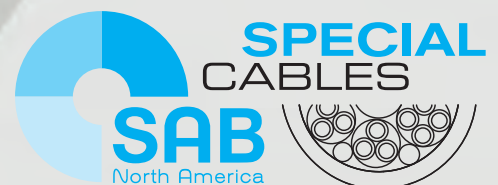


ASSEMBLIES

FOR ETAS CONTROL DEVICES & INTERFACE MODULES



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866-722-2974 ■ info@sabcable.com



About Us

SAB North America is a focused supplier for the automation, aerospace, medical, high temperature, and robotics industries, providing cable and thermocouple solutions that meet, exceed, and set new standards in the flexible cable market. In addition to flexible cable products, we offer an extensive inventory of high-quality cable accessories, including cord grips, grounding glands and other accessories that complement our flexible control and automation cables.

Whatever the need may be, look to SAB North America for Special Cables that can, for example, help minimize maintenance costs and increase productivity, reduce downtime, and solve specific problems. Here is a small sample of some of the challenges that Special Cables from SAB North America can help address:

- Hybrid designs for multiple functions
- Harsh environments
- Difficult applications
- Industry-specific requirements



Car manufacturers need to test that the systems in their automobiles are working. This can be difficult because the test components cannot directly connect to the automotive systems because they are not compatible. A bridge needs to be built to connect the tester and car. SAB has a variety of cable assemblies which allow the connection between the car and ETAS's control devices and interface modules.

Whether you're a valued distribution partner, a manufacturer, an automation house, an integrator, or a contractor, rest assured that our cables are reliable to maximize production efficiencies. SAB brings world class performance & 75 years of ingenuity to the table.

SAB's level of speed and service as a supplier is unmatched. SAB lives up to its name in not only flexible cable but also flexible manufacturing.



SAB Advantage...We make it Easy

- Engineering & technical assistance
- Cut to length with no cut charges
- Prepaid freight within US for orders over \$2,500
- Specialty cable designs (1500 ft minimum)
- No minimum on orders from stock
- Free drop shipments (no surcharges)
- 24-hour shipments from stock
- Cord Grips for securing and grounding cables

Cable Assemblies for ETAS Measuring Devices

Content

■ Introduction

Automotive technical developments often face challenges when trying to test the systems in a car. SAB has developed solutions to enable the capability so that control device, port cable, and module can be connected together for test measurement. SAB cables can be connected to ETAS control devices and interface modules to enable testing. The control devices for instance can check that commands are working in car, such as the wipers move when clicked on. The interface modules are used for data evaluation, for example to test how strong is that signal between wiper lever and the wipers.

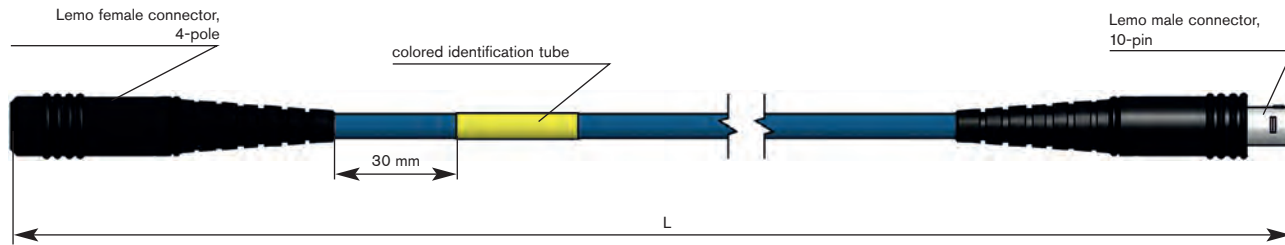
These assemblies can be customized by cable length and individual marking.

Product overview	page
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■ ETK - FETK - ETK adapter	
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Cable Assemblies for ETAS Measuring Devices

ETK - FETK adapter

with Lemo female connector 4-pole and Lemo male connector 10-pin



Application range:

Connection of ETK cable CBM150.1 with FETK interface module ES89x

SURVEY

Measuring chain:

Control device:	ETK control device
Interface cable:	ETK interface cable (catalogue page 8)
Adaptation:	ETK - FETK adapter cable (catalogue page 5)
Interface module:	FETK interface module for example ES89x

Connector:

Side 1:	Lemo female connector 4-pole
Side 2:	Lemo male connector 10-pin

Configuration examples:

item no.	sheath material	length "L" in cm
S3833-4499-00030	PUR	30
S3833-4267-00030	silicone	30

SAB marking:

item no., order no., length

PUR Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Insulation:	TPFK
Shield:	global braiding 100%
Outer jacket:	PUR, color blue, matte surface
Outer diameter:	approx. 5.5 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range:	-40°C/+90°C (+125°C / 2500h)
Oil resistance:	very good - TMPU acc. to EN50363-10-2

SILICONE Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Insulation:	TPFK
Shield :	global braiding 100%
Outer jacket:	Besilen®, color blue
Outer diameter:	approx. 5.8 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range	
<i>fixed laying:</i>	-40°C/+180°C
<i>flexible application:</i>	-25°C/+180°C



Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode

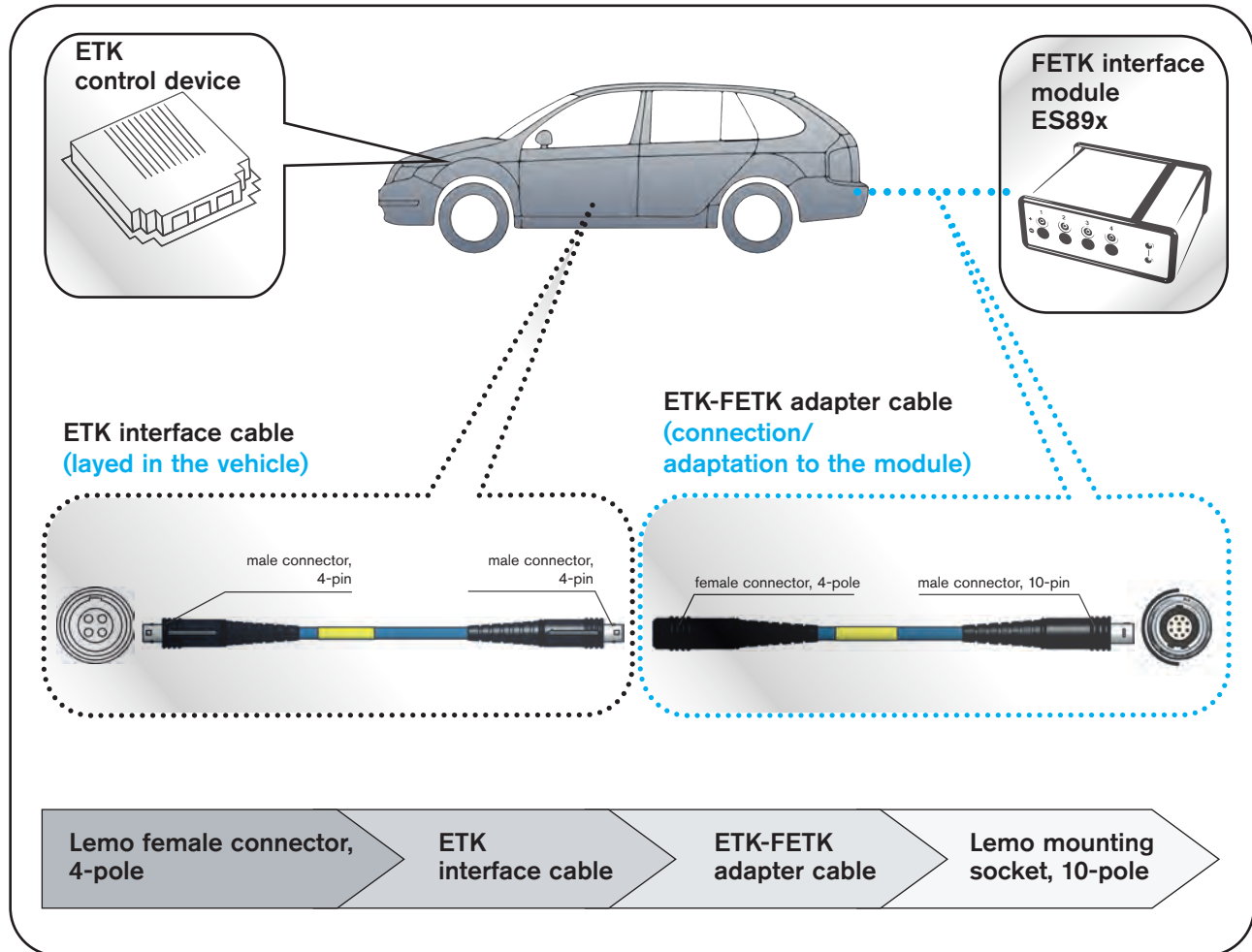
Cable Assemblies for ETAS Measuring Devices

Survey measuring chain

■ Application examples

The ETK control device and the ETK interface cable are installed in the vehicle. Nevertheless, a FETK interface module ES89x is used. Now an appropriate adapter cable is needed which makes the ETK interface cable compatible with the FETK interface module ES89x. This is demonstrated in the following figure.

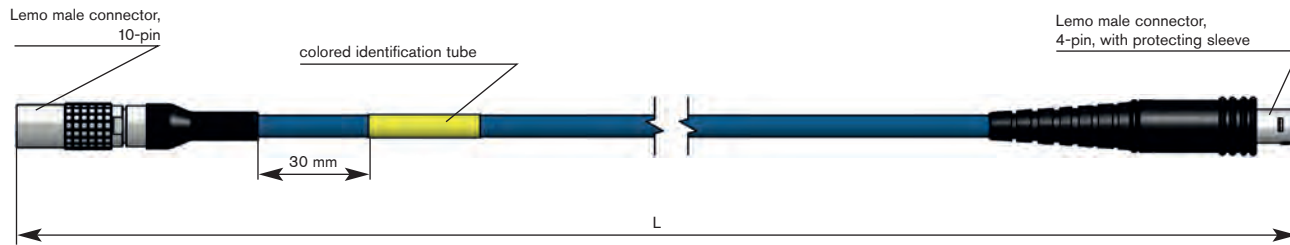
■ Application example for page 4



Cable Assemblies for ETAS Measuring Devices

ETK - FETK - ETK adapter

with Lemo male connector 10-pin and Lemo male connector 4-pin



Application range:

Connection of FETK cable CBE.260.1 with ETK control device*

*Note: If the FETK cable is layed in the vehicle and is used as interface cable between ETK control device and ETK interface module the adaption is necessary towards control device and interface module.

SURVEY

Measuring chain:

Control device:	ETK control device
Adaptation:	ETK-FETK-ETK adapter cable (catalogue page 5)
Interface cable:	FETK interface cable (catalogue page 10)
Adaptation:	FETK - ETK adapter cable (catalogue page 7)
Interface module:	ETK interface module for example ES59x FETK interface module for example ES89x

Connector:

Side 1:	Lemo male connector 10-pin
Side 2:	Lemo male connector 4-pin

Configuration examples:

item no.	sheath material	length "L" in cm
S3833-4493-00030	PUR	30
S3833-4500-00030	silicone	30

SAB marking:

item no., order no., length

PUR Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Insulation:	TPFK
Shield :	global braiding 100%
Outer jacket:	PUR, color blue, matte surface
Outer diameter:	approx. 5.5 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range:	-40°C/+90°C (+125°C / 2500h)
Oil resistance:	very good - TMPU acc. to EN50363-10-2

SILICONE Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Insulation:	TPFK
Shield :	global braiding 100%
Outer jacket:	Besilen®, color blue
Outer diameter:	approx. 5.8 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range	
fixed laying:	-40°C/+180°C
flexible application:	-25°C/+180°C



Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode

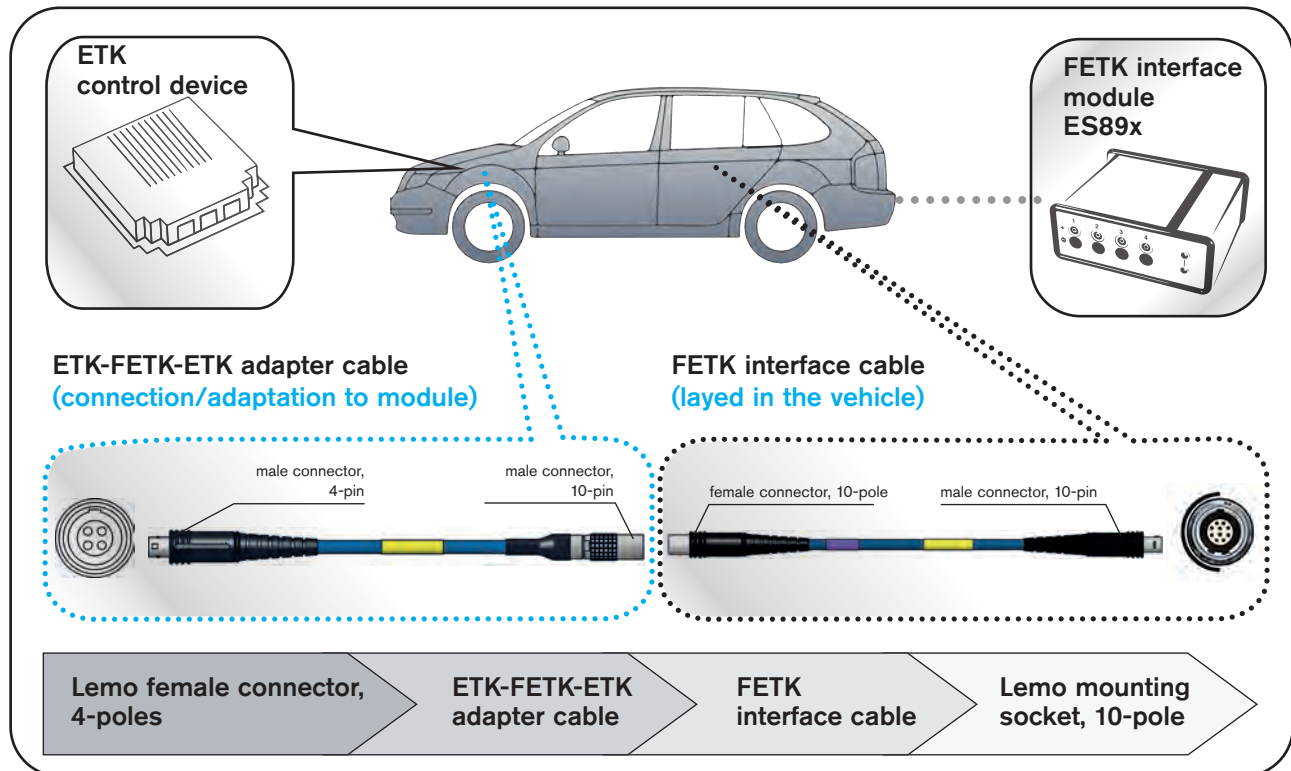
Cable Assemblies for ETAS Measuring Devices

Survey measuring chain

■ Application examples

The ETK control device and the ETK interface cable are placed in the vehicle. Nevertheless, a FETK interface module ES89x is used. Now an appropriate adapter cable is needed which makes the ETK interface cable compatible with the FETK interface module ES89x. This is demonstrated in the following figure.

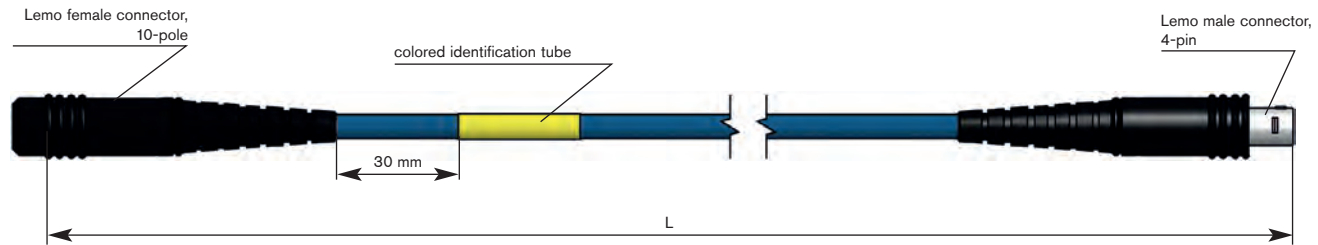
■ Application example for page 6



Cable Assemblies for ETAS Measuring Devices

FETK - ETK adapter

with Lemo female connector 10-pole and Lemo male connector 4-pin



Application range:

Connection of FETK cable CBE.260.1 with ETK interface module for example ES59x*

*Note: If the FETK cable is layed in the vehicle and is used as interface cable between ETK control device and ETK interface module the adaption is necessary towards control device and interface module.

SURVEY

Measuring chain:

Control device:	ETK control device
Adaptation:	ETK-FETK-ETK adapter cable (catalogue page 5)
Interface cable:	FETK interface cable (catalogue page 10)
Adaptation:	FETK - ETK adapter cable (catalogue page 7)
Interface module:	ETK interface module for example ES59x

Connector:

Side 1:	Lemo female connector 10-pole
Side 2:	Lemo male connector 4-pin

Configuration examples:

item no.	sheath material	length "L" in cm
S3833-4501-00030	PUR	30
S3833-4502-00030	silicone	30

SAB marking:

item no., order no., length

PUR Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Isolation:	TPFK
Shield :	global braiding 100%
Outer jacket:	PUR, color blue, matte surface
Outer diameter:	approx. 5.5 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range:	-40°C/+90°C (+125°C / 2500h)
Oil resistance:	very good - TMPU acc. to EN50363-10-2

SILICONE Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Insulation:	TPFK
Shield :	global braiding 100%
Outer jacket:	Besilen®, color blue
Outer diameter:	approx. 5.8 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range	
fixed laying:	-40°C/+180°C
flexible application:	-25°C/+180°C



Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode

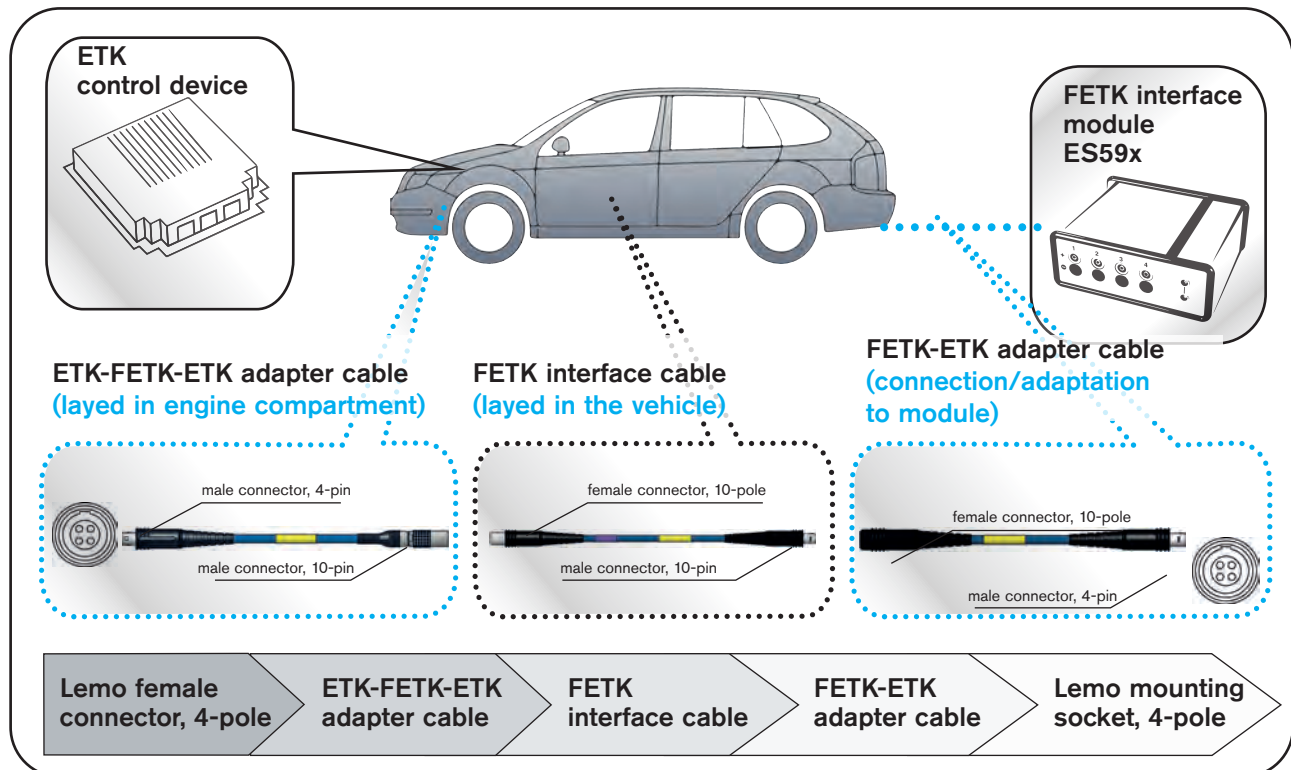
Cable Assemblies for ETAS Measuring Devices

Survey measuring chain

■ Application examples

The ETK control device and the ETK interface cable are placed in the vehicle. Nevertheless, a FETK interface module ES89x is used. Now an appropriate adapter cable is needed which makes the ETK interface cable compatible with the FETK interface module ES89x. This is demonstrated in the following figure.

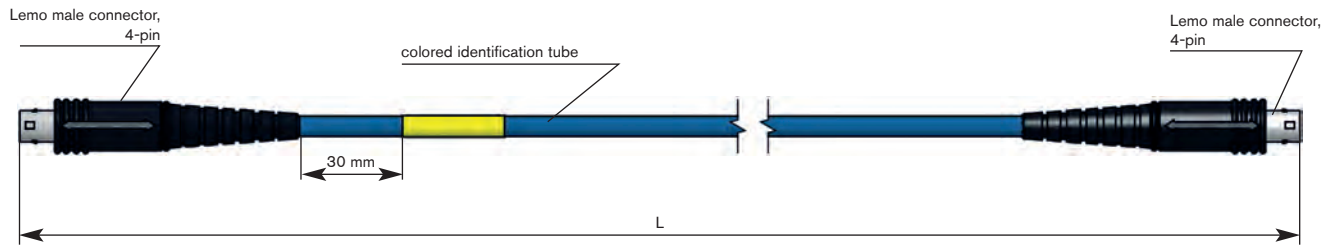
■ Application example for ge 8



Cable Assemblies for ETAS Measuring Devices

ETK interface cable

with Lemo male connector 4-pin at both sides



Application range:

Connection of ETK control device with ETK interface module for example ES59x

SURVEY

Measuring chain:

Control device:	ETK control device
Interface cable:	ETK interface cable
Interface module:	ETK interface module for example ES59x

Connector:

Side 1:	Lemo male connector 4-pin
Side 2:	Lemo male connector 4-pin

Configuration examples:

item no.	sheath material	length "L" in cm
S3833-4219-00100	PUR	100
S3833-4218-00100	silicone	100

SAB marking:

item no., order no., length

PUR Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Isolation:	TPFK
Shield :	global braiding 100%
Outer jacket:	PUR, color blue, matte surface
Outer diameter:	approx. 5.5 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range:	-40°C/+90°C (+125°C / 2500h)
Oil resistance:	very good - TMPU acc. to EN50363-10-2

SILICONE Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Isolation:	TPFK
Shield :	global braiding 100%
Outer jacket:	Besilen®, color blue
Outer diameter:	approx. 5.8 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range	
<i>fixed laying:</i>	-40°C/+180°C
<i>flexible application:</i>	-25°C/+180°C



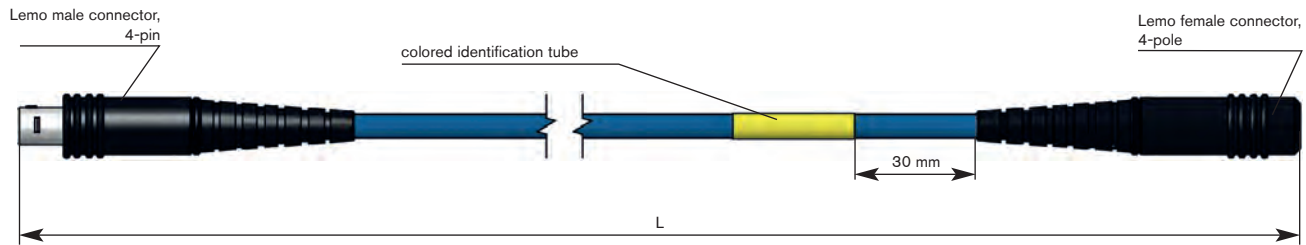
Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode

Cable Assemblies for ETAS Measuring Devices

ETK extension

with Lemo male connector 4-pin and Lemo female connector 4-pole



Application range:

Extension of ETK interface cable and connection to ETK interface module for example ES59x

SURVEY

Measuring chain:

Interface cable:	ETK interface cable (catalogue page 8)
Extension cable:	ETK extension cable
Interface module:	ETK interface module for example ES59x

Connector:

Side 1:	Lemo male connector 4-pin
Side 2:	Lemo female connector 4-pole

Configuration example:

item no.	length "L" in cm
S3833-4568-00100	100

SAB marking:

item no., order no., length

Cable data:

Dimension:	2 x 2 x 0.22 mm ²
Isolation:	TPFK
Shield :	global braiding 100%
Outer jacket:	Besilen®, color blue
Outer diameter:	approx. 5.8 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 350 V
Temperature range	
fixed laying:	-40°C/+180°C
flexible application:	-25°C/+180°C



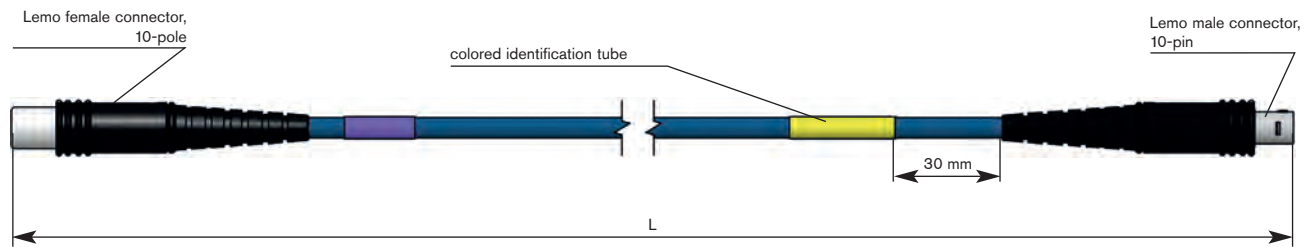
Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode

Cable Assemblies for ETAS Measuring Devices

FETK interface cable

with Lemo female connector 10-pole and Lemo male connector 4-pin



Application range:

Connection of FETK control device with FETK interface module for example ES89x

SURVEY

Measuring chain:

Control device:	FETK control device
Interface cable:	FETK interface cable
Interface module:	FETK interface module for example ES59x

Connector:

Side 1:	Lemo female connector 10-pole
Side 2:	Lemo male connector 10-pin

Configuration example:

item no.	length "L" in cm
S1631-4013-00300	300

SAB marking:

item no., order no., length

Cable data:

Dimension:	4 x 2 x AWG26 + 2 x AWG24
Isolation:	TPFK
Shield :	global braiding 100%
Outer jacket:	PUR, color blue, matte surface
Outer diameter:	approx. 6.6 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 90 V
Temperature range:	-40°C/+90°C (+125°C / 2500h)
Oil resistance:	very good - TMPU acc. to EN50363-10-2



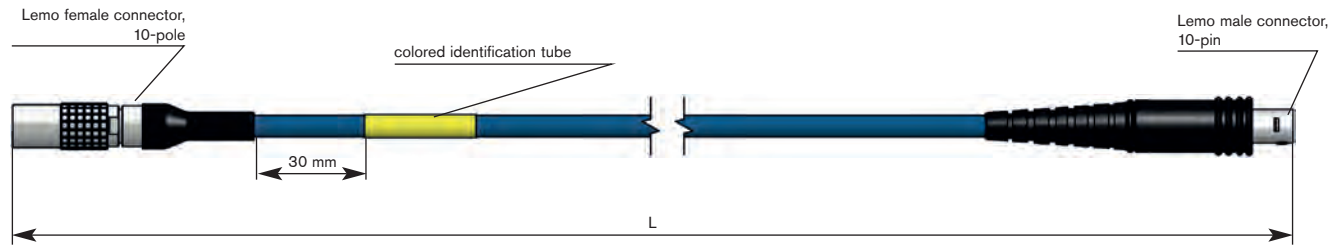
Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode

Cable Assemblies for ETAS Measuring Devices

FETK extension

with Lemo female connector 10-pole and Lemo male connector 10-pin



Application range:

Extension of FETK interface cable and connection to FETK interface module for example ES89x

SURVEY

Measuring chain:

Interface cable:	FETK interface cable (catalogue page 10)
Extension cable:	FETK extension cable
Interface module:	FETK interface module for example ES59x

Connector:

Side 1:	Lemo female connector 10-pole
Side 2:	Lemo male connector 10-pin

Configuration example:

item no.	length "L" in cm
S1631-4112-00100	100

SAB marking:

item no., order no., length

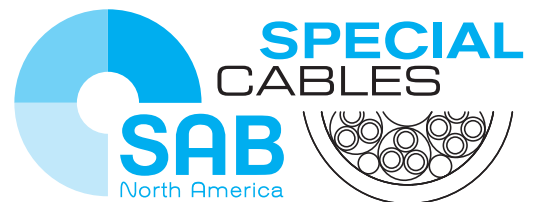
Cable data:

Dimension:	4 x 2 x AWG26 + 2 x AWG24
Isolation:	TPFK
Shield :	global braiding 100%
Outer jacket:	PUR, color blue, matte surface
Outer diameter:	approx. 6.6 mm
Min. bending radius:	10 x O.D.
Peak operating voltage:	max. 90 V
Temperature range	-40°C/+90°C (+125°C / 2500h)
Oil resistance:	very good - TMPU acc. to EN50363-10-2



Further service issues:

- individual marking by shrinkable sleeve as for example with internal material no. or barcode



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July 2023