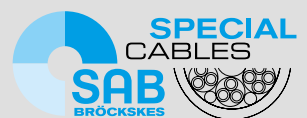


# CONNECTION CABLES

## FOR ACCELERATION SENSORS



[www.sab-cable.com](http://www.sab-cable.com)



## 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. Whether 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.**

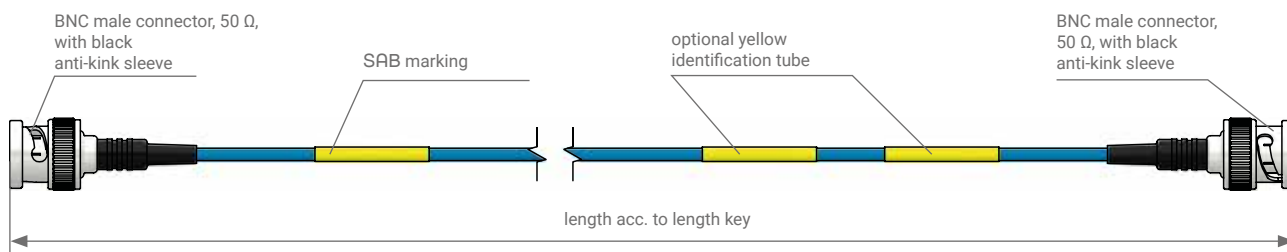
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## 1.1.1 Connection cables for uniaxial acceleration sensors

### Low noise coax cable

with BNC male connector on both sides



TPFK

#### Application range

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



PUR

#### Connector

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



Silicone

#### 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. 2,2 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

#### Further service aspects



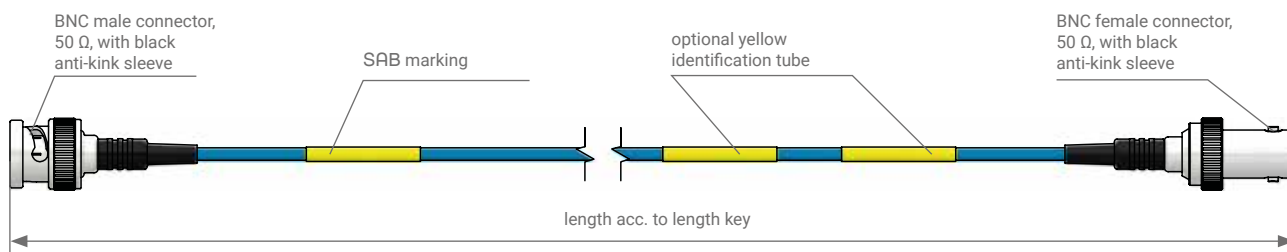
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:  
item number, batch number

## 1.1.2 Connection cables for uniaxial acceleration sensors

### Low noise coax cable

with BNC male and female connector



TPFK

#### Application range

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



PUR

#### Connector

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



Silicone

#### 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]
S3011-3031-00100	TPFK	1000
S3012-3031-00100	PUR	1000
S3013-3031-00100	Silicone	1000

#### Further service aspects



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

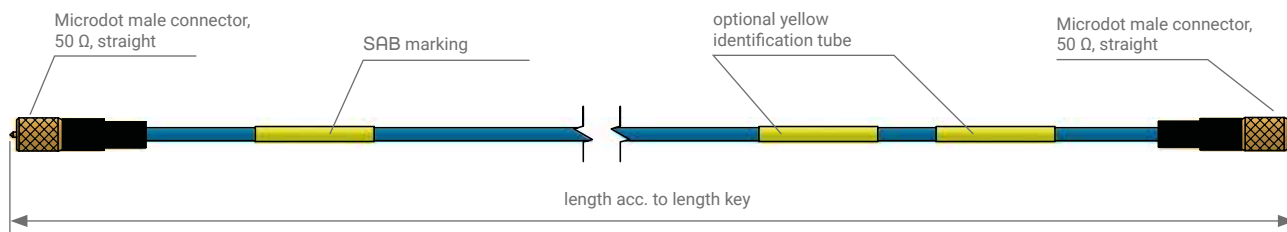
SAB identification:  
item number, batch number

## 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.



TPFK

### Application range

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



PUR

### Connector

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



Silicone

### 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]
S3011-3232-00100	TPFK	1000
S3012-3232-00100	PUR	1000
S3013-3232-00100	Silicone	1000

### Further service aspects



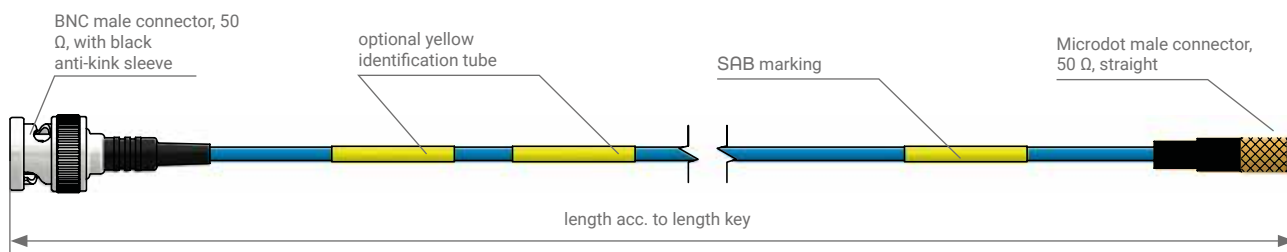
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:  
item number, batch number

## 1.1.4 Connection cables for uniaxial acceleration sensors

### Low noise coax cable

with Microdot male connector 10-32 and BNC male connector



TPFK

#### Application range

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



PUR

#### Connector

side 1: BNC male connector

side 2: Microdot male connector 10-32 UNF



Silicone

#### 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

#### Further service aspects



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

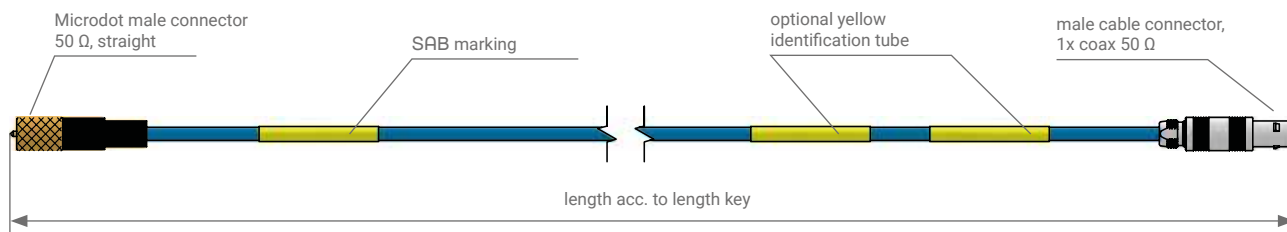
SAB identification:  
item number, batch number



## 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



TPFK

#### Application range

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



PUR

#### Connector

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



Silicone

#### 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]
S3011-3242-00100	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

SAB identification:  
item number, batch number

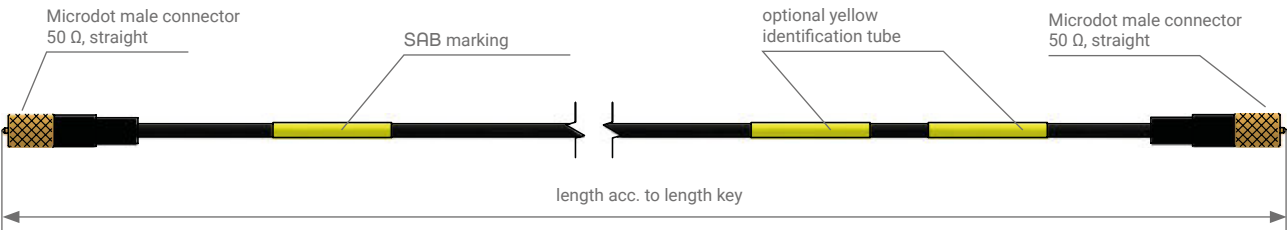


## 1.2.1 Connection cables for uniaxial acceleration sensors

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

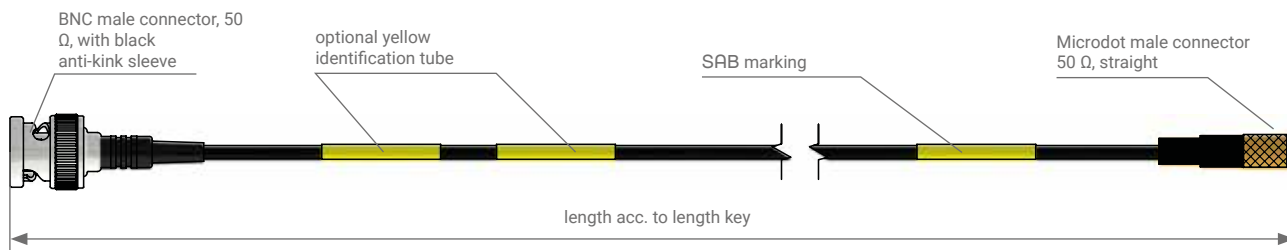
item no.	sheath material	length „L“ [mm]
S3021-3232-00100	TPFK	1000

SAB identification:  
item number, batch number

## 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: Microdot 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

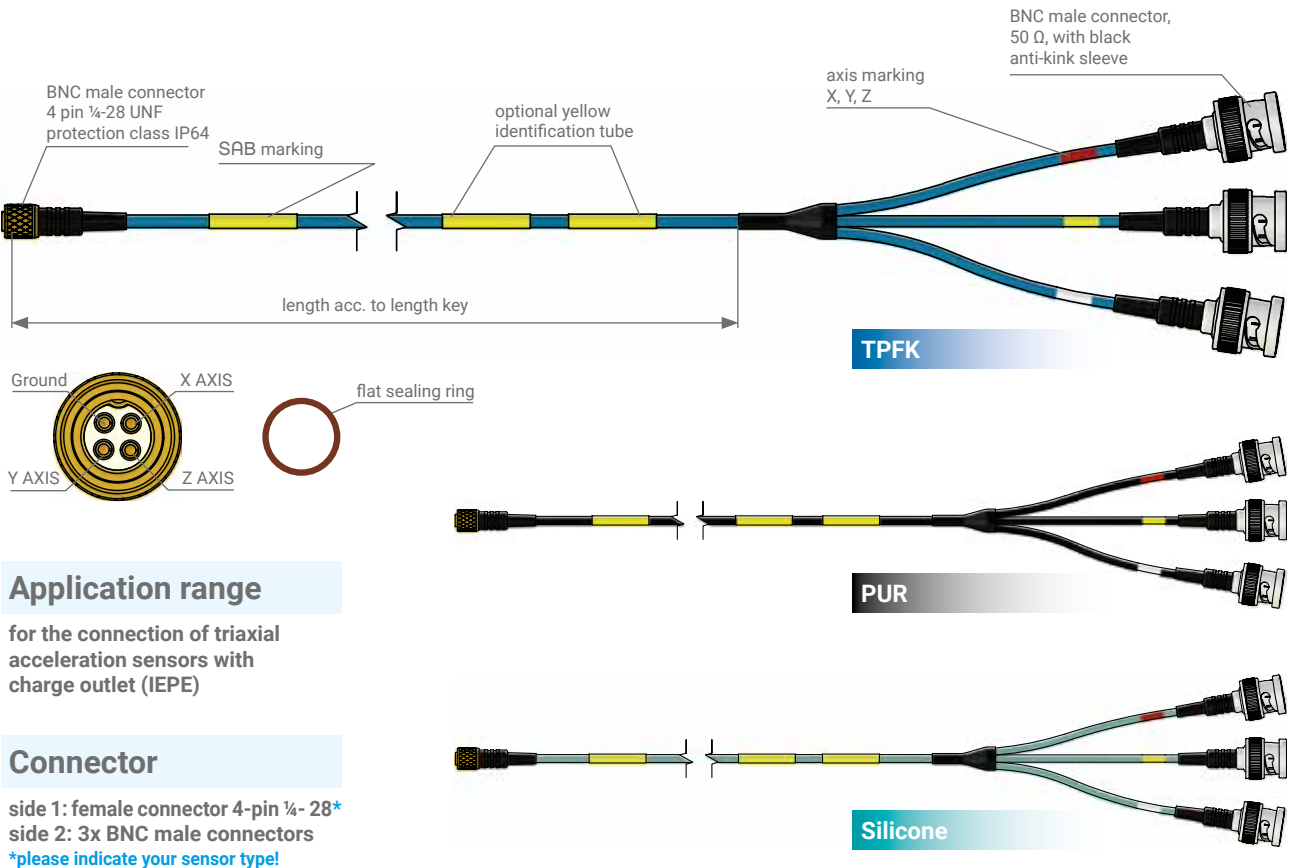
item no.	sheath material	length „L“ [mm]
S3021-3032-00100	TPFK	1000

SAB identification:  
item number, batch number

## 2.1.1 Connection cables for triaxial acceleration sensors

### Connection cable

female connector 4-pole ¼- 28 and 3x BNC male connectors



#### Application range

for the connection of triaxial acceleration sensors with charge outlet (IEPE)

#### Connector

side 1: female connector 4-pin ¼- 28\*

side 2: 3x BNC male connectors

\*please indicate your sensor type!

#### 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]
S3031-1030-00600	TPFK	6000
S3032-1030-00600	PUR	6000
S3033-1030-00600	Silicone	6000

SAB identification:  
item number, batch number

#### Further service aspects

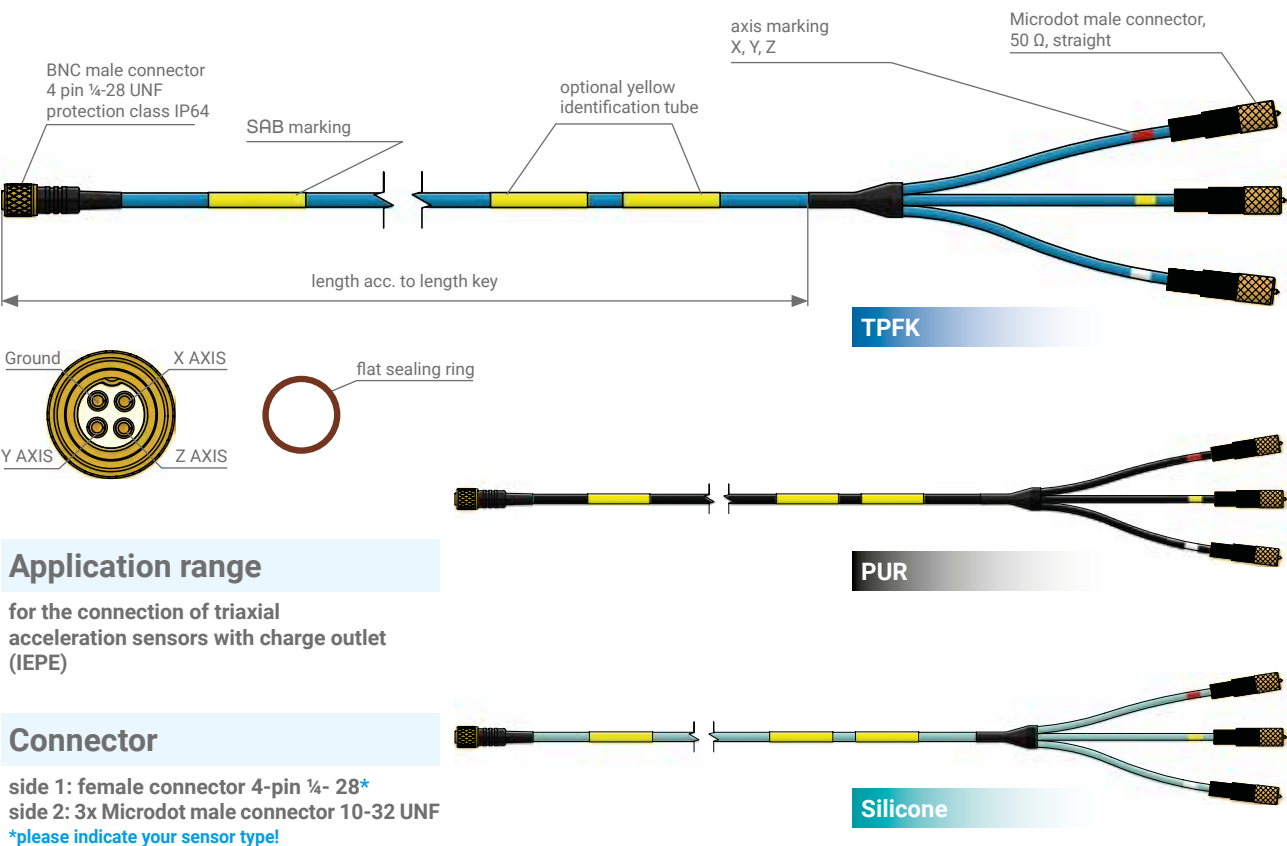


Individual marking by shrinkable sleeve as for example material number or barcode

## 2.1.2 Connection cables for triaxial acceleration sensors

### Connection cable

female connector 4-pole ¼- 28 and 3x Microdot male connector 10-32



#### Application range

for the connection of triaxial  
acceleration sensors with charge outlet  
(IEPE)

#### Connector

side 1: female connector 4-pin ¼- 28\*  
side 2: 3x Microdot male connector 10-32 UNF  
\*please indicate your sensor type!

#### 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

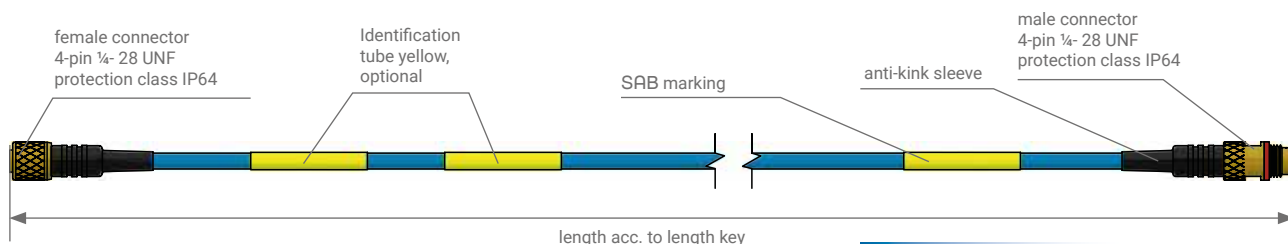


Individual marking by shrinkable  
sleeve as for example material  
number or barcode

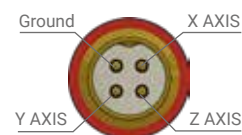
## 2.1.3 Connection cables for triaxial acceleration sensors

### Extension cable

female connector 4-pole ¼- 28 and male connector 4-pin ¼- 28



TPFK



PUR

### Application range

for the extension of a triaxial acceleration sensor cable with ¼-28 UNF female connector

### Connector

side 1: female connector 4-pin ¼- 28\*  
side 2: male connector 4-pin ¼-28 UNF  
\*please indicate your sensor type!



Silicone

### 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

SAB identification:  
item number, batch number

### Further service aspects

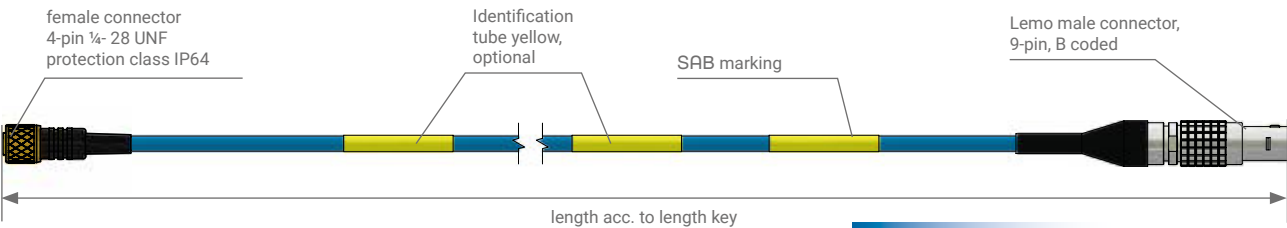


Individual marking by shrinkable sleeve as for example material number or barcode

## 2.1.4 Connection cables for triaxial acceleration sensors

### Connection cable

female connector 4-pin ¼- 28 UNF and Lemo male connector, 9-pin B coded



### Application range

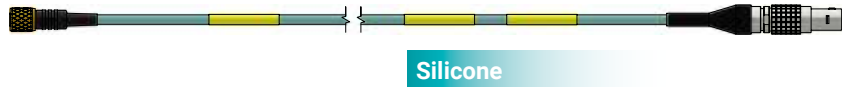
sensor cable for triaxial acceleration sensors with charge outlet (IEPE) and connection to e.g. Müller BBM PAK measuring technique



### Connector

side 1: female connector 4-pin ¼- 28 UNF\*  
side 2: Lemo male connector 9-pin, B coded

\*please indicate your sensor type!



### 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]
S3031-1040-00600	TPFK	6000
S3032-1040-00600	PUR	6000
S3033-1040-00600	Silicone	6000

SAB identification:  
item number, batch number

### Further service aspects

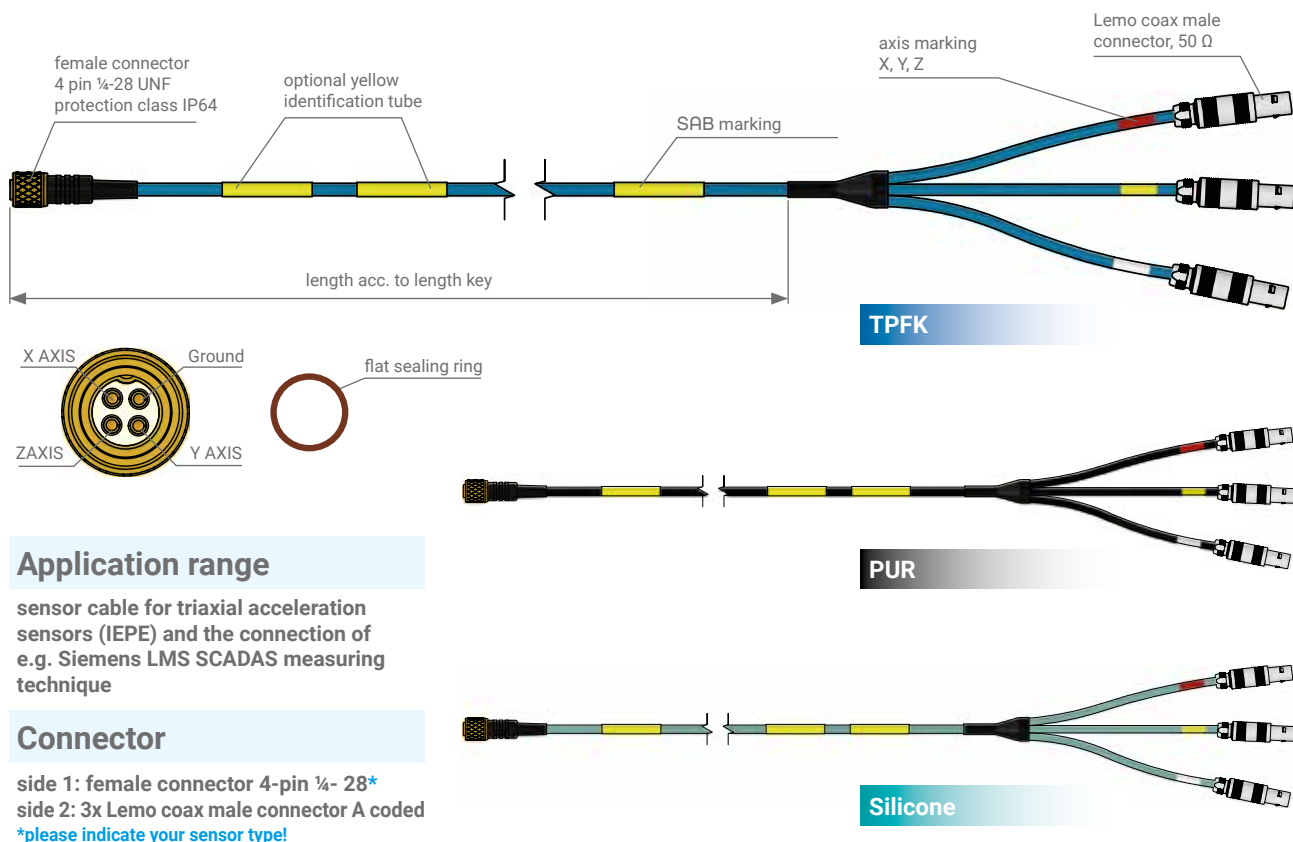


Individual marking by shrinkable sleeve as for example material number or barcode

## 2.1.5 Connection cables for triaxial acceleration sensors

### Connection cable

female connector 4-pin ¼- 28 and 3x Lemo coax male connector 00



#### Application range

sensor cable for triaxial acceleration sensors (IEPE) and the connection of e.g. Siemens LMS SCADAS measuring technique

#### Connector

side 1: female connector 4-pin ¼- 28\*

side 2: 3x Lemo coax male connector A coded

\*please indicate your sensor type!

#### 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

SAB identification:  
item number, batch number

#### Further service aspects



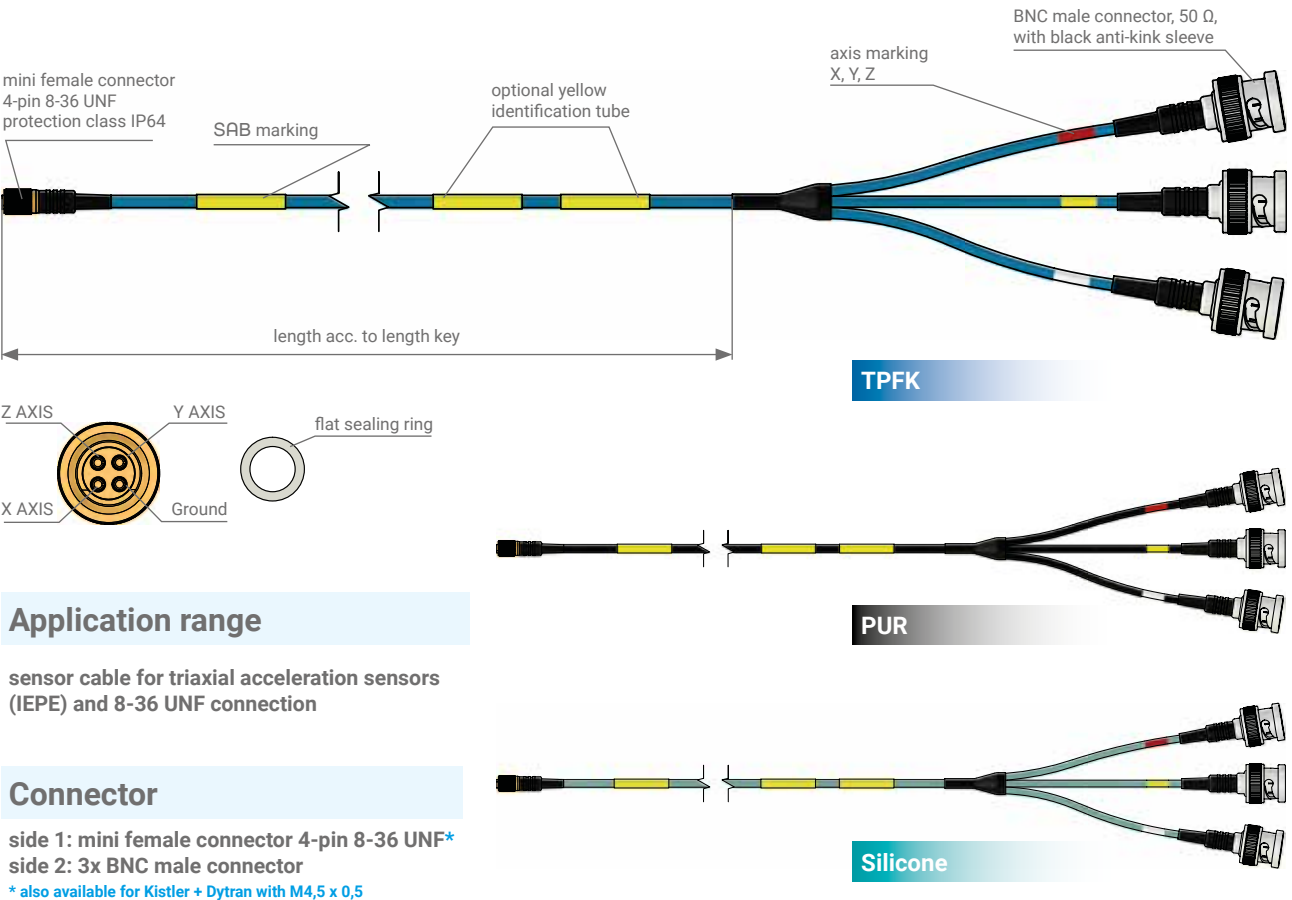
Individual marking by shrinkable sleeve as for example material number or barcode



## 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

	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]
S3031-2030-00600	TPFK	6000
S3032-2030-00600	PUR	6000
S3033-2030-00600	Silicone	6000

### Further service aspects



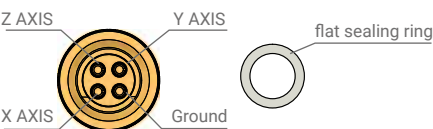
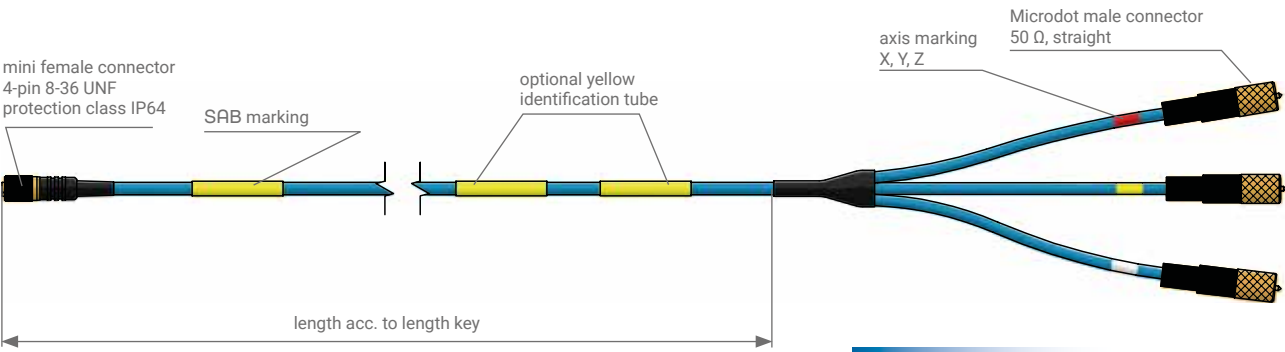
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:  
item number, batch number

## 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



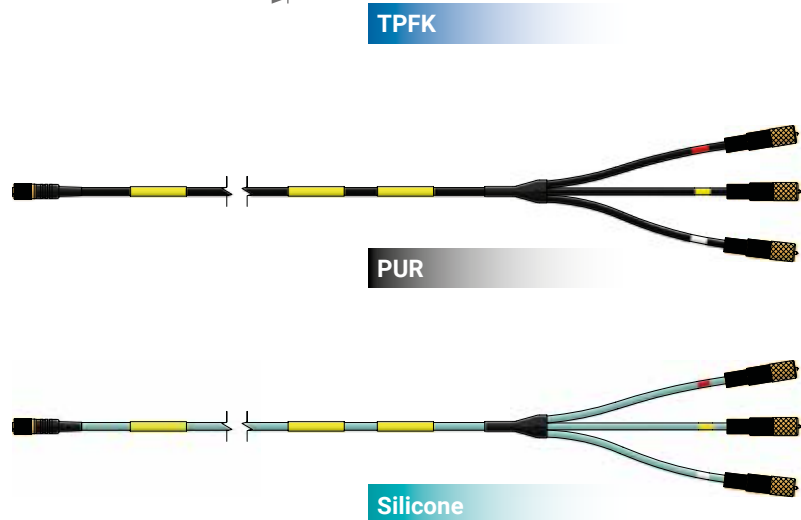
### Application range

sensor cable for triaxial acceleration sensors (IEPE) and 8-36 UNF connection

### Connector

side 1: mini female connector 4-pin 8-36 UNF\*  
side 2: 3x Microdot male connector 10-32 UNF

\* also available for Kistler + Dytran with M4,5 x 0,5



### 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]
S3031-2032-00600	TPFK	6000
S3032-2032-00600	PUR	6000
S3033-2032-00600	Silicone	6000

### Further service aspects



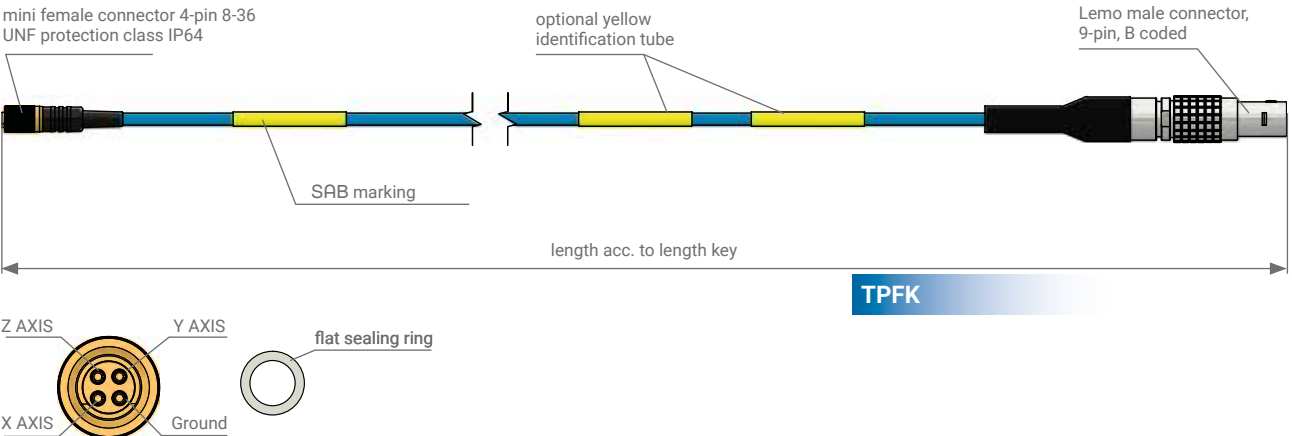
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:  
item number, batch number

## 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



### Application range

sensor connection cable for triaxial acceleration sensors (IEPE) and connection for e.g. MüllerBBM PAK measuring technique

### Connector

side 1: mini female connector 4-pin 8-36 UNF\*  
side 2: Lemo male connector 9-pin, B coded

\* also available for Kistler + Dytran with M4,5 x 0,5

### 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]
S3031-2040-00600	TPFK	6000
S3032-2040-00600	PUR	6000
S3033-2040-00600	Silicone	6000

### Further service aspects



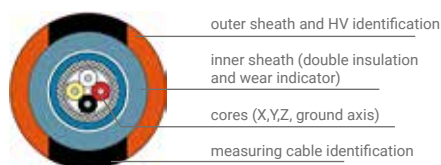
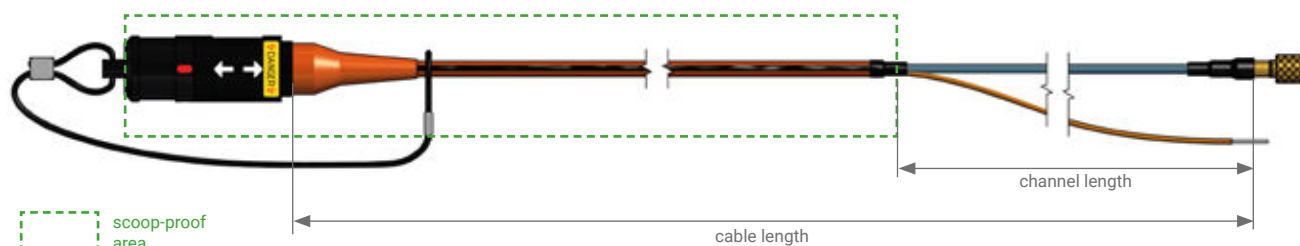
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:  
item number, batch number

## 2.1.9 Connection cables for triaxial acceleration sensors

### HV connection cable

4-pole ¼ -28 UNF female connector and 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](http://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 predection cap, 8  
pole, C coded  
1000 V AC tension proof – IP 67  
plugged

#### Tests



##### Cable test:

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 ¼ -28 UNF for the connection to an triaxial IEPE acceleration sensor (also with 4-pin 8-36 UNF and 4-pin M4,5)
Screen:	bundle led out and insulated with shrinkable sleeve
temperature range:	bundle channel: -55°C / +250°C

#### Configuration examples

item no.	connection cable length [mm]	single channel length		male connector
		channel 1	ground	
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

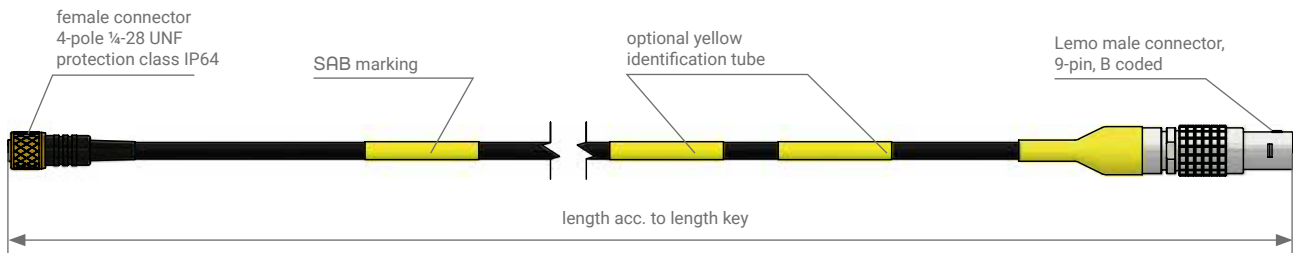
total and channel length can be led out individually.

SAB identification:  
item number, batch number

## 2.2.1 Connection cables for triaxial acceleration sensors

### Connection cable

4-pole ¼-28 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 ¼-28 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)
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

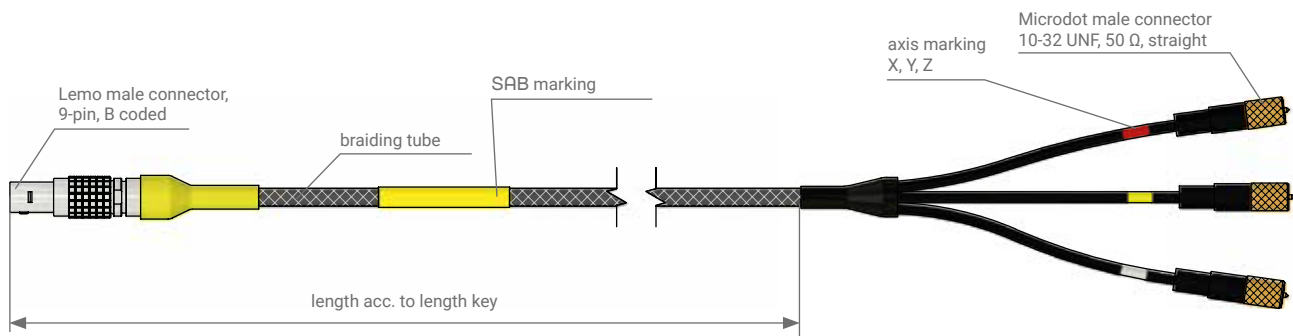
item no.	sheath material	length „L“ [mm]
S3041-1040-00400	TPFK	4000

SAB identification:  
item number, batch number

## 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



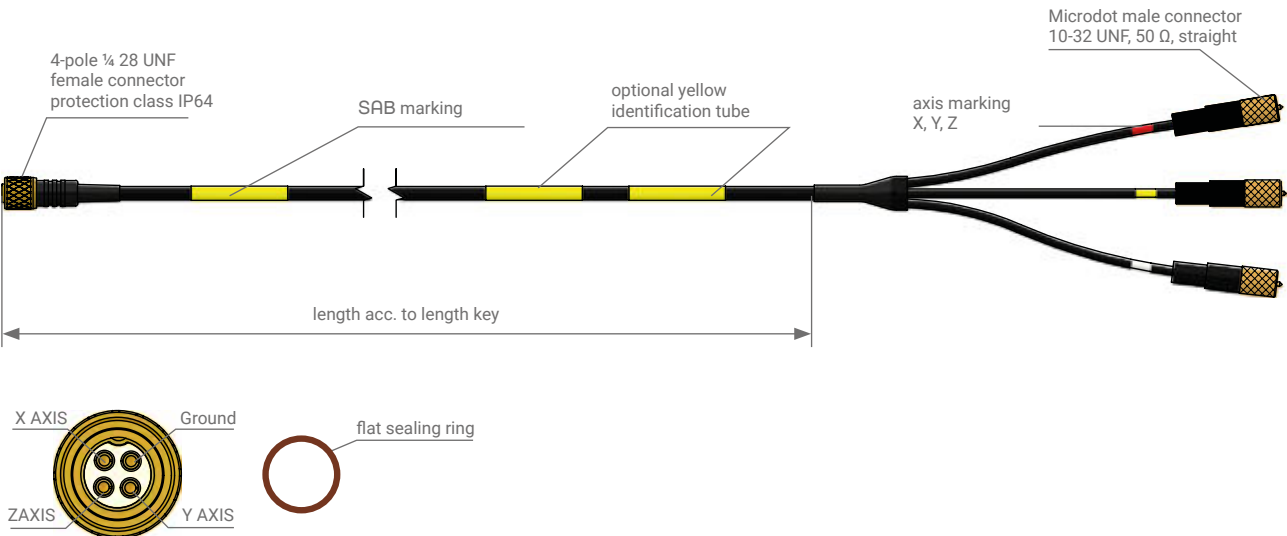
Individual marking by shrinkable sleeve as for example material number or barcode

## 2.2.3 Connection cables for triaxial acceleration sensors

### Connection cable

4-pole ¼ 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 ¼ 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

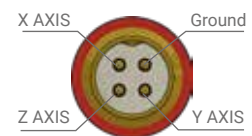
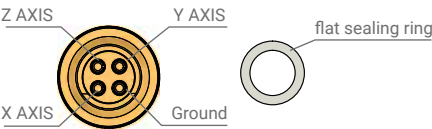
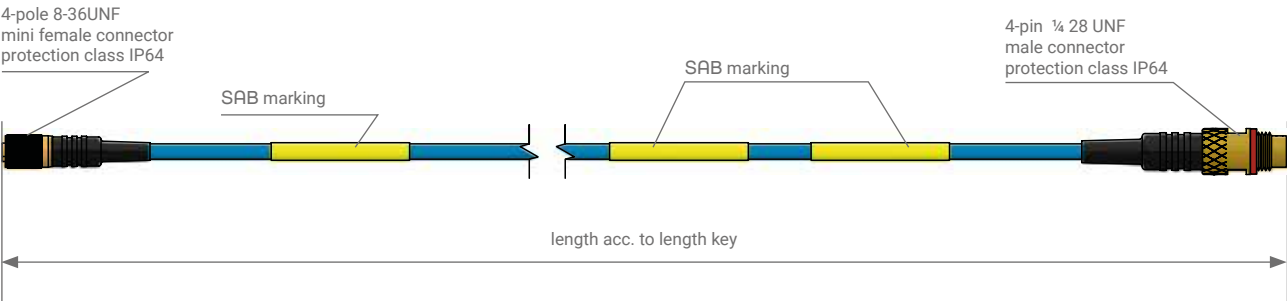
SAB identification:  
item number, batch number



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

#### Adapter cable

4-pole 8-36 mini female connector and 4-pin ¼ 28 male connector



#### Application range

Adapter cable for the adaptation of a mini female acceleration sensor (IEPE) with a 4-pin ¼ 28 sensor cable (for example page 2.1.1)

#### Connector

side 1: 4-pole 8-36UNF mini female connector  
side 2: 4-pin ¼ 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

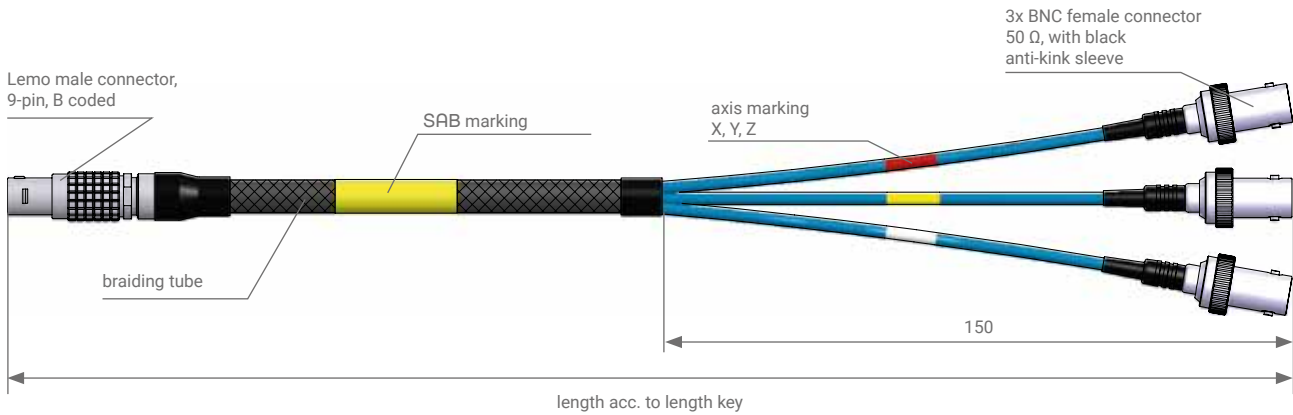


Individual marking by shrinkable sleeve  
as for example internal material number  
or barcode

# 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

SAB identification:  
item number, batch number

## Further service aspects

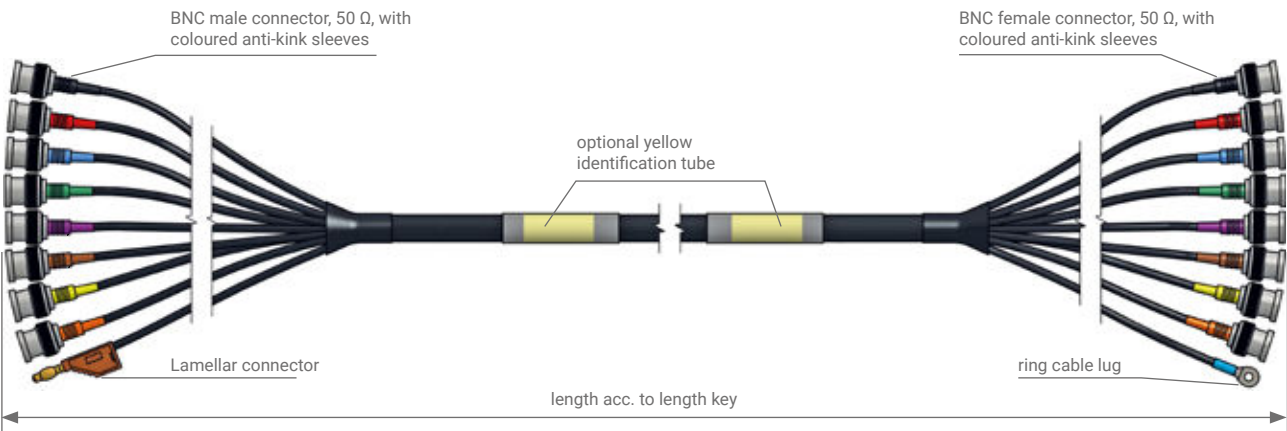


Individual marking by shrinkable sleeve as for example internal material number or barcode

## 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

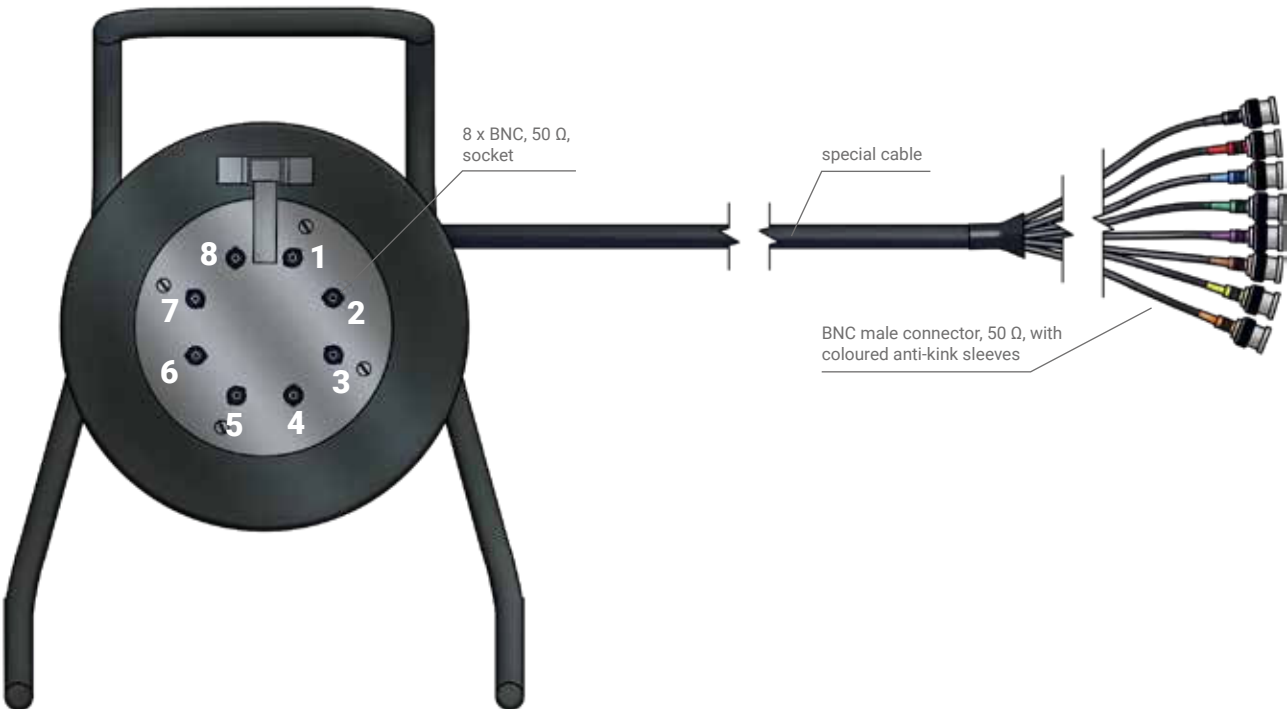
### Further service aspects



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

#### 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

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]
S3600-4078-03000	PUR	30000

SAB identification:  
item number, batch number

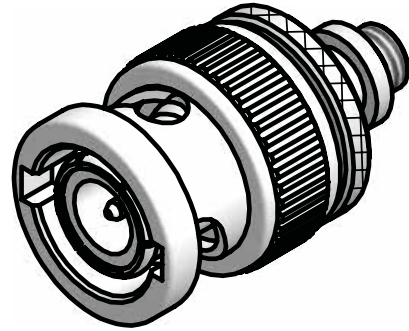
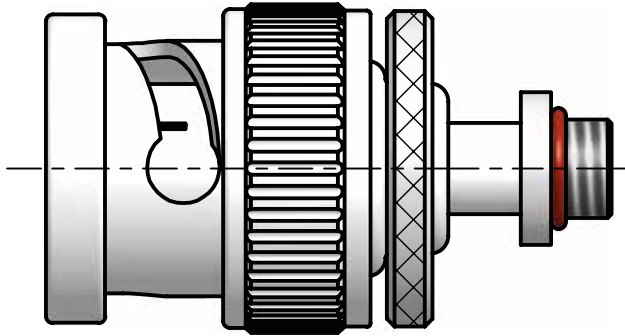
#### Further service aspects



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

### BNC/Microdot adapter

*Further adapter  
types on request.*



#### Application range

adapter / connection element

#### Connector

side 1: BNC male connector

side 2: Microdot female connector 10-32 UNF

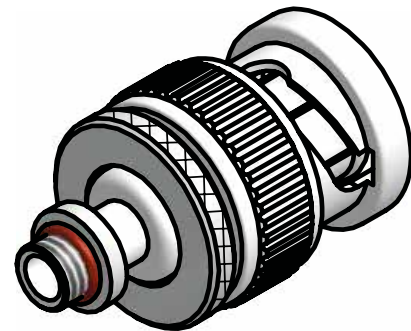
#### Configuration example

item no.

C020-170-999-000-139

SAB identification:

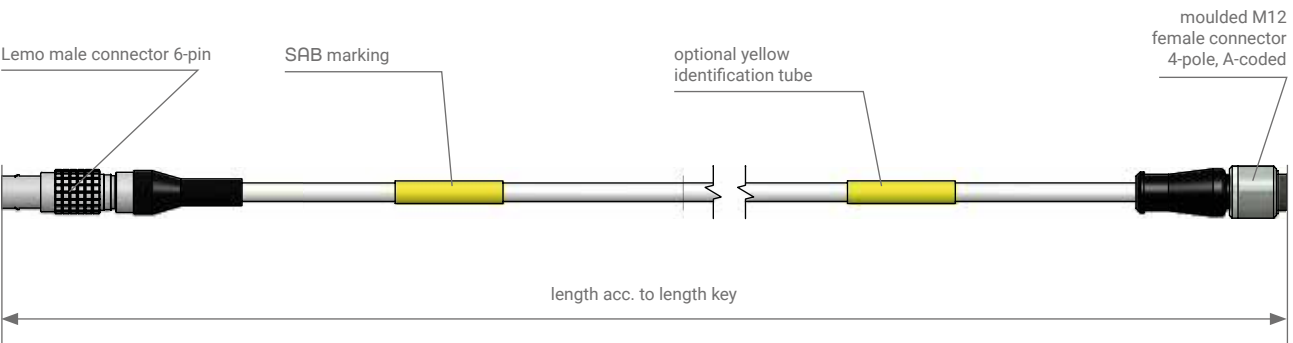
item number, batch number



## 4.1 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

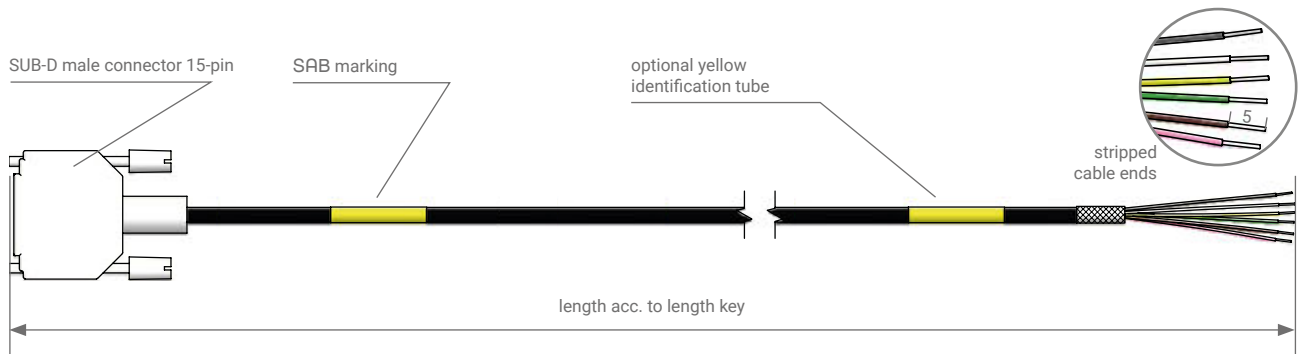


Individual marking by shrinkable sleeve as for example internal material number or barcode

Also possible  
with TEDS

## Connection cable

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



### 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 mm <sup>2</sup> (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

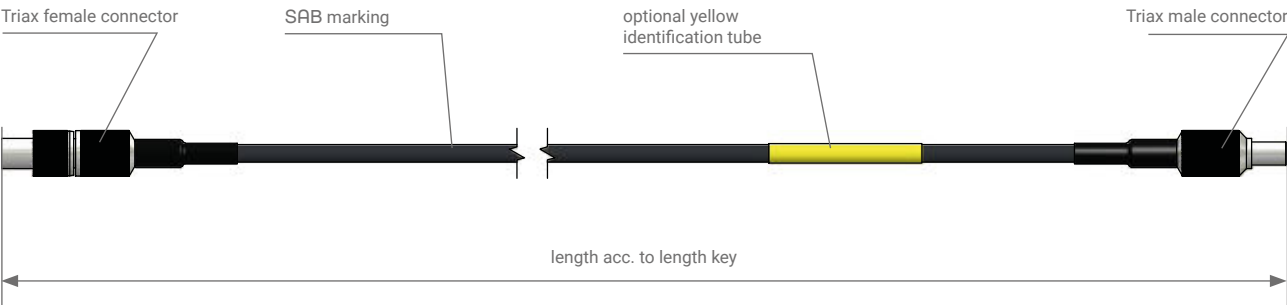


Individual marking by shrinkable sleeve  
as for example internal material number  
or barcode



## 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

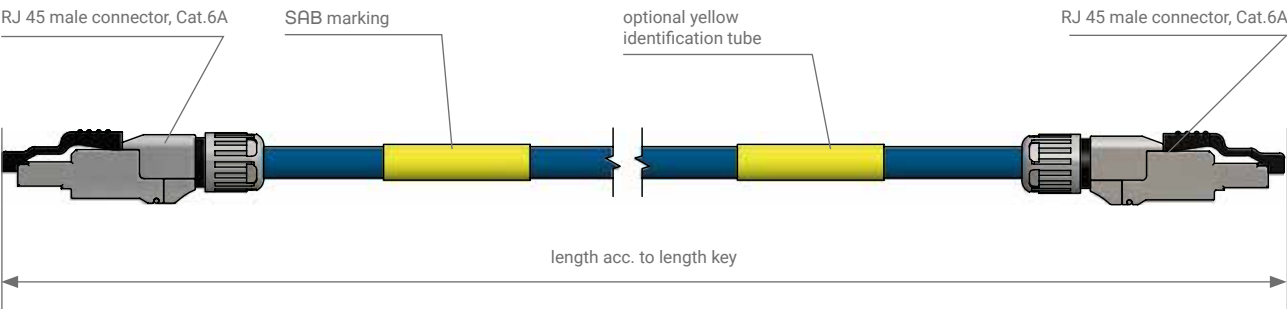
### Further service aspects



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

## 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

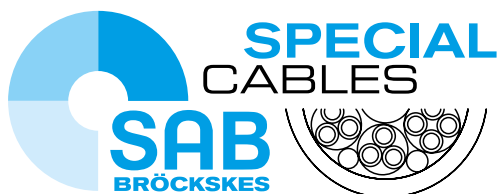
item no.	sheath material	length „L“ [mm]
S1631-4017-00100	PUR	1000

SAB identification:  
item number, batch number

### Further service aspects



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



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