# CONNECTION CABLES

FOR ACCELERATION SENSORS



#### Introduction

In the range of acceleration measurement as for examples within the NVH sector (Noise-Vibration-Harshness), whenever tests have to be executed with regard to noise and vibration characteristics of vehicles (passenger cars and trucks) as well as machines, a safe and trouble-free connection of the applied accelerations sensors and microphones to the used measuring technique is needed.

As one of the worldwide leading cable manufacturers SAB Bröckskes is aware of the challenges in the range of sensor cabling and the applied measuring technique. As a consequence SAB has developed and designed a wide range of sensor and connection cables. Wether for uniaxial or triaxial sensors on IEPE or charge basis – we have the appropriate solution for you in our product range.

Above all the multiple material combinations of our cables that you will find on the following pages offer a response to the challenges in the range of user-friendly cabling:

#### **TPFK**

resistant to high temperatures and for narrow spaces

#### PUR

mechanically robust for sharp-edged and rough environments

#### Silicone

for highly flexible and smooth applications as well as for narrow bending radii

Besides the known standard cables we also offer the required connector combination so that you are able to connect the used measuring technique without time-consuming adaptation. Under the heading "application range" you will find several examples of measuring technique (for example PAKII by MüllerBBM Vibro Akustik). In case that you do not find your plug-in combination please contact us and we will design your special cable.





In the range of piezoelectric acceleration sensors with charge outlet, special low noise coaxial cables are needed. Here the sensitive measuring chain shall be protected against additional electrostatic load created by cable movement so that only the charge created by the sensor is transferred to the load amplifier. On the next page you will find the overview of our charge cables .

Furthermore, we offer especially for the range of NVH testing benches, for example for a NVH roll testing bench some special solutions as for example our coax cable drum (catalogue page 26) or our multiple coax collection cable (catalogue page 25). As cable manufacturer there are no limits for us so that we collect multiple ideas and the input resulting from field application in order to improve and simplify cabling and thus create a practical cable solution.

You have got an idea and no one for realization? Please contact us.

Our sensor cables are also appropriate vibration measurement in the range of E-mobility (scoop-proof cables in the HV range), control of machines, bridges and wind power plants, crash test applications, turbine technique and many more.

Besides of our excellent cable quality and the multiple special solutions we also offer the following services:

production for small quantities – individual cable lengths – marking with customer's identification number (material no.) – test samples for final release – assistance on site by our competent sales team or via teams.

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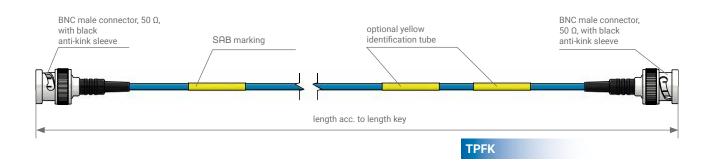
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## Connection cables for uniaxial acceleration sensors

## Low noise coax cable

with BNC male connector on both sides

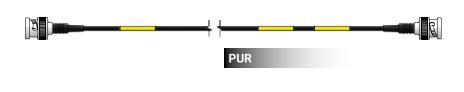


## **Application range**

For example for the connection of an uniaxial acceleration sensor (IEPE)

#### Connector

side 1: BNC male connector side 2: BNC male connector





#### Cable data

	ТРГК	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 1,7 mm	approx. 2,1 mm	approx. 2,2 mm
operating voltage:	max. 375 V	max. 350 V	max. 350 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

item no.	sheath material	length "L" [mm]
S3011-3030-00100	TPFK	1000
S3012-3030-00100	PUR	1000
S3013-3030-00100	Silicone	1000

SAB identification: item number, batch number

#### **Further service aspects**

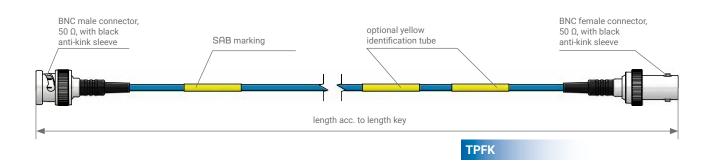
number or barcode



## 1.1.2 Connection cables for uniaxial acceleration sensors

## Low noise coax cable

with BNC male and female connector

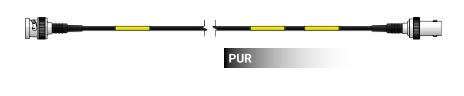


## **Application range**

For example for the connection of an uniaxial acceleration sensor (IEPE)

#### Connector

side 1: BNC male connector side 2: BNC female connector





#### Cable data

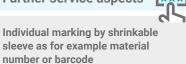
	ТРГК	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 1,7 mm	approx. 2,1 mm	approx. 2,1 mm
operating voltage:	max. 375 V	max. 350 V	max. 350 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

item no.	sheath material	length "L" [mm]
S3011-3031-00100	TPFK	1000
S3012-3031-00100	PUR	1000
S3013-3031-00100	Silicone	1000

SAB identification: item number, batch number

#### **Further service aspects**

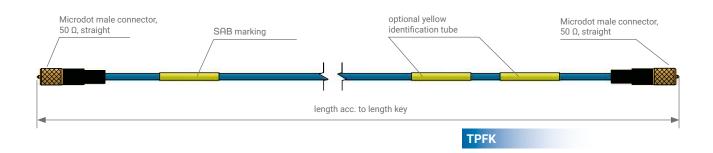


## 1.1.3 Connection cables for uniaxial acceleration sensors

## Low noise coax cable

at both sides with Microdot 10-32 male connectors

also possible with Microdot female connector.



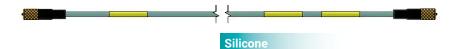
## **Application range**

For example for the connection of an uniaxial acceleration sensor (IEPE)



#### Connector

side 1: Microdot male connector 10-32 UNF side 2: Microdot male connector 10-32 UNF



#### Cable data

	ТРГК	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 1,7 mm	approx. 2,1 mm	approx. 2,1 mm
operating voltage:	max. 375 V	max. 350 V	max. 350 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

item no.	sheath material	length "L" [mm]
S3011-3232-00100	TPFK	1000
S3012-3232-00100	PUR	1000
S3013-3232-00100	Silicone	1000

#### **Further service aspects**

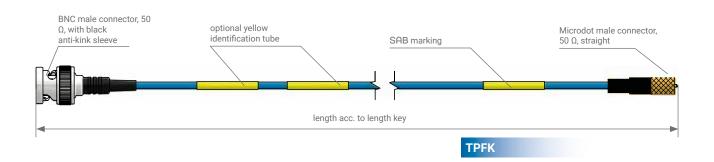


Individual marking by shrinkable sleeve as for example material number or barcode

## 1.1.4 Connection cables for uniaxial acceleration sensors

## Low noise coax cable

with Microdot male connector 10-32 and BNC male connector



## **Application range**

For example for the connection of an uniaxial acceleration sensor (IEPE)



#### Connector

side 1: BNC male connector

side 2: Microdot male connector 10-32 UNF



Cable data			
	TPFK	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 1,7 mm	approx. 2,1 mm	approx. 2,1 mm
operating voltage:	max. 375 V	max. 350 V	max. 350 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

Configuration examples			
item no.	sheath material	length "L" [mm]	
S3011-3032-00100	TPFK	1000	
S3012-3032-00100	PUR	1000	
S3013-3032-00100	Silicone	1000	

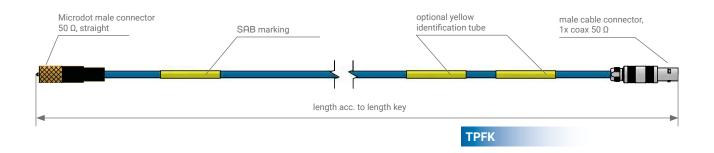
SAB identification: item number, batch number

# Further service aspects Individual marking by shrinkable sleeve as for example material number or barcode

## 1.1.5 Connection cables for uniaxial acceleration sensors

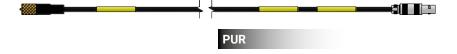
## Low noise coax cable

with Microdot male connector 10-32 and Lemo coax male connector 00



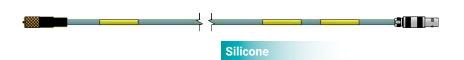
## **Application range**

Sensor cable for uniaxial acceleration sensor (IEPE) and connection at e.g. Siemens LMS SCADAS measuring technique



#### Connector

side 1: Microdot male connector 10-32 UNF side 2: Lemo coax male connector A coded



#### Cable data

	ТРГК	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 1,7 mm	approx. 2,1 mm	approx. 2,1 mm
operating voltage:	max. 375 V	max. 350 V	max. 350 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

item no.	sheath material	length "L" [mm]
S3011-3242-00100	TPFK	1000
S3012-3242-00100	PUR	1000
S3013-3242-00100	Silicone	1000

#### **Further service aspects**



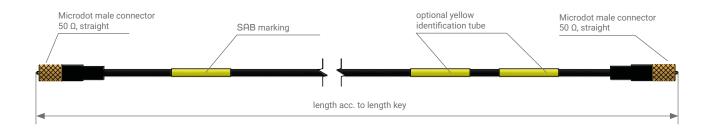
Individual marking by shrinkable sleeve as for example material number or barcode

## 1.2.1 Connection cables for uniaxial acceleration sensors

## Sensor charge cable

with Microdot male connector 10-32 at both sides

also possible with Microdot female connector.



## **Application range**

For the connection of an uniaxial acceleration sensor with charge outlet

#### Connector

side 1: Mircodot male connector 10-32 UNF side 2: Mircodot male connector 10-32 UNF

#### **Further service aspects**



Individual marking by shrinkable sleeve as for example material number or barcode

#### Cable data

construction:	1 x 0,20 mm Ø
insulation:	TPFK
outer sheath:	TPFK
sheath colour:	black
outer diameter:	approx. 1,7 mm
operating voltage:	max. 375 V
temperature range:	-55°C / +250°C
special characteristics:	chargeable 🗸
	resistant to high temperatures 🗸

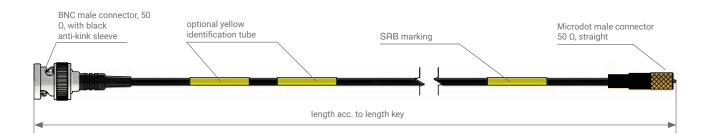
## **Configuration example**

item no.	sheath material	length "L" [mm]
S3021-3232-00100	TPFK	1000

## 1.2.2 Connection cables for uniaxial acceleration sensors

## Sensor charge cable

with Microdot male connector 10-32 and BNC male connector



## **Application range**

For the connection of an uniaxial acceleration sensor with charge outlet

#### Connector

side 1: BNC male connector

side 2: Mircodot male connector 10-32 UNF

#### **Further service aspects**



Individual marking by shrinkable sleeve as for example material number or barcode

#### Cable data

construction:	1 x 0,20 mm Ø
insulation:	TPFK
outer sheath:	TPFK
sheath colour:	black
outer diameter:	approx. 1,7 mm
operating voltage:	max. 375 V
temperature range:	-55°C / +250°C
special characteristics:	chargeable 🗸
	resistant to high temperatures 🗸

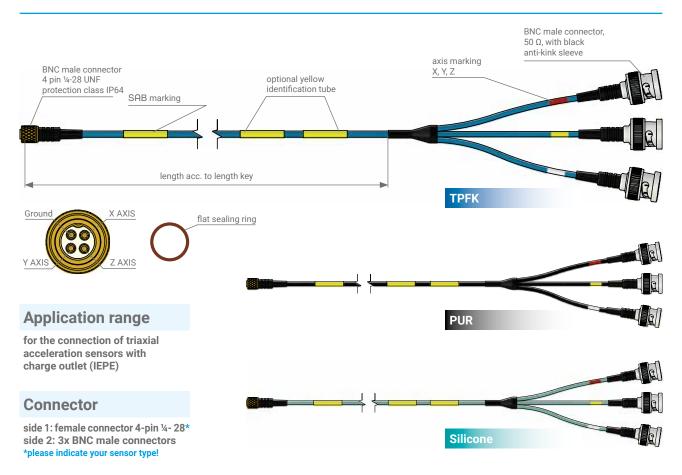
## **Configuration example**

item no.	sheath material	length "L" [mm]
S3021-3032-00100	TPFK	1000

## 2.1.1 Connection cables for triaxial acceleration sensors

#### **Connection cable**

female connector 4-pole 1/4- 28 and 3x BNC male connectors



#### Cable data PUR **TPFK** Silicone 4 x AWG 34 construction: 4 x AWG 34 4 x AWG 30 **TPFK TPFK TPFK** insulation: **TPFK** PUR outer sheath: Silicone sheath colour: blue black turquoise outer diameter: approx. 2,1 mm approx. 2,5 mm approx. 2,7 mm max. 150 V max. 150 V max. 150 V operating voltage:

-40°C / +90°C (+125°C 2500h)

mechanically more robust 🗸

Configuration examples			
item no. sheath material length "L" [mm			
S3031-1030-00600	TPFK	6000	
S3032-1030-00600	PUR	6000	
S3033-1030-00600	Silicone	6000	

-55°C / +250°C

resistant to high temperatures

SAB identification: item number, batch number

temperature range:

special characteristics:



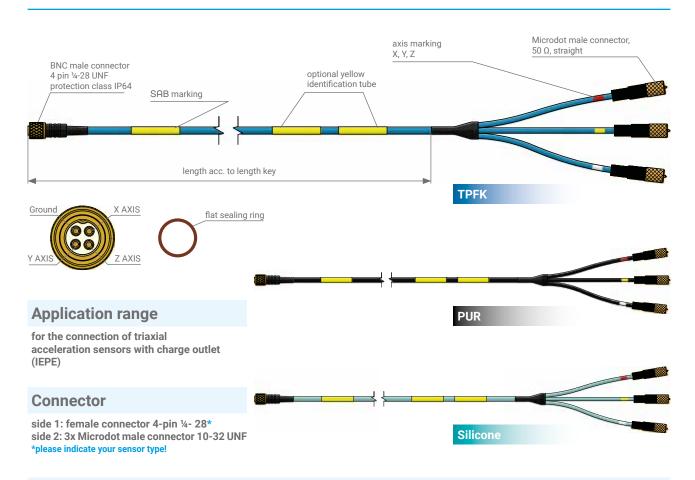
-25°C / +180°C

highest flexibility 🗸

## 2.1.2 Connection cables for triaxial acceleration sensors

## **Connection cable**

female connector 4-pole 1/4- 28 and 3x Microdot male connector 10-32



#### Cable data

	TPFK	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm
operating voltage:	max. 150 V	max. 150 V	max. 150 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

item no.	sheath material	length "L" [mm]
S3031-1032-00100	TPFK	6000
S3032-1032-00100	PUR	6000
S3033-1032-00100	Silicone	6000

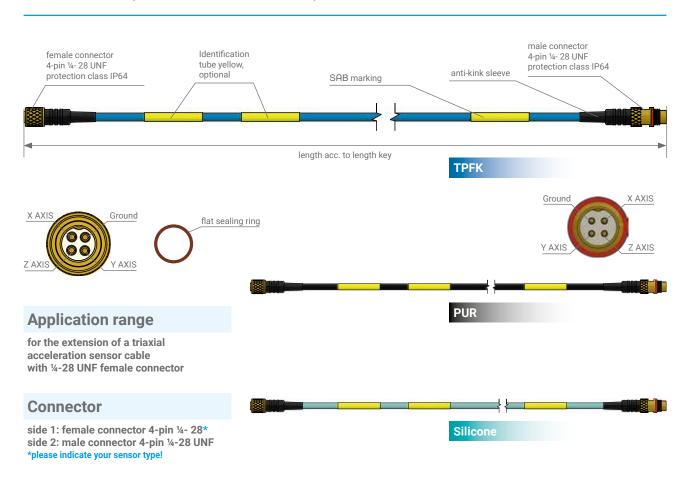
SAB identification: item number, batch number

## **Further service aspects**

## 2.1.3 Connection cables for triaxial acceleration sensors

## **Extension cable**

female connector 4-pole 1/4- 28 and male connector 4-pin 1/4- 28



Cable	data
-------	------

	TPFK	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm
operating voltage:	max. 150 V	max. 150 V	max. 150 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

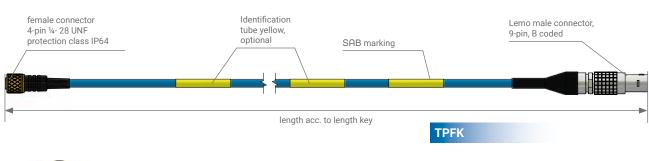
item no.	sheath material	length "L" [mm]
S3031-1011-00100	TPFK	3000
S3032-1011-00100	PUR	3000
S3033-1011-00100	Silicone	3000



## 2.1.4 Connection cables for triaxial acceleration sensors

## **Connection cable**

female connector 4-pole 1/4- 28 and Lemo male connector, 9-pin B coded





## **Application range**

sensor cable for triaxial acceleration sensors with charge outlet (IEPE) and connection to e.g. Müller BBM PAK measuring technique

#### Connector

side 1: female connector 4-pin 1/4- 28 UNF\* side 2: Lemo male connector 9-pin, B coded

\*please indicate your sensor type!





#### Cable data

	ТРГК	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm
operating voltage:	max. 150 V	max. 150 V	max. 150 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

item no.	sheath material	length "L" [mm]
S3031-1040-00600	TPFK	6000
S3032-1040-00600	PUR	6000
S3033-1040-00600	Silicone	6000

SAB identification: item number, batch number

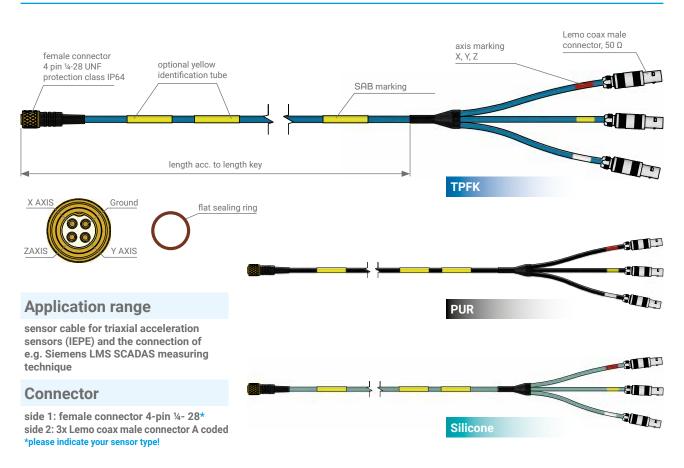


number or barcode

## 2.1.5 Connection cables for triaxial acceleration sensors

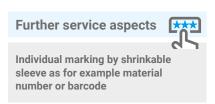
## **Connection cable**

female connector 4-pole 1/4- 28 and 3x Lemo coax male connector 00



Cable data				
	TPFK	PUR	Silicone	
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30	
insulation:	TPFK	TPFK	TPFK	
outer sheath:	TPFK	PUR	Silicone	
sheath colour:	blue	black	turquoise	
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm	
operating voltage:	max. 150 V	max. 150 V	max. 150 V	
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C	
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸	

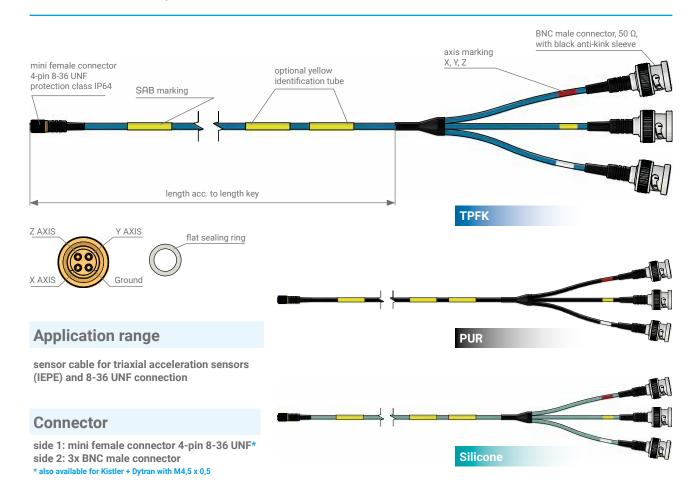
Configuration examples		
item no.	sheath material	length "L" [mm]
S3031-1042-00600	TPFK	6000
S3032-1042-00600	PUR	6000
S3033-1042-00600	Silicone	6000



## 2.1.6 Connection cables for triaxial acceleration sensors

## **Connection cable**

mini female connector 4-pole 8-36 and 3x BNC male connector



Cable data			
	ТРГК	TPFK PUR	
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm
operating voltage:	max. 150 V	max. 150 V	max. 150 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

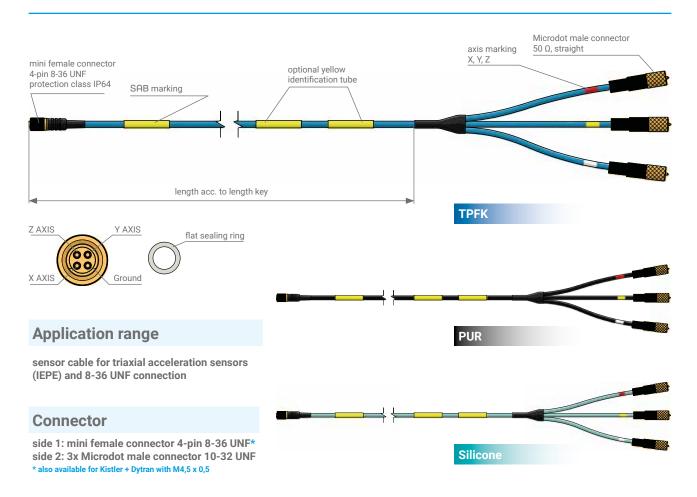
Configuration examples		
item no.	sheath material	length "L" [mm]
S3031-2030-00600	TPFK	6000
S3032-2030-00600	PUR	6000
S3033-2030-00600	Silicone	6000

**Further service aspects** Individual marking by shrinkable sleeve as for example material number or barcode

## 2.1.7 Connection cables for triaxial acceleration sensors

## **Connection cable**

mini female connector 4-pole 8-36 and 3x Microdot male connector 10-32



Ca	ble	dat	a

	TPFK	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm
operating voltage:	max. 150 V	max. 150 V	max. 150 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

## **Configuration examples**

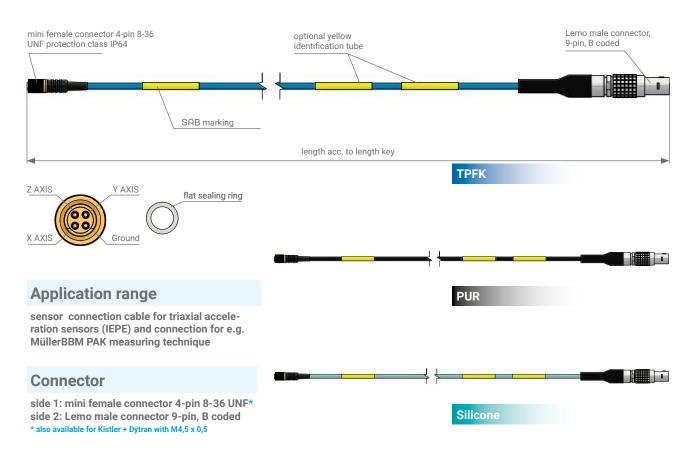
item r	o. s	heath material	length "L" [mm]
S3031-2032	2-00600	TPFK	6000
S3032-2032	2-00600	PUR	6000
S3033-2032	2-00600	Silicone	6000

**Further service aspects** Individual marking by shrinkable sleeve as for example material number or barcode

## 2.1.8 Connection cables for triaxial acceleration sensors

## **Connection cable**

mini female connector 4-pole 8-36 and Lemo male connector 9-pin, B coded



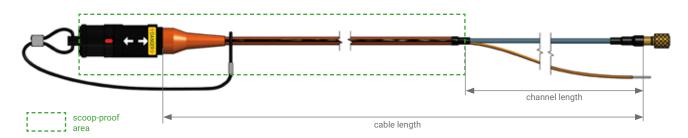
Cable data			
	TPFK	TPFK PUR	
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFK	TPFK	TPFK
outer sheath:	TPFK	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 2,1 mm	approx. 2,5 mm	approx. 2,7 mm
operating voltage:	max. 150 V	max. 150 V	max. 150 V
temperature range:	-55°C / +250°C	-40°C / +90°C (+125°C 2500h)	-25°C / +180°C
special characteristics:	resistant to high temperatures	mechanically more robust 🗸	highest flexibility 🗸

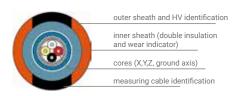
Configuration examples		
item no.	sheath material	length "L" [mm]
S3031-2040-00600	TPFK	6000
S3032-2040-00600	PUR	6000
S3033-2040-00600	Silicone	6000

**Further service aspects** Individual marking by shrinkable sleeve as for example material number or barcode

#### **HV** connection cable

4-pole 1/4 -28 UNF female connectorand Lemo Redel connector





#### **Further HV sensors**

you will find in our brochure "E-mobility HV measurement technology on our home page www.sab-kabel.de

## **Application range**

HV acceleration measurement together with CSM HV IEPE FL 100 measuring module

#### Connector

Lemo Redel male connector with orange kink predection sleeve and black predecting cap, 8 pole, C coded 1000 V AC tension proof - IP 67 plugged

#### **Tests**



via single channel in water bath - 5000 V AC - 5 min - with reference to EN 50264-2-1

#### sensor test:

routine test of harnessed connector with reference to the new standard for measuring devices 61010-1 as well as VDE indications in our in-house ball bath (testing equipment has been released by VDE). Control of safety to touch towards outside - 3000 V/1 min. AC

issue of HV test certificate with batch number for gapless traceability!

optional: test + repair of already used sensors on request.

#### Cable data

connection cable:	HV IEPE sensor cable
core insulation:	PFA – red, white, black, yellow
bundle sheath:	PFA - blue acc. to RAL 5015
inner sheath:	PUR - blue acc. to RAL 5024
outer sheath:	PUR
sheath colour:	orange with black longitudinal stripes
stranding:	optimised in layers
outer diameter:	approx. 4,3 mm
dielectric strength:	1000 V AC over second inner sheath
temperature range:	fixed laying: -50/+150 °C flexible application: -40/+150 °C
special characteristics:	scoop-proof* ✓

\*please note the marked scoop-proof area!

#### Sensor connection side

male connector: 4-pin 1/4 -28 UNF for the connection

to an triaxial IEPE acceleration sensor (also with 4-pin 8-36 UNF and 4-pin M4,5)

bundle led out and insulated with shrinkable sleeve Screen:

temperature range: bundle channel: -55°C / +250°C

#### **Configuration examples**

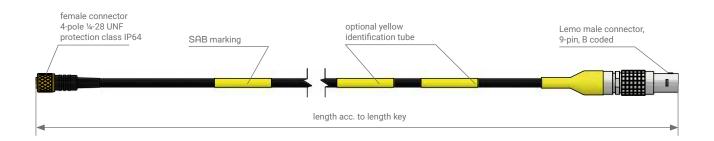
item no.	connection cable	single channel length		male
	length [mm]	channel 1	ground	connector
T642-062-666	3000	100 mm	200 mm	4-pin ¼ -28 UNF
T642-062-794	6000	100 mm	200 mm	4-pin ¼ -28 UNF
T642-062-635	3000	100 mm	200 mm	4-pin 8-36 UNF

total and channel length can be led out individually.

## Connection cables for triaxial acceleration sensors

## **Connection cable**

4-pole 1/4-28 female connector and Lemo male connector 9-pin, B coded





#### **Application range**

sensor connection cable for triaxial acceleration sensors with charge outlet and for example Müller BBM PAK measuring technique

#### Connector

side 1: 4-pole 1/4-28 UNF female connector side 2: Lemo male connector 9-pin, B coded \*please indicate your sensor type!

#### **Further service aspects**



Individual marking by shrinkable sleeve as for example material number or barcode

## Cable data

construction: 3x (1 x 0,20 mm Ø) **TPFK** insulation: outer sheath: **TPFK** sheath colour: black outer diameter: approx. 3,2 mm operating voltage: max. 375 V temperature range: -55°C / +250°C special characteristics: chargeable < resistant to high temperatures 🗸

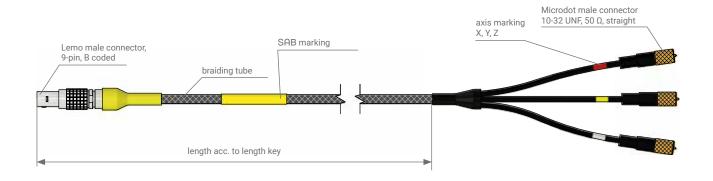
## **Configuration example**

item no.	sheath material	length "L" [mm]
S3041-1040-00400	TPFK	4000

## 2.2.2 Connection cables for triaxial acceleration sensors

## **Connection cable**

Lemo male connector 9-pin, B coded and 3x Microdot male connector 10-32



## **Application range**

sensor connection cable for triaxial acceleration sensors with charge outlet and for example Müller BBM PAK measuring technique

#### Connector

side 1: Lemo male connector 9-pin, B coded side 2: 3x Microdot male connector 10-32 UNF

Cable data	
construction:	3 x (1 x 0,20 mm Ø) braiding tube
insulation:	TPFK
outer sheath:	TPFK
sheath colour:	black
outer diameter:	approx. 1,7 mm
operating voltage:	max. 48 V
temperature range:	-55°C / +250°C
special characteristics:	low-noise ✓
	chargeable 🗸
	resistant to high temperatures 🗸

## **Configuration example**

item no.	sheath material	length "L" [mm]
S3041-4032-00100	TPFK	1000

SAB identification: item number, batch number

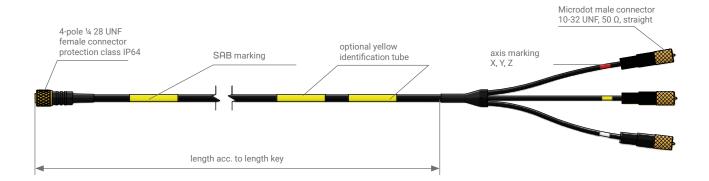
## **Further service aspects**

## 2.2.3 Connection cables for triaxial acceleration sensors

## **Connection cable**

4-pole 1/4 28 female connector and 3x Microdot male connector 10-32

also possible with Microdot female connector.





## **Application range**

sensor connection cable for triaxial acceleration sensors with charge outlet

#### Connector

side 1: 4-pole 1/4 28 UNF female connector\* side 2: Microdot male connector 10-32 UNF \*please indicate your sensor type!

## **Further service aspects**



Individual marking by shrinkable sleeve as for example internal material number or barcode

## Cable data

construction:	3x (1 x 0,20 mm Ø)
insulation:	TPFK
outer sheath:	TPFK
sheath colour:	black
outer diameter:	approx. 3,2 mm
operating voltage:	max. 375 V
temperature range:	-55°C / +250°C
special characteristics:	chargeable 🗸
	resistant to high temperatures 🗸

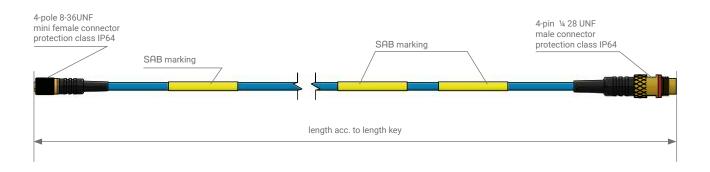
## **Configuration example**

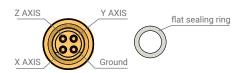
item no.	sheath material	length "L" [mm]
S3041-1032-00400	TPFK	4000

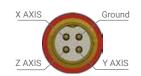
#### Adaptation cable, collection cable and connection adapter 3.1

## **Adapter cable**

4-pole 8-36 mini female connector and 4-pin 1/4 28 male connector







## **Application range**

Adapter cable for the adaptation of a mini female acceleration sensor (IEPE) with a 4-pin 1/4 28 sensor cable (for example page 2.1.1)

#### Connector

side 1: 4-pole 8-36UNF mini female connector side 2: 4-pin 1/4 28 UNF male connector

Cable data	
construction:	4 x AWG 34
insulation:	TPFK
outer sheath:	TPFK
sheath colour:	blue
outer diameter:	approx. 2,1 mm
operating voltage:	max. 150 V
temperature range:	-55°C / +250°C
special characteristics:	resistant to high temperatures ✓

Configuration example		
item no.	sheath material	length "L" [mm]
S3061-2011-00030	TPFK	300

SAB identification: item number, batch number

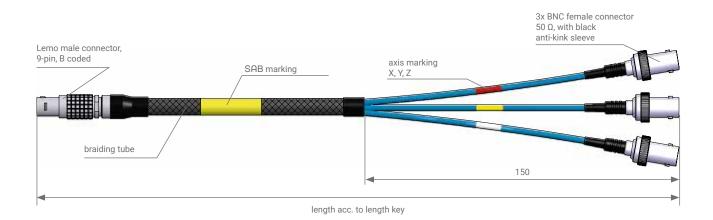
#### **Further service aspects**

## Adaptation cable, collection cable and connection adapter

## **Adapter cable**

Lemo male connector 9-pin and 3x BNC female connector

also possible with **BNC** male connector



## **Application range**

Adapter cable for the adaptation of a sensor cable with 3x BNC male connector to for example Müller BBM measuring technique

#### Connector

side 1: Lemo male connector 9-pin, B coded side 2: 3x BNC female connector

Cable data	
construction:	3 x (1 x 0,20 mm Ø) braiding tube
insulation:	TPFK
outer sheath:	TPFK
sheath colour:	blue
outer diameter:	approx. 1,7 mm
operating voltage:	max. 375 V
temperature range:	-55°C / +250°C

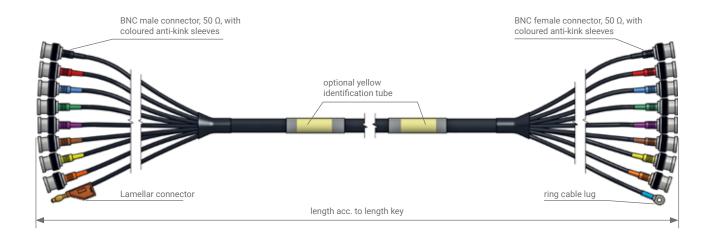
Configuration example		
item no.	sheath material	length "L" [mm]
S3061-4031-00050	TPFK	500



## 8-fold coax collection cable

8x BNC male connector and 8x BNC female connector

Also possible 16-fold and with BNC female connector.



## **Application range**

collection cable for a structured and proper laying for example at a test bench

#### Connector

side 1: 8x BNC male connector +

1 Lamellar connector

side 2: 8x BNC female connector +

1 ring cable lug

## Cable data

construction:	8 x AWG 26
insulation:	TPFK
Inner sheath:	TPE
outer sheath:	PUR
sheath colour:	black
outer diameter:	approx. 11,6 mm
operating voltage:	max. 900 V
temperature range:	-40°C / +90°C (short-time use +125°C 2500h)
special characteristics:	mechanically robust 🗸
	smooth laying 🗸

## **Configuration example**

item no.	sheath material	length "L" [mm]
S3600-4042-00100	PUR	1000

SAB identification: item number, batch number

#### **Further service aspects**



#### coax cable drum

with 8x BNC installation socket and a wound up 8-fold collection cable with 8xBNC male connector



#### **Application range**

collection cable for a structured and proper laying for example at a test bench

#### Connector

side 1: cable drum with 8x BNC

installation sockets

side 2: 8x BNC male connector

#### Cable data

8 x AWG 26 construction: **TPFK** insulation: **TPE** Inner sheath: PUR outer sheath: sheath colour: black outer diameter: approx. 11,6 mm operating voltage: max. 900 V -40°C / +90°C (short-time use +125°C 2500h) temperature range: special characteristics: mechanically robust 🗸 smooth laying 🗸

## **Configuration example**

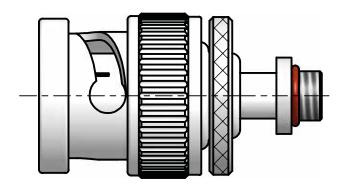
	item no.	sheath material	length "L" [mm]
Т	\$3600-4078-03000	DUR	30000

SAB identification: item number, batch number

#### **Further service aspects**



Further adapter types on request.





## **Application range**

adapter / connection element

#### Connector

side 1: BNC male connector

side 2: Microdot female connector 10-32 UNF

## **Configuration example**

item no.

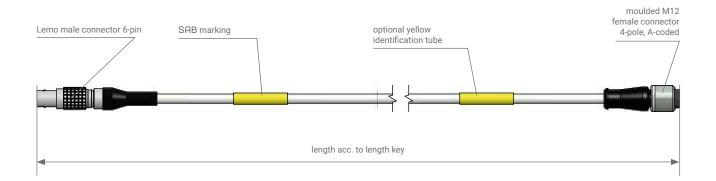
C020-170-999-000-139



## Connection cables for further sensors

## **Connection cable**

with Lemo male connector 6-pin + moulded M12 female connector 4-pole (for example pressure sensors)



## **Application range**

sensor cable for the connection to pressure sensors with M12 reception

#### Connector

side 1: Lemo male connector 6-pin, A coded side 2: moulded M12 female connector 4-pin, A coded

Cable data		
construction:	4 x AWG 22	
insulation:	TPFK	
outer sheath:	TPFK	
sheath colour:	white	
outer diameter:	approx. 3,7 mm	
operating voltage:	max. 375 V	
temperature range:	-40°C / +180°C	
special characteristics:	very good oil resistance ✓	

#### **Configuration example** item no. sheath material length "L" [mm] S3833-4641-00300 **TPFK** 3000

SAB identification: item number, batch number

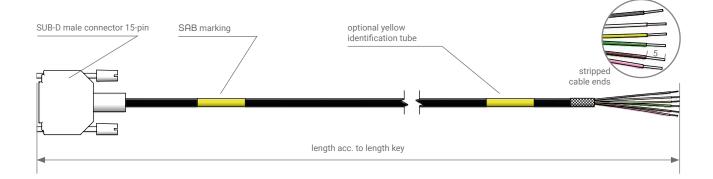
#### **Further service aspects**

#### Connection cables for further sensors 4.2

## **Connection cable**

with SUB-D male connector and stripped ends (for strain gauges)

Also possible with TEDS



## **Application range**

sensor cable for the connection of strain gauges

#### Connector

side 1: SUB-D male connector 15-pin side 2: 50 mm stripped ends + 5 mm bare

Cable data	
construction:	3 x 2 x 0,14 mm² (tinned copper strands)
insulation:	TPFK
outer sheath:	PUR
sheath colour:	black
outer diameter:	approx. 4,6 mm
operating voltage:	max. 375 V
temperature range:	-40°C / +90°C (+125°C 2500h)
wire circuit of strain gauge:	whether quarter, half of full bridge application – we respect your requirements.

## **Configuration example**

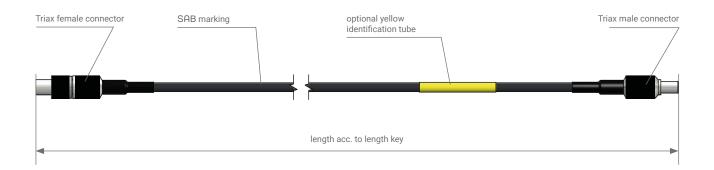
item no.	sheath material	length "L" [mm]
S3833-4419-00250	PUR	2500

SAB identification: item number, batch number

#### **Further service aspects**

## **Extension cable**

with Triax male and female connector on both sides (engine indexing)



## **Application range**

extension cable for the connection of Piezo pressure sensors at the charge amplifier for engine indexing

#### Connector

side 1: Triax female connector side 2: Triax male connector

Cable data	
construction:	1 x 0,055 mm <sup>2</sup>
insulation:	TPFK
Inner sheath:	TPFK
outer sheath:	PUR
sheath colour:	black
outer diameter:	approx. 3,4 mm
operating voltage:	max. 350 V
temperature range:	-40°C / +90°C (+125°C 2500h)
special characteristics:	double screening 🗸

Configuration example				
item no.	sheath material	length "L" [mm]		
S3600-4100-00100	PUR	1000		

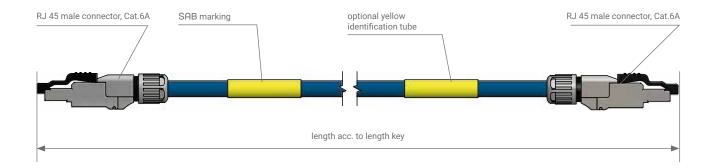
SAB identification: item number, batch number

#### **Further service aspects**

## Connection cables for further sensors

## Patch cable CAT6A

with RJ 45 male connectors on both sides



## **Application range**

PC connection element

#### Connector

side 1: RJ 45 male connector, heavy load, CAT6A side 2: RJ 45 male connector, heavy load, CAT6A

## Cable data

construction:	4 x 2 x AWG26
insulation:	TPFK
outer sheath:	PUR
sheath colour:	blue
outer diameter:	approx. 6,1 mm
operating voltage:	max. 90 V
temperature range:	-40°C / +125°C (+150°C 3000h)
special characteristics:	male connector:
	mechanically robust 🗸
	cold resistant ✓

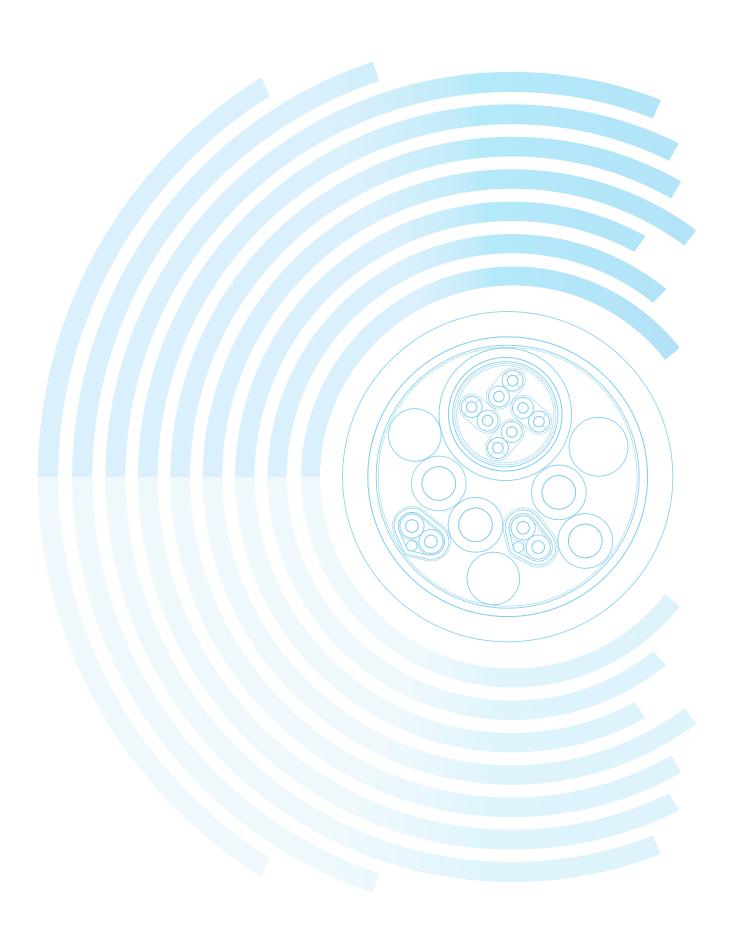
## **Configuration example**

item no.	sheath material	length "L" [mm]
S1631-4017-00100	PUR	1000

SAB identification: item number, batch number

#### **Further service aspects**







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