Connection Cables for NVH-Testing

SPECIAL CABLES
SAB BRÖCKSKES

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:

TPFP

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 for 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.

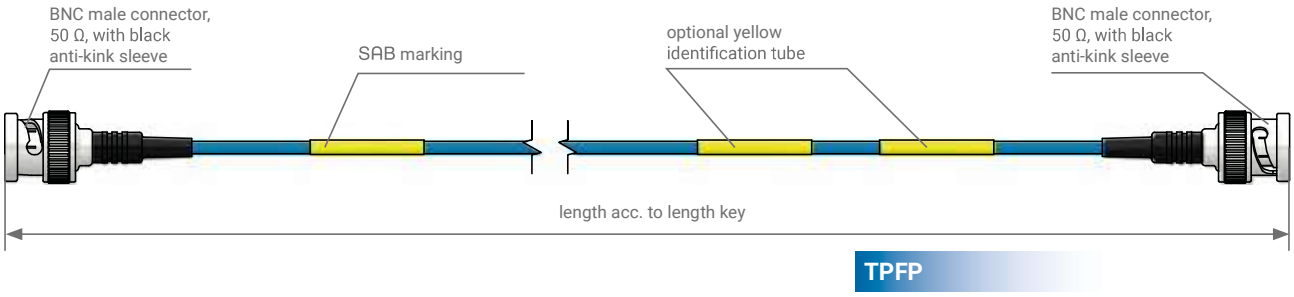
Besides of our excellent cable quality and the multiple special solutions we also offer the following services:

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.

Contents

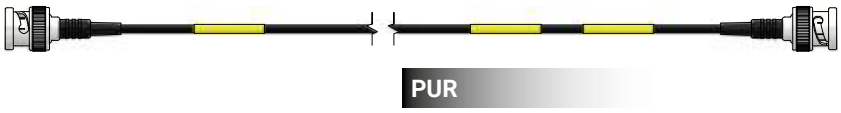
Low noise coax cable

with BNC male connector on both sides



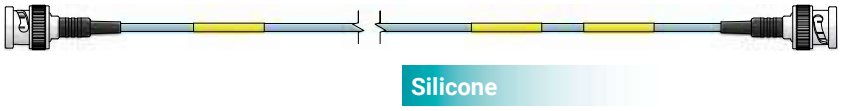
Application range

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



Connector

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



Cable data

	TPFP	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	1000
S3012-3030-00100	PUR	1000
S3013-3030-00100	Silicone	1000

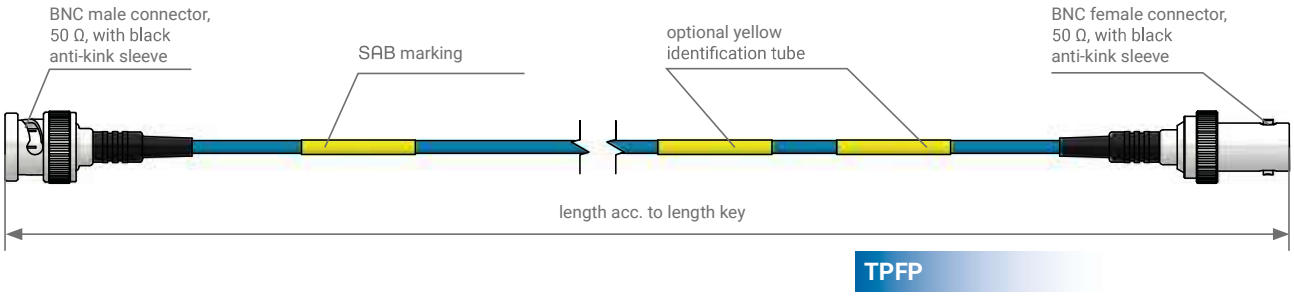
Further service aspects

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

SAB identification:
item number, batch number

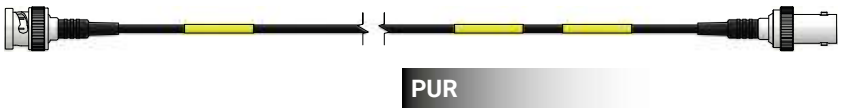
Low noise coax cable

with BNC male and female connector



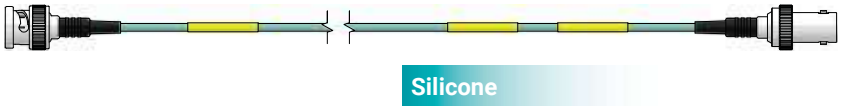
Application range

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



Connector

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



Cable data

	TPFP	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	1000
S3012-3031-00100	PUR	1000
S3013-3031-00100	Silicone	1000

Further service aspects

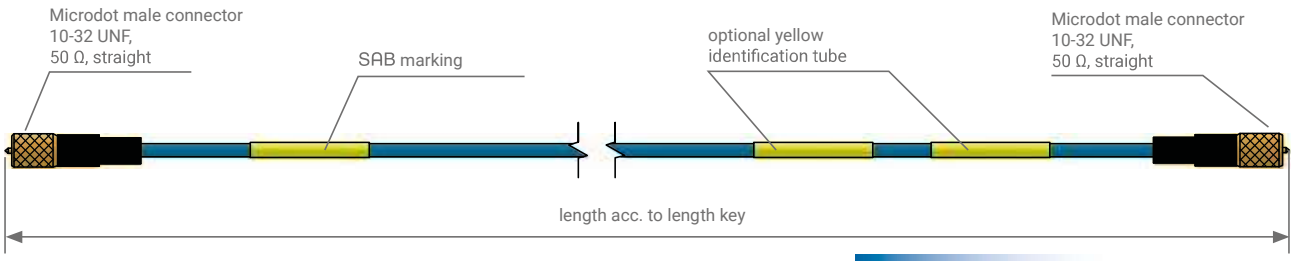
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:
item number, batch number

Low noise coax cable

with Microdot male connector 10-32 UNF on both sides

also possible with Micro-dot female connector.



TPFP

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

	TPFP	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	1000
S3012-3232-00100	PUR	1000
S3013-3232-00100	Silicone	1000

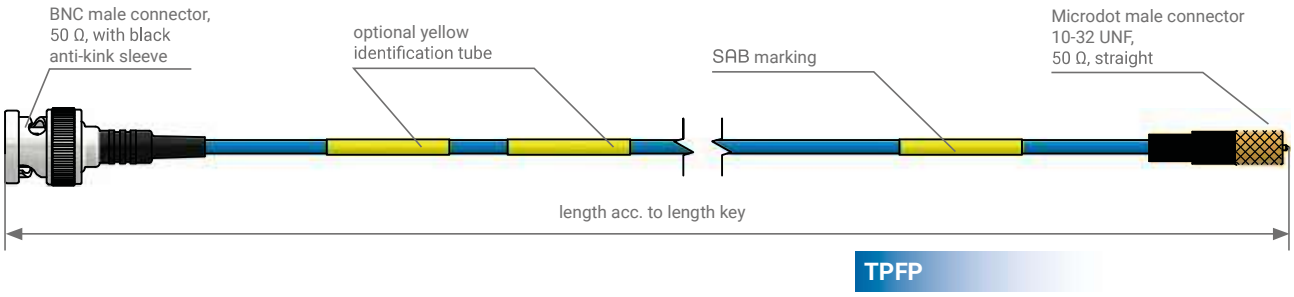
Further service aspects

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

SAB identification:
item number, batch number

Low noise coax cable

with BNC male connector and Microdot male connector 10-32 UNF



TPFP

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

	TPFP	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	1000
S3012-3032-00100	PUR	1000
S3013-3032-00100	Silicone	1000

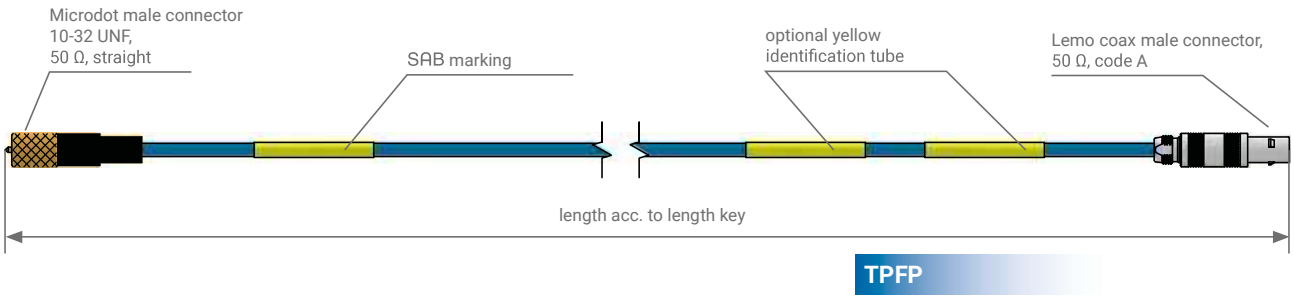
Further service aspects

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

SAB identification:
item number, batch number

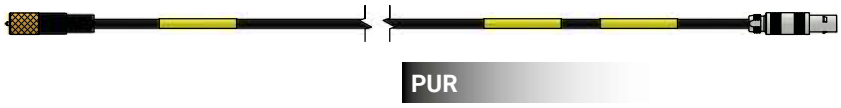
Low noise coax cable

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



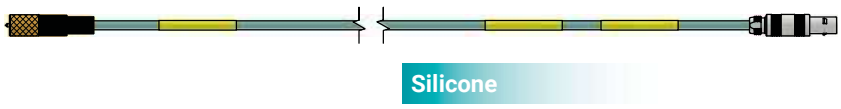
Application range

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, code A



Cable data

	TPFP	PUR	Silicone
construction:	1 x 0,20 mm Ø	1 x 0,20 mm Ø	1 x 0,20 mm Ø
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	1000
S3012-3242-00100	PUR	1000
S3013-3242-00100	Silicone	1000

Further service aspects

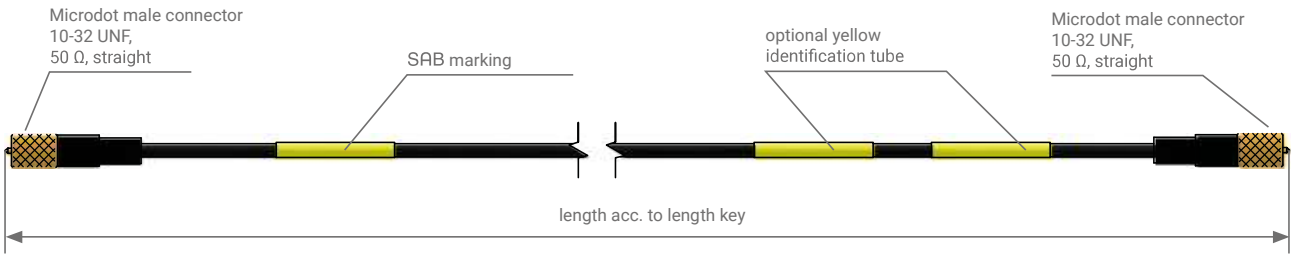
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:
item number, batch number

Sensor charge cable

with Microdot male connector 10-32 UNF on both sides

also possible with Micro-dot 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:	TPFP
outer sheath:	TPFP
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 ✔**

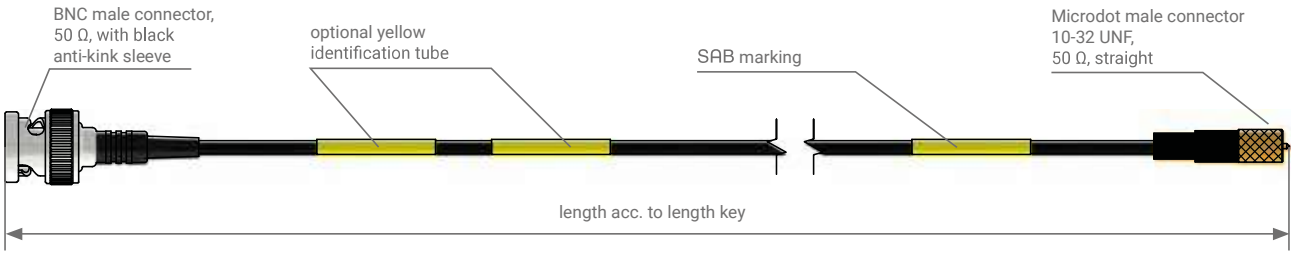
Configuration example

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

SAB identification:
item number, batch number

Sensor charge cable

with BNC male connector and Microdot male connector 10-32 UNF



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:	TPFP
outer sheath:	TPFP
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 ✔**

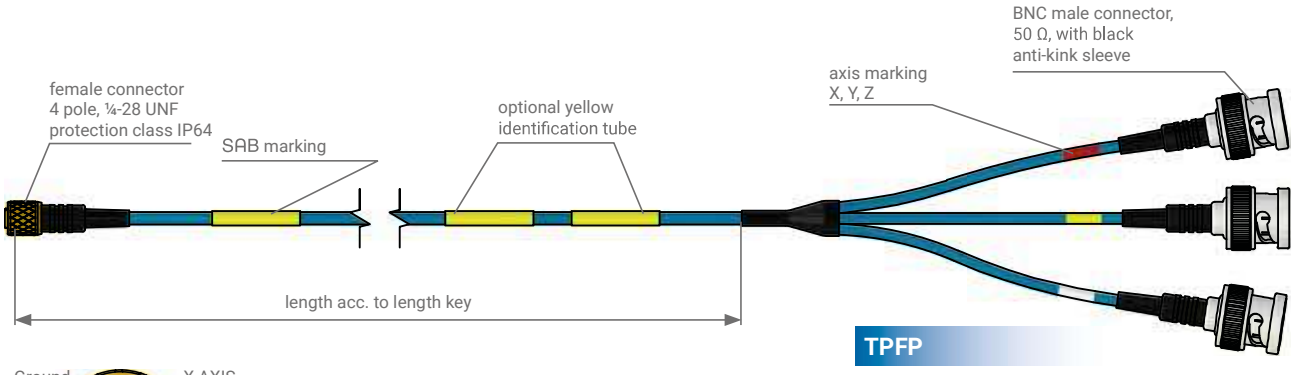
Configuration example

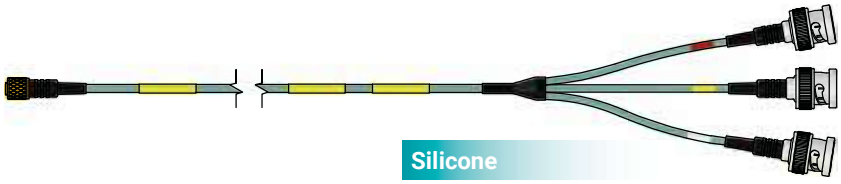
item no.	sheath material	length „L“ [mm]
S3021-3032-00100	TPFP	1000

SAB identification:
item number, batch number

Connection cable

with female connector ¼-28 UNF, 4-pole and 3 x BNC male connector





Application range

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

Connector

side 1: female connector ¼-28 UNF, 4-pole*
side 2: 3 x BNC male connector
***please indicate your sensor type!**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-1030-00600	PUR	6000
S3033-1030-00600	Silicone	6000

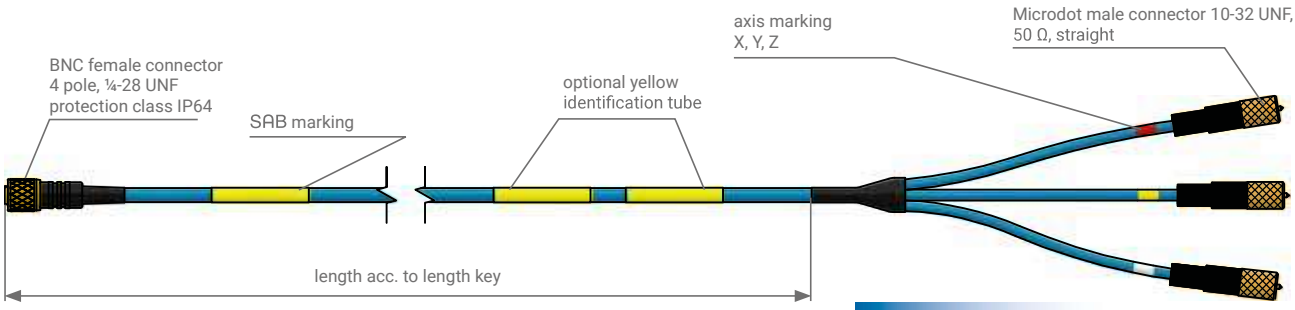
SAB identification:
item number, batch number

Further service aspects

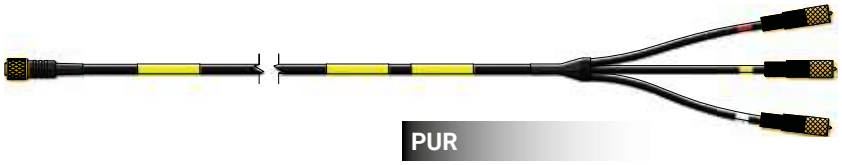
Individual marking by shrinkable sleeve as for example material number or barcode

Connection cable

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



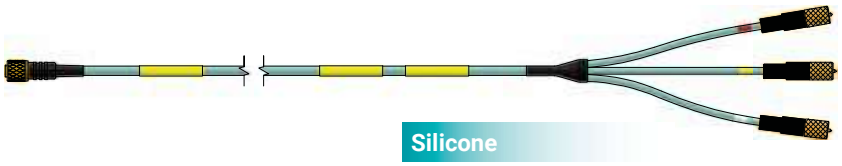
TPFP



PUR

Application range

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



Silicone

Connector

side 1: female connector ¼-28 UNF, 4-pole*
side 2: 3 x Microdot male connector 10-32 UNF

***please indicate your sensor type!**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-1032-00100	PUR	6000
S3033-1032-00100	Silicone	6000

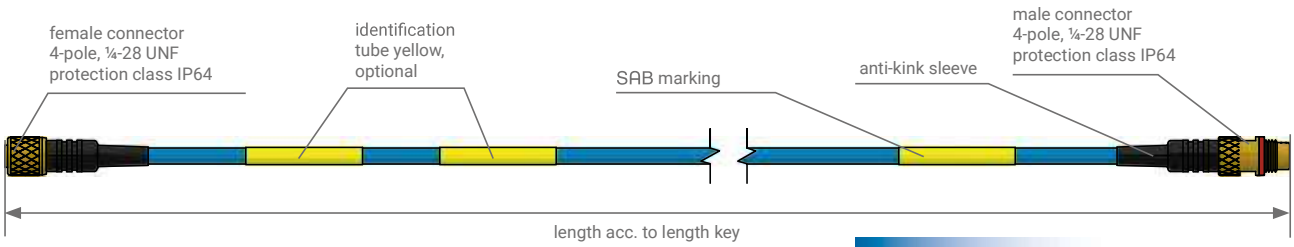
SAB identification:
item number, batch number

Further service aspects

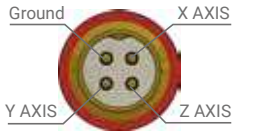
Individual marking by shrinkable sleeve as for example material number or barcode

Extension cable

with female connector ¼-28 UNF, 4-pole and male connector ¼-28 UNF, 4-pole



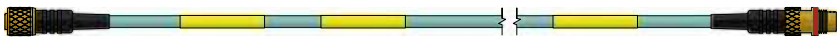
TPFP



PUR

Application range

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



Silicone

Connector

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

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	3000
S3032-1011-00100	PUR	3000
S3033-1011-00100	Silicone	3000

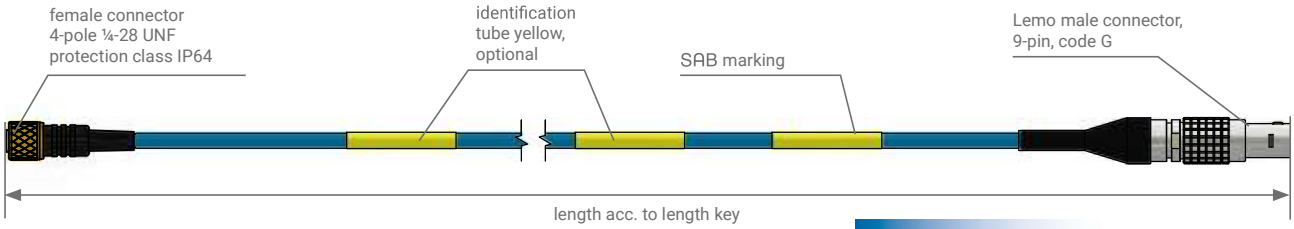
SAB identification:
item number, batch number

Further service aspects

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

Connection cable

with female connector ¼-28 UNF, 4-pole and Lemo male connector, 9-pole, code G



TPFP

PUR

Application range

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

Silicone

Connector

side 1: female connector ¼-28 UNF, 4-pole*
side 2: Lemo male connector 9-pole, code G
***please indicate your sensor type!**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-1040-00600	PUR	6000
S3033-1040-00600	Silicone	6000

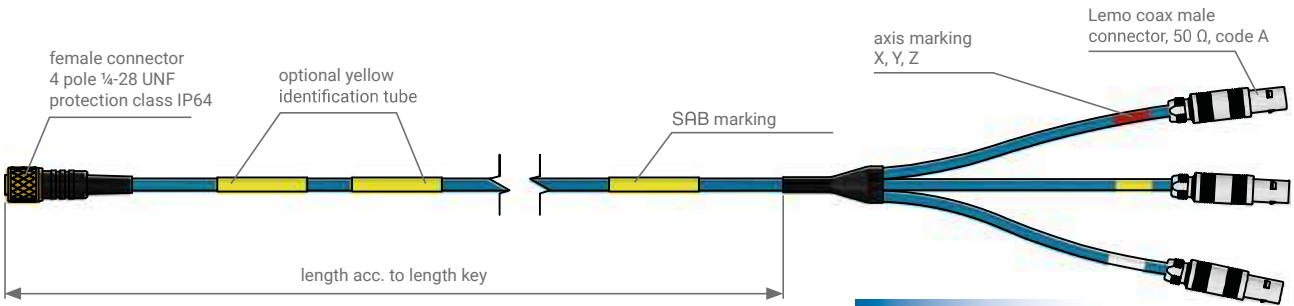
SAB identification:
item number, batch number

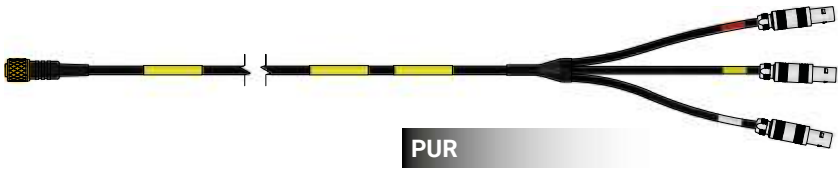
Further service aspects

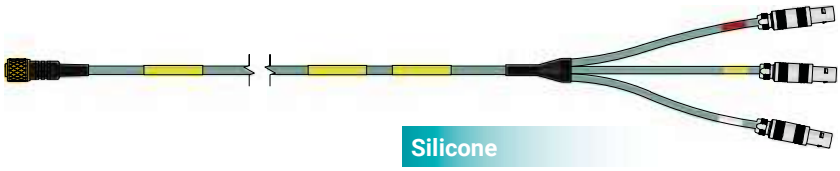
Individual marking by shrinkable sleeve as for example material number or barcode

Connection cable

with female connector ¼-28 UNF, 4-pole and 3 x Lemo coax male connector







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 ¼-28 UNF, 4-pole*
side 2: 3 x Lemo coax male connector, code A

***please indicate your sensor type!**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-1042-00600	PUR	6000
S3033-1042-00600	Silicone	6000

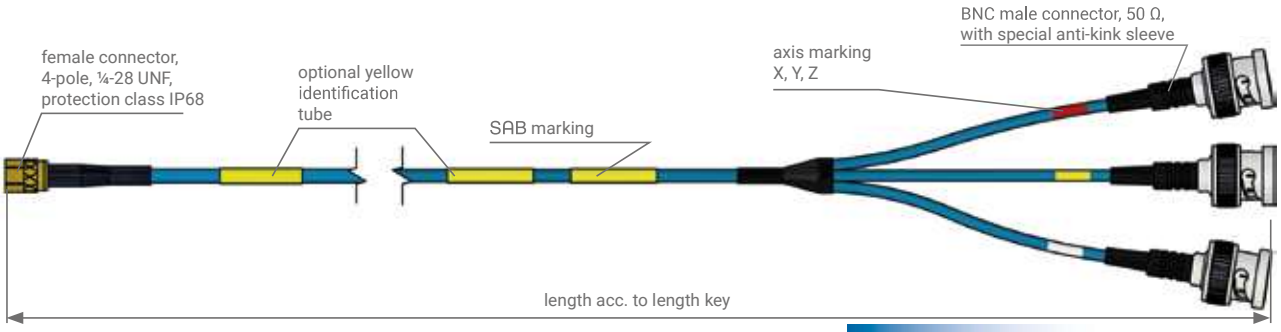
SAB identification:
item number, batch number

Further service aspects

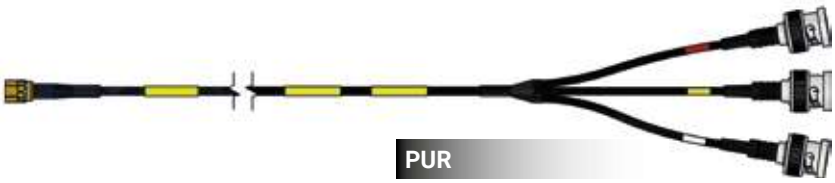
Individual marking by shrinkable sleeve as for example material number or barcode

Connection cable

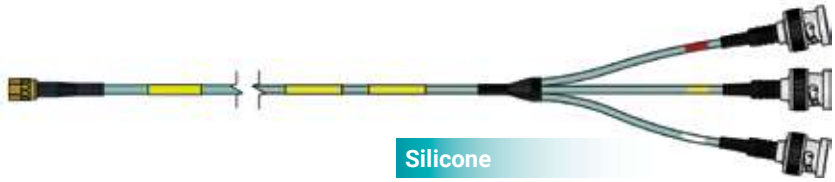
with waterproof female connector ¼-28 UNF IP68, 4-pole and 3 x BNC male connector



TPFP



PUR



Silicone

Application range

connection cable with waterproof sensor connector IP 68 for triaxial acceleration sensors on IEPE Basis

Connector

side 1: 4-pin ¼-28 UNF IP68 female connector*
side 2: 3 x BNC male connector
***please indicate your sensor type!**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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]
S3031-1430-00300	TPFP	3000
S3032-1430-00300	PUR	3000
S3033-1430-00300	Silicone	3000

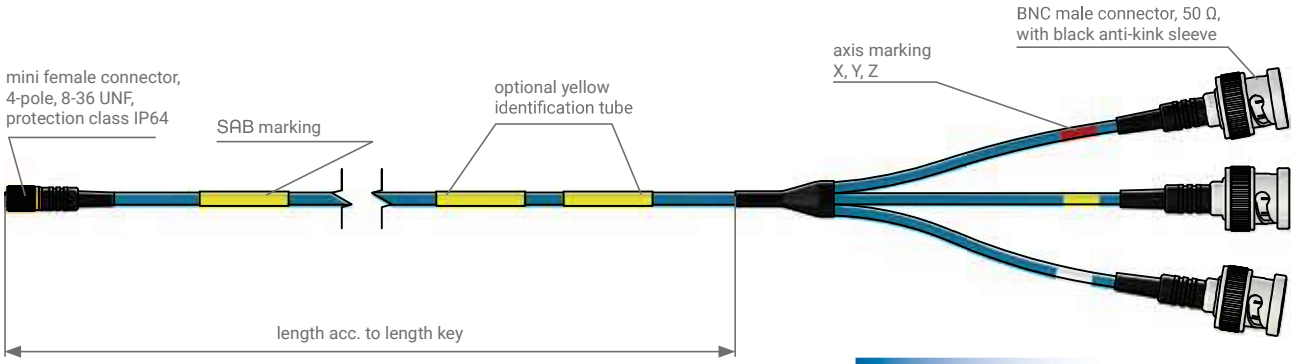
SAB identification:
item number, batch number

Further service aspects

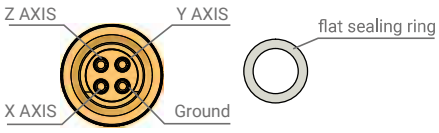
Individual marking by shrinkable sleeve as for example material number or barcode

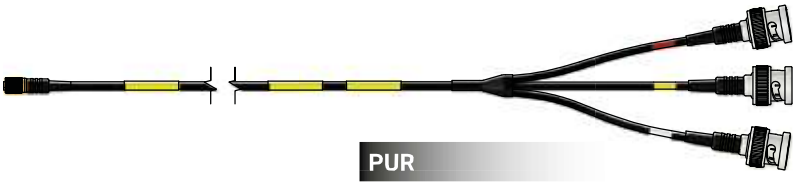
Connection cable

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

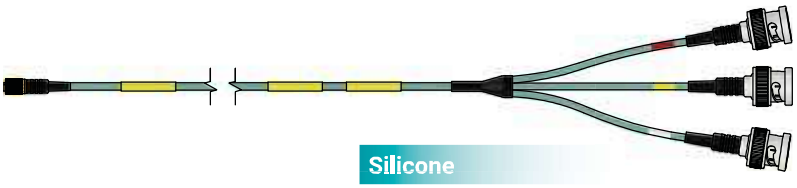


TPFP





PUR



Silicone

Application range

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

Connector

side 1: mmini female connector 8-36 UNF, 4-pole*
side 2: 3 x BNC male connector
*** also available for Kistler + Dytran with M4,5 x 0,5**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-2030-00600	PUR	6000
S3033-2030-00600	Silicone	6000

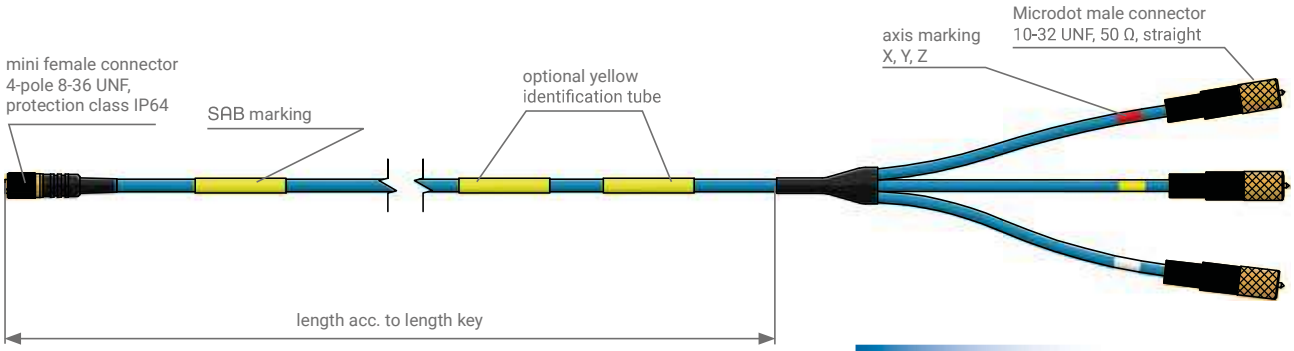
Further service aspects

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

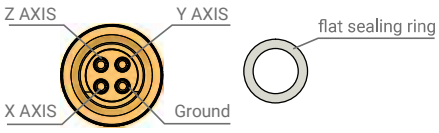
SAB identification:
item number, batch number

Connection cable

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



TPFP



PUR

Silicone

Application range

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

Connector

side 1: mini female connector 8-36 UNF, 4-pole*
side 2: 3 x Microdot male connector 10-32 UNF
*** also available for Kistler + Dytran with M4,5 x 0,5**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-2032-00600	PUR	6000
S3033-2032-00600	Silicone	6000

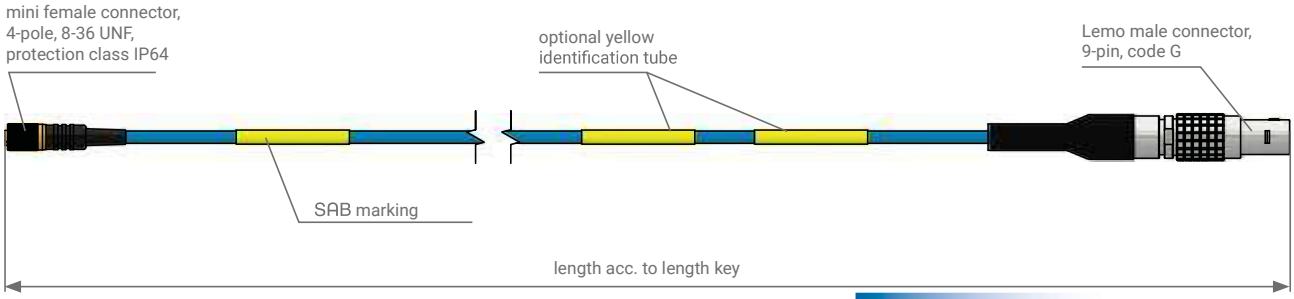
Further service aspects

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

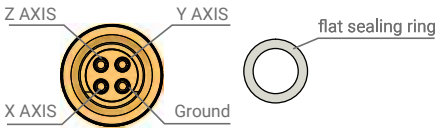
SAB identification:
item number, batch number

Connection cable

with mini female connector 8-36 UNF, 4-pole and Lemo male connector, 9-pole, code G



TPFP



PUR

Silicone

Application range

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

Connector

side 1: mini female connector 8-36 UNF, 4-pole*
side 2: Lemo male connector, 9-pole, code G
*** also available for Kistler + Dytran with M4,5 x 0,5**

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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	TPFP	6000
S3032-2040-00600	PUR	6000
S3033-2040-00600	Silicone	6000

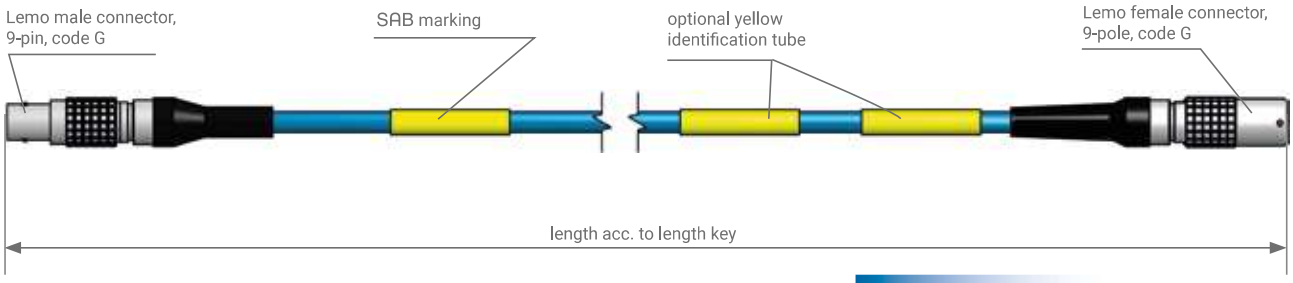
Further service aspects

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

SAB identification:
item number, batch number

Extension cable

with Lemo male connector and female connector, 9-pole, code G



TPFP

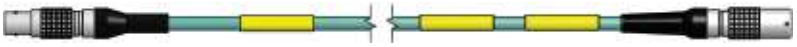
Application range

for the extension of a sensor connection cable with Lemo connector 9-pole code G

PUR

Connector

side 1: Lemo male connector, 9-pin, code G
side 2: Lemo female connector, 9-pole, code G



Silicone

Cable data

	TPFP	PUR	Silicone
construction:	4 x AWG 34	4 x AWG 34	4 x AWG 30
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	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]
S3031-4041-00300	TPFP	3000
S3032-4041-00300	PUR	3000
S3033-4041-00300	Silicone	3000

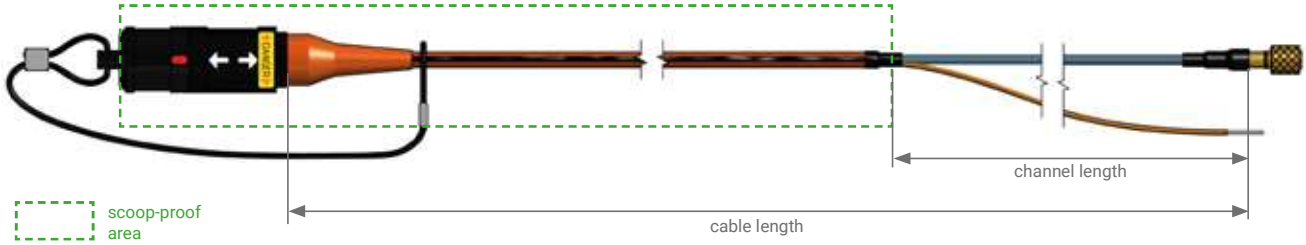
Further service aspects

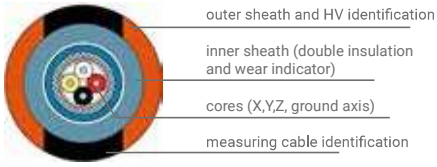
Individual marking by shrinkable sleeve as for example material number or barcode

SAB identification:
item number, batch number

HV connection cable

with female connector ¼-28 UNF, 4-pole and Lemo REDEL male 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 IEPE3 FL 100 measuring module

Connector

Lemo Redel male connector with orange kink predection sleeve and black protecting cap, 8 pole, code C
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

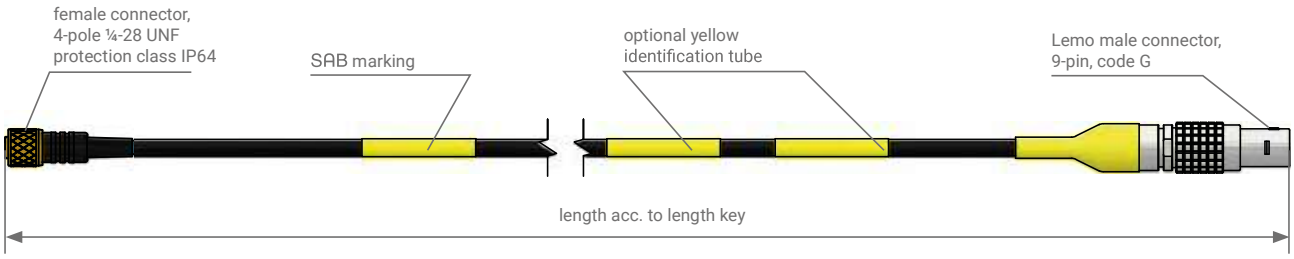
item no.	connection cable length [mm]	single channel length		male connector
		channel 1	ground	
T642-062-666	3000	100 mm	200 mm	4-pin ¼-28 UNF
T642-062-794	6000	100 mm	200 mm	4-pin ¼-28 UNF
T642-062-635	3000	100 mm	200 mm	4-pin 8-36 UNF

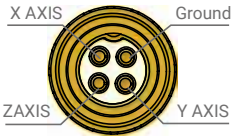
total and channel length can be led out individually.

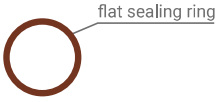
SAB identification:
item number, batch number

Connection cable

with female connector ¼-28 UNF, 4-pole and Lemo male connector, 9-pole, code G







Application range

sensor connection cable for triaxial acceleration sensors with charge outlet and for example Müller BBM PAK measurement systems

Connector

side 1: female connector ¼-28 UNF, 4-pole*
side 2: Lemo male connector, 9-pole, code G
***please indicate your sensor type!**

Further service aspects

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

Cable data

construction:	3 x (1 x 0,20 mm Ø)
insulation:	TPFP
outer sheath:	TPFP
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 ✔**

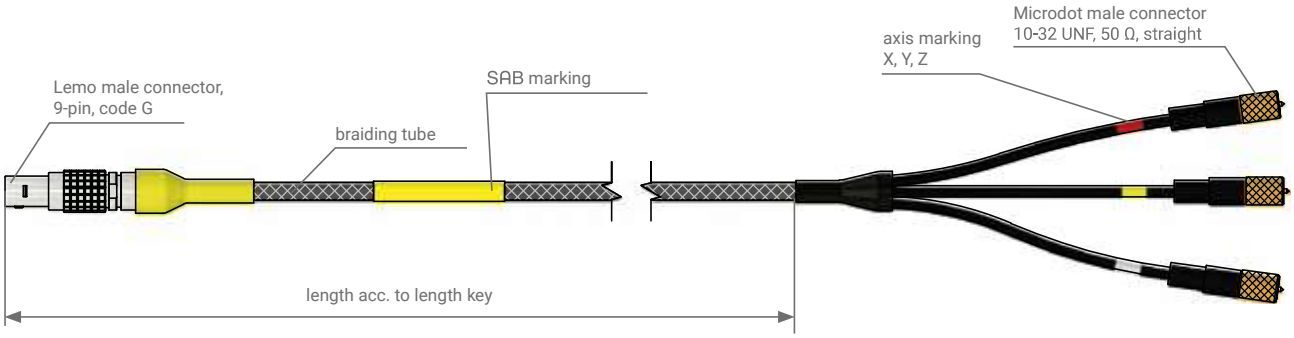
Configuration example

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

SAB identification:
item number, batch number

Connection cable

with Lemo male connector, 9-pole, code G and 3 x Microdot male connector 10-32 UNF



Application range

sensor connection cable for triaxial acceleration sensors with charge outlet and for example Müller BBM PAK measurement systems

Connector

side 1: Lemo male connector, 9-pole, code G
side 2: 3 x Microdot male connector 10-32 UNF

Cable data

construction:	3 x (1 x 0,20 mm Ø) braiding tube
insulation:	TPFP
outer sheath:	TPFP
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	TPFP	1000

SAB identification:
item number, batch number

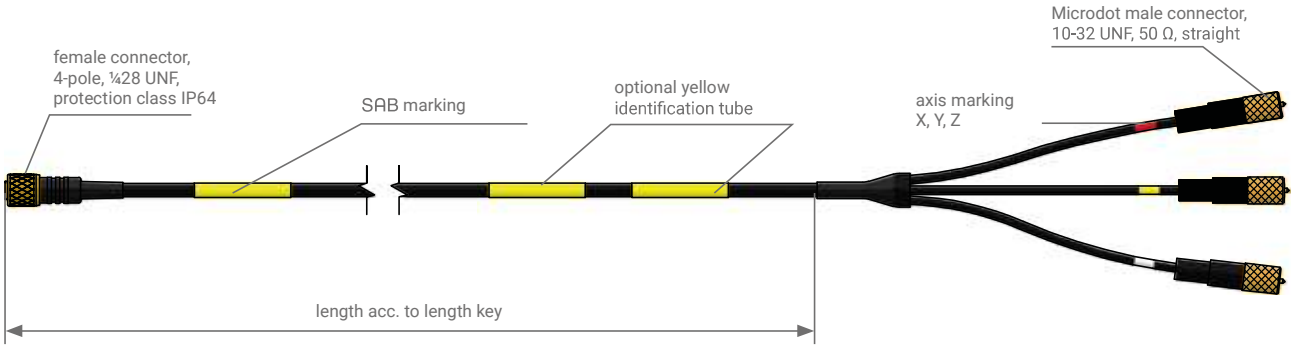
Further service aspects

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

Connection cable

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

also possible with Micro-dot female connector.



Application range

sensor connection cable for triaxial acceleration sensors with charge outlet

Connector

side 1: female connector ¼-28 UNF, 4-pole*

side 2: 3 x 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:	3 x (1 x 0,20 mm Ø)
insulation:	TPFP
outer sheath:	TPFP
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 ✔**

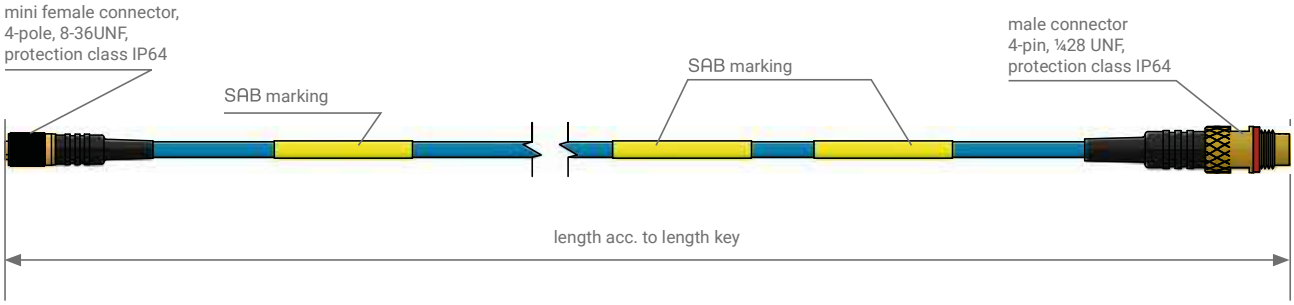
Configuration example

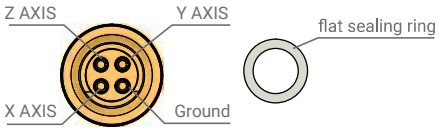
item no.	sheath material	length „L“ [mm]
S3041-1032-00400	TPFP	4000

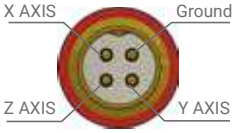
SAB identification:
item number, batch number

Adapter cable

with mini female connector 8-36 UNF, 4-pole and male connector ¼-28 UNF, 4-pole







Application range

Adapter cable for the adaptation of a mini female acceleration sensor (IEPE) with a 4-pin ¼28 sensor cable (for example page 2.1.1)

Connector

side 1: mini female connector 8-36 UNF, 4-pole
side 2: male connector ¼-28 UNF, 4-pole

Cable data

construction:	4 x AWG 34
insulation:	TPFP
outer sheath:	TPFP
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	TPFP	300

SAB identification:
item number, batch number

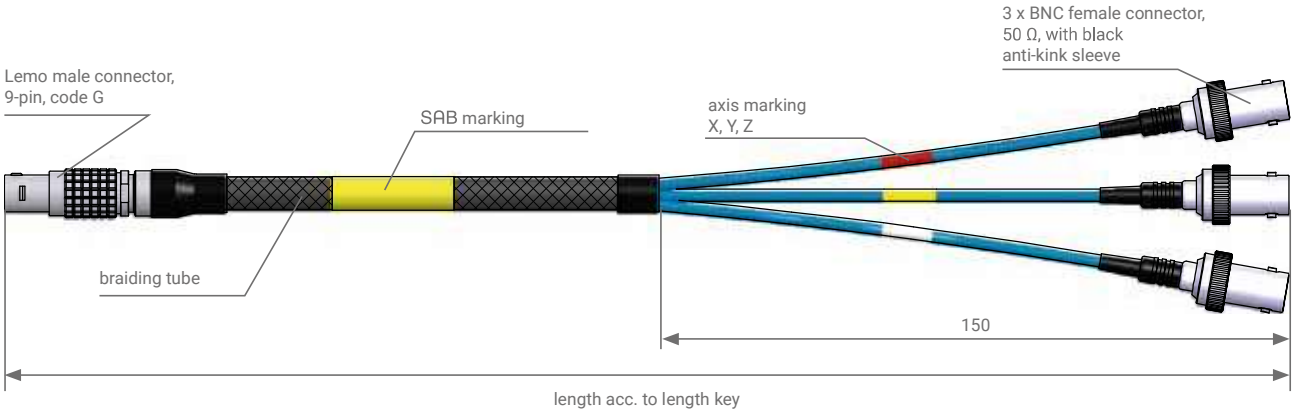
Further service aspects

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

Adapter cable

with Lemo male connector, 9-pole, code G and 3 x BNC female connector

also possible with BNC male connector



Application range

Adapter cable for the adaptation of a sensor cable with 3 x BNC male connector to for example Müller BBM PAK measurement systems

Connector

side 1: Lemo male connector, 9-pole, code G
side 2: 3 x BNC female connector

Cable data

construction:	3 x (1 x 0,20 mm Ø) braiding tube
insulation:	TPFP
outer sheath:	TPFP
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	TPFP	500

Further service aspects

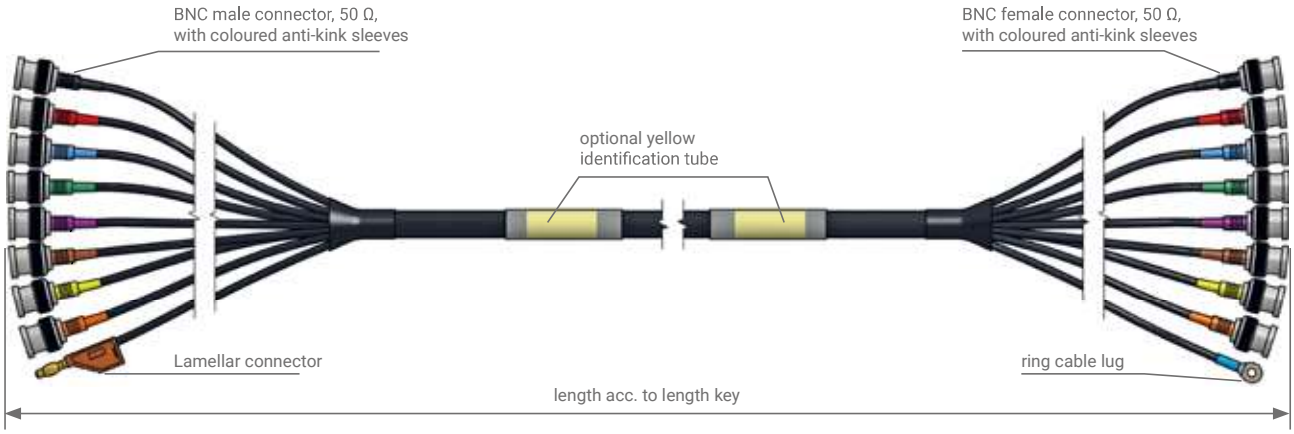
Individual marking by shrinkable sleeve as for example internal material number or barcode

SAB identification:
item number, batch number

8-fold coax collection cable

with 8 x BNC male connector and 8 x 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: 8 x BNC male connector + lamellar connector

side 2: 8 x BNC female connector + ring cable lug

Cable data

construction:	8 x AWG 26
insulation:	TPFP
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

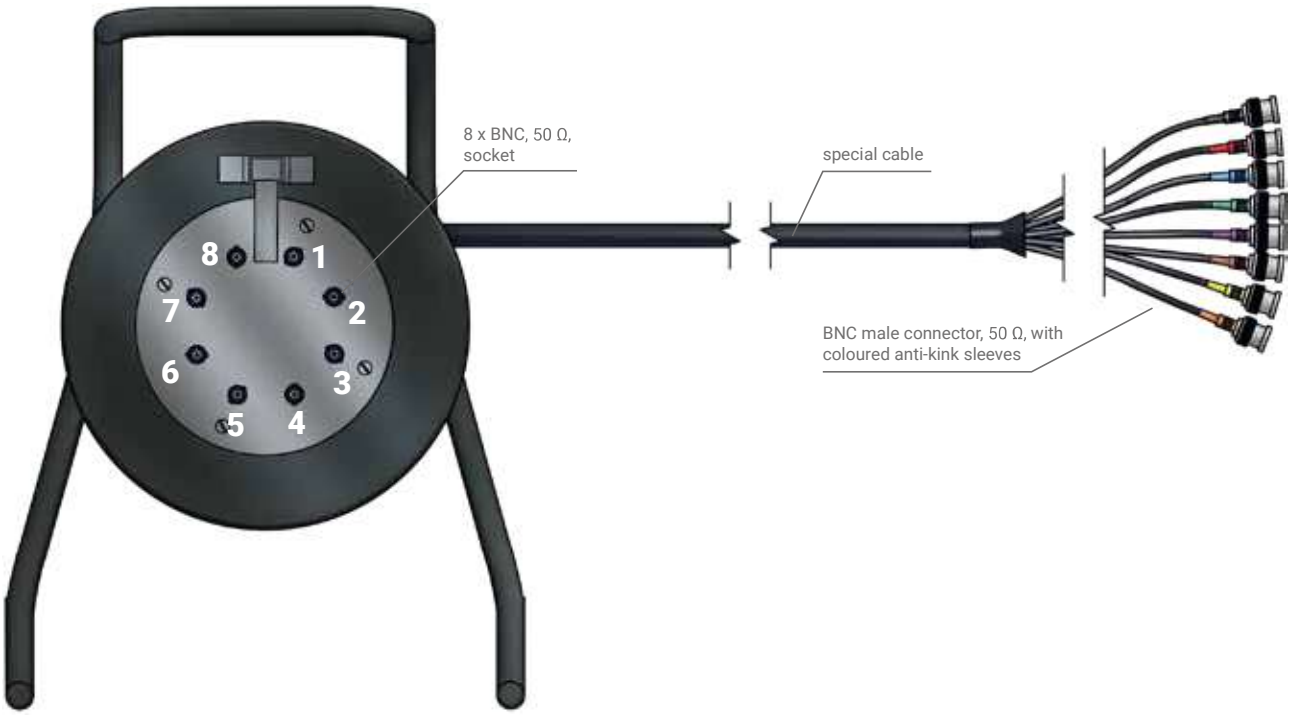
SAB identification:
item number, batch number

Further service aspects

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

coax cable drum

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



Application range

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

Connector

side 1: cable drum
with 8 x BNC installation sockets

side 2: 8 x BNC male connector

Cable data

construction:	8 x AWG 26
insulation:	TPFP
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

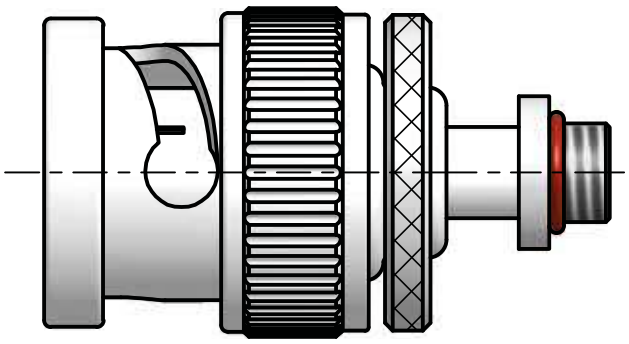
SAB identification:
item number, batch number

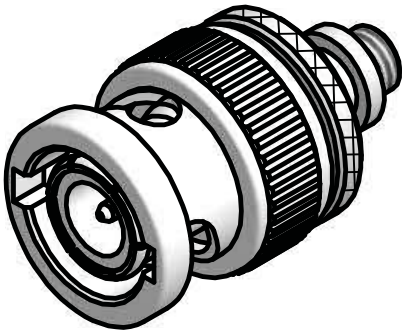
Further service aspects

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

BNC/Microdot adapter

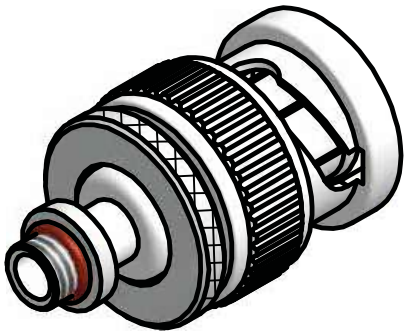
Further adapter types on request.





Application range

adapter / connection element
Microdot to BNC



Connector

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

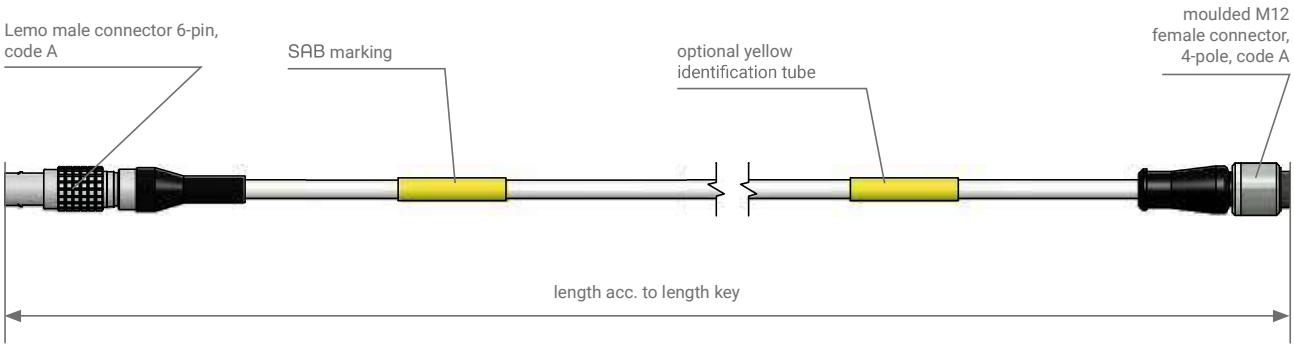
Configuration example

item no.
C020-170-999-000-139

SAB identification:
item number, batch number

Connection cable

with Lemo male connector, 6-pole and 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-pole, code A
side 2: moulded M12 female connector, 4-pole, code A

Cable data

construction:	4 x AWG 22
insulation:	TPFP
outer sheath:	TPFP
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	TPFP	3000

SAB identification:
item number, batch number

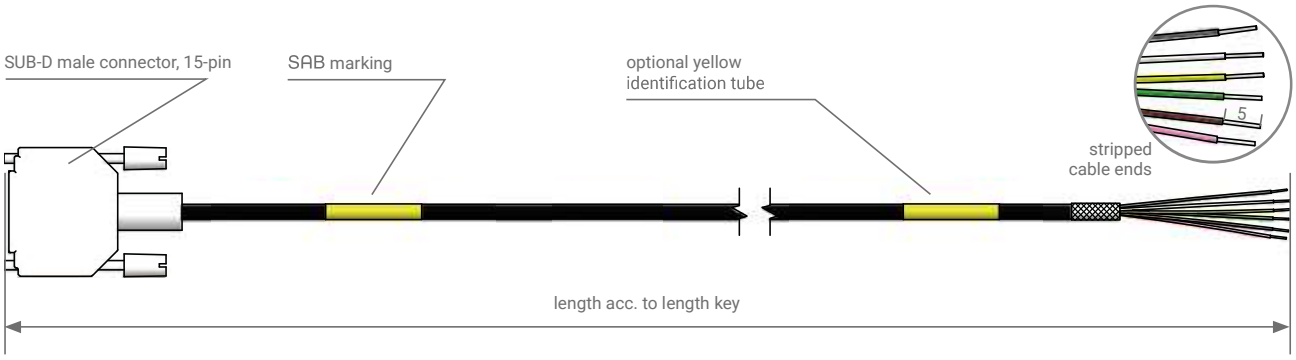
Further service aspects

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

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-pole
side 2: 50 mm stripped ends + 5 mm bare

Cable data

construction:	3 x 2 x 0,14 mm² (tinned copper strands)
insulation:	TPFP
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

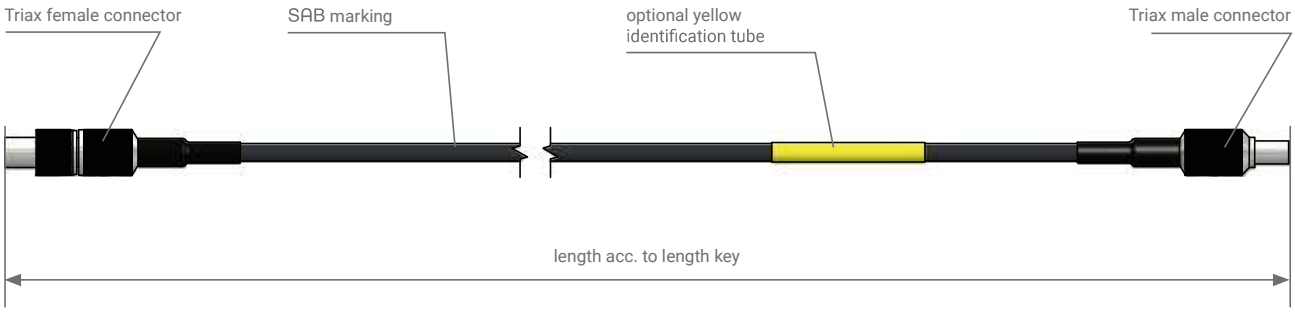
SAB identification:
item number, batch number

Further service aspects

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

Extension cable

with Triax female and Triax male connector (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 mm²
insulation:	TPFP
Inner sheath:	TPFP
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

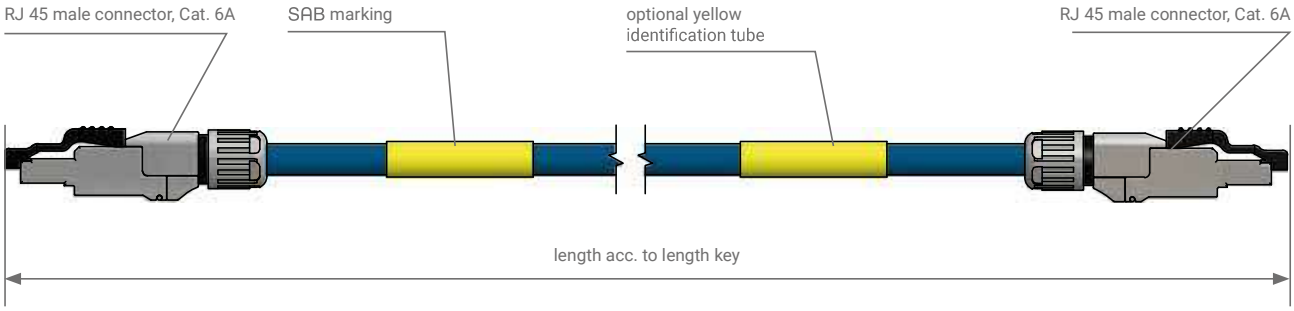
SAB identification:
item number, batch number

Further service aspects

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

Patch cable Cat. 6A

with RJ 45 male connector on both sides



Application range

PC connection element

Connector

side 1: RJ 45 male connector, heavy load, Cat. 6A
side 2: RJ 45 male connector, heavy load, Cat. 6A

Cable data

construction:	4 x 2 x AWG 26
insulation:	TPFP
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

Configuration for cables and connectors

Sensor cable

S	30	3	2	-	10	30	-	00600

- standard marking for NVS cable
- Type of connection cable
- Selection of cable
- Connection or connector side 1
- Connection or connector side 2
- Cable length

Example (page 2.1.1)

PUR ¼-28 UNF female connector - 3 x BNC male connector

Your configuration

You didn't find your cable combination in our catalogue?
No problem !

Create with the help of the following pages
you cable and connector combination
and/or contact us directly!

Sensor cable

S	30			-			-	

Notes

Configuration for cables and connectors

1 Type of connection cable

S	30	3	2	-	10	30	-	00600

1 = uniaxial connection cable (IEPE)
2 = uniaxial connection cable (Charge)
3 = triaxial connection cable (IEPE)
4 = triaxial connection cable (Charge)
5 = collecting/multiple connection cable
6 = adaptation cable

2 Selection of cable

S	30	3	2	-	10	30	-	00600

	1 = TPFP	2 = PUR	3 = Silicone
insulation:	TPFP	TPFP	TPFP
outer sheath:	TPFP	PUR	Silicone
sheath colour:	blue	black	turquoise
outer diameter:	approx. 1,7 mm / approx. 2,1 mm	approx. 2,1 mm / approx. 2,5 mm	approx. 2,1 mm / approx. 2,7 mm
operating voltage:	max. 375 V	max. 350 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 ✔

3 Connector side 1 and 2

S	30	3	2	-	10	30	-	00600

1x = ¼-28 UNF male connector
10 = standard 4-pin ¼-28 UNF female connector (with shortened knurled screw)
11 = standard 4-pin ¼-28 UNF female connector
12 = 4-pin ¼-28 UNF female connector (explicitly for B&K sensors)
13 = 4-pin ¼-28 UNF male connector (explicitly for B&K sensors)
14 = IP68 4-pin ¼-28 UNF female connector (waterproof type)

2x = miniature 4-pin male connector
20 = 8-36 UNF 4-pole female connector (for example for PCB sensors)
21 = 8-36 UNF 4-pin male connector (for example for PCS sensors)
22 = M4,5 x 0,5 4-pole female connector (for example for Kistler sensors)
23 = M4,5 x 0,5 4-pin male connector (for example for Kistler sensors)

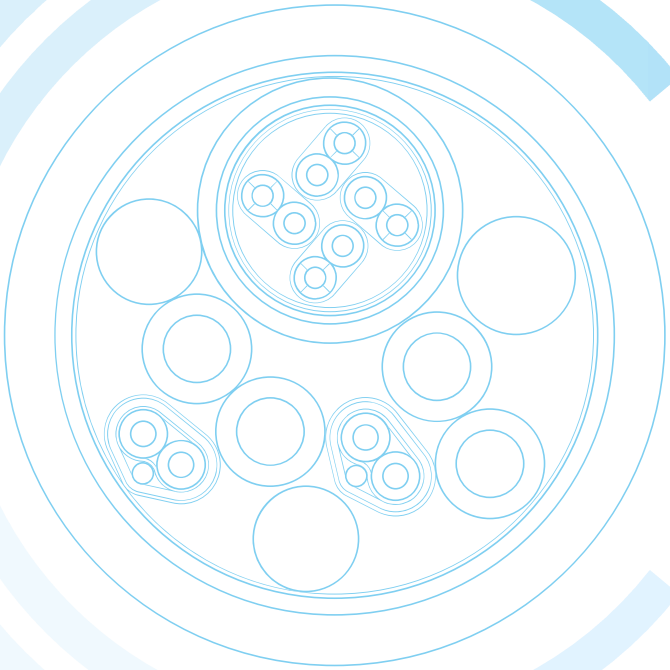
3x = coaxial male connector
30 = BNC male connector
31 = BNC female connector
32 = Microdot male connector
33 = Microdot female connector
34 = Microdot male connector angled (90°)
35 = TNC male connector
36 = TNC female connector

4x = push-pull / multi pole male connector
40 = Lemo male connector 9-pin code G
41 = Lemo female connector 9-pole code G
42 = Lemo coax male connector code A

4 Cable length

S	30	3	2	-	10	30	-	00600

Length indication in numbers
identical to the length in cm
as for example 00600 = 600 cm = 6 m



SPECIAL CABLES

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