZ205DRKDS-NBR	
250	268.5x240x17	K-SZ250DRKDS-NBR (black)	



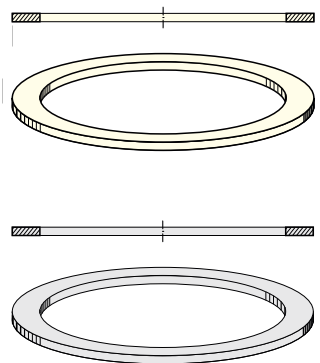
DRK seal rings for high and low pressure operation (DS)

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



DRK seal rings for high pressure operation (D)

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

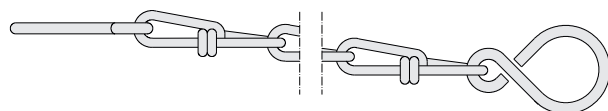


DRG thread flat seal rings

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

KT knotted-link chain with S-hook

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





EU-Konformitätserklärung EU-Declaration of Conformity

Wir/We

MOLLET Füllstandtechnik GmbH

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

erklären hiermit, dass die Geräte:

declare that the devices:

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

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

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

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

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

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

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

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

und

and

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

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

DIN EN IEC 60947-5-2:2021

DIN EN IEC 60947-5-2:2021

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

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

Osterburken, 20. Juni 2022

Osterburken, June 20th 2022



Wolfgang Hageleit

Diese Erklärung darf nur unverändert
weiterverbreitet werden.

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



EU-Konformitätserklärung EU-Declaration of Conformity

Wir/We

MOLLET Füllstandtechnik GmbH

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

erklären hiermit, dass die Geräte:

declare that the devices:

Schlauch- und Rohr-Kupplungen der Typenreihen:

Hose and pipe couplings of type series:

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

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

DN 32 bis DN 100

DN 32 to DN 100

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

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

Richtlinie 2014/68/EU (Druckgeräte-Richtlinie)

Directive 2014/68/EU (Directive Pressure Equipment)

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

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

Einstufung:
Druckhaltendes Ausrüstungsteil

Categorization:
Pressure-maintaining components

Mediumeigenschaft nach Artikel 13:
Gruppe 1 - gefährlich

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

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

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

Angewendetes Konformitätsverfahren:
Modul A

Applied conformity assessment procedures:
Modul A

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

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

Osterburken, 07. Januar 2019

Osterburken, January 7th 2019



Wolfgang Hageleit

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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, MOLOSswitch, MOLOSlock)
aus Aluminum, Edelstahl oder Messing

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

DN 101 bis DN 150

DN 101 to DN 150

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

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

Richtlinie 2014/68/EU (Druckgeräte-Richtlinie)

Directive 2014/68/EU (Directive Pressure Equipment)

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

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

Einstufung:
Druckhaltendes Ausrüstungsteil

Categorization:
Pressure-maintaining components

Mediumeigenschaft nach Artikel 13:
Gruppe 2 - andere

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

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

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

Angewendetes Konformitätsverfahren:
Modul A

Applied conformity assessment procedures:
Modul A

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

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

Osterburken, 07. Januar 2019

Osterburken, January 7th 2019



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