

## **XCP/ECAT Accessories**

for CSM measurement modules



### **CSM Accessories**

We offer suitable XCP-on-Ethernet and EtherCAT® (XCP/ECAT) interface and connection cables, power supply cables, sensor cables, CAN connection cables and sync cables for our measurement modules. The portfolio is extended by HV safe sensor cables and connectors - so that you are also ideally equipped for measurement in a high-voltage environment.

The system cables for our measurement modules are specially made for the respective measurement task. They are designed for immunity to noise, low internal resistance and a wide temperature range. Furthermore, they are flexible and highly resistant to chemicals, including fuel and oil.

We also provide a wide range of other accessories, including the USB-to-CAN interface CSMcan, system and signal cables, plugs, sockets, mounting materials, antennas as well as memory cards. You can find more information on our website and in the respective accessories brochures (also available for download).

Do you still have questions or need individual solutions? Please contact us - you will find our contact details at the end.



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## **XCP/ECAT Interface Cables**

### K420e.2

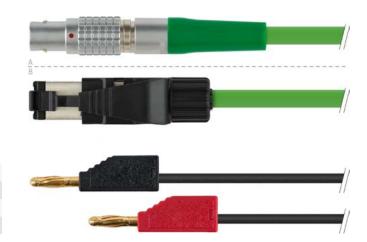
IC, L1B 8p, RJ45 8p / B

Connection cable between EtherCAT®socket/measurement module or XCP-Gateway Basic or pro and Ethernet interface of the PC, including supply line for power supply

### **Connectors**

Α	Socket	LEMO 1B	8-pole	code L
В	Plug	RJ45 and	banana p	lugs

ART1100205	K420e.2-0100	Length: 1 m
ART0202420	K420e.2-0250	Length: 2.5 m
ART1100200	K420e.2-0500	Length: 5 m
ART1100201	K420e.2-1000	Length: 10 m



### K405.1

CC, L1B 8p, L1B 8p

Connection cable between XCP-Gateway Basic or pro and Ethernet interface of ETAS ES600, ES592, ES593-D or ES595, supply line for power supply integrated in the cable, power supply of measurement chain via ETAS measurement modules

### Connectors

Α	Socket	LEMO 1B	8-pole	code L
В	Plug	LEMO 1B	8-pole	code F

ART1401030	K405.1-0050	Length: 0.5 m
ART1401032	K405.1-0250	Length: 2.5 m



### K425.1

IC, L1B 8p, RJ45 8p

Connection cable (Gigabit Ethernet) for e. g. XCP-Gateway 4S pro and HV BM 3.3

#### **Connectors**

А	Socker	LEMO IR	8-pole	code j
В	Plug	RJ45		

ART1412501	K425.1-0100	Length: 1 m
ART1412502	K425.1-0250	Length: 2.5 m
ART1412503	K425.1-0500	Length: 5 m
ART1412504	K425.1-1000	Length: 10 m



## **Power Supply Cables**

### K480

PC, LOB 5p, B

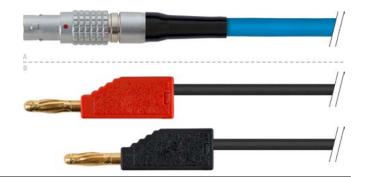
Power supply cable for XCP-Gateway 4S pro module

### **Connectors**

A Socket LEMO 0B 5-pole code J

**B** Banana plugs

ART1440101	K480-0200	Length: 2 m
ART1440102	K480-0500	Length: 5 m



### K485

PC, L0B 5p, B, R

Power supply cable for HV BM 3.3 with integrated 120 Ohm CAN termination resistor (yellow cable marking)

### **Connectors**

A Socket LEMO 0B 5-pole code G

**B** Banana plugs

ART1440103	K485-0200	Length: 2 m
ART1440104	K485-0500	Length: 5 m
ART1440106	K485-1000	Length: 10 m



### K495

PC, L1B 8p, B

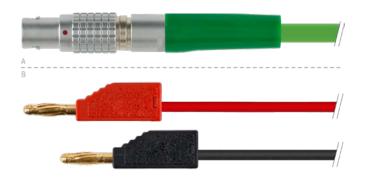
Power Supply cable for HV AD XCP module

### **Connectors**

A Socket LEMO 1B 8-pole code L

**B** Banana plugs

ART1440401	K495-0200	Length: 2 m
ART1440402	K495-0500	Length: 5 m
ART1440403	K495-1000	Length: 10 m



## **XCP/ECAT Connection Cables**

code L

Length: 20 m

### K400.1

CC, L1B 8p, L1B 8p

Connection cable for cascading EtherCAT® based measurement modules

LEMO 1B 8-pole

### **Connectors**

Socket

<b>B</b> Plug	LEMO 1B 8-pole	code A
ART0202401	K400.1-0025	Length: 0.25 m
ART0202402	K400.1-0050	Length: 0.5 m
ART0202403	K400.1-0100	Length: 1 m
ART0202404	K400.1-0200	Length: 2 m
ART0202405	K400.1-0500	Length: 5 m
ART1401006	K400.1-1000	Length: 10 m



### K410.1

ART1401007

CC, L1B 8p, L1B 8p/B

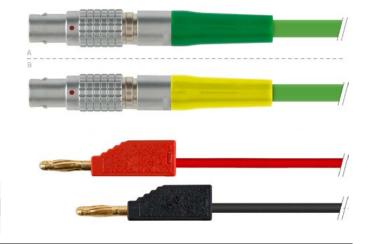
Connection cable for cascading EtherCAT® based measurement modules, including supply line for intermediate power supply

K400.1-2000

#### **Connectors**

Α	Socket	LEMO 1B	8-pole	code L
В	Plug	LEMO 1B	8-pole	code A
	and bana	ana plugs		

ART1401022	K410.1-0050	Length: 0.5 m
ART1090320	K410.1-0250	Length: 2.5 m
ART1401021	K410.1-0500	Length: 5 m



### K490

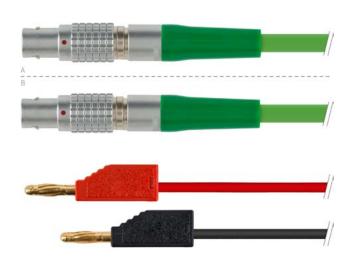
CC, L1B 8p, L1B 8p / B

Connection cable between EtherCAT® based measurement modules and XCP based measurement modules (e. g. HV AD4 XW 4000) with bidirectional feed

### **Connectors**

Α	Socket	LEMO 1B	8-pole	code L
В	Socket	LEMO 1B	8-pole	code L
	and ban	ana plugs		

ART1401051	K490-0050	Length: 0.5 m
ART1401052	K490-0250	Length: 2.5 m
ART1401053	K490-0500	Length: 5 m
ART1401054	K490-1000	Length: 10 m



### **Sensor Cables**

### K356

SC, L1B 8p, open, 1/4, T

Quarter bridge completion cable (120/350 Ohm) in 3-wire connection with preconfigured TEDS

### **Connectors**

A Plug LEMO 1B 8-pole code G B Open cable end

ART1420102	K356-0200/120	Length: 2 m
ART1420101	K356-0200/350	Length: 2 m
ART1420105	K356-0500/350	Length: 5 m



### K630

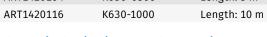
SC, L1B 8p, open

Cable between signal input/measurement module and sensor

### **Connectors**

A Plug LEMO 1B 8-pole code G B Open cable end

ART1420103	K630-0200	Length: 2 m
ART1420104	K630-0500	Length: 5 m
A D.T.4 / 2044 6	KC20 4000	1 th - 40

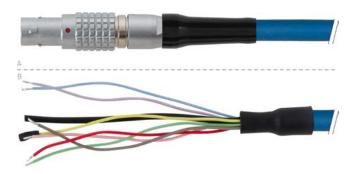


### Alternatively with integrated TEDS chip

### K642

SC, L1B 8p, open, TR

ART1420112	K642-0120	Length: 1.2 m
ART1420113	K642-0500	Length: 5 m
ART1420115	K642-1000	Length: 10 m



CSM Accessories // Sensor Cables

### K697

SC, L1B 8p, B

Cable between signal input/measurement module and sensor

### **Connectors**

A Plug LEMO 1B 8-pole code G

**B** Banana plugs/-socket

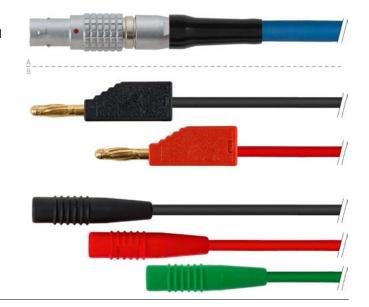
ART1420503	K697-0120	Length: 1.2 m
ART1420504	K697-0500	Length: 5 m

### Alternatively with integrated TEDS chip

### K643

SC, L1B 8p, B, TR

ART1420500	K643-0120	Length: 1.2 m
ART1420501	K643-0500	Length: 5 m



### K645

SC, L1B 8p, BNC, IEPE\_U, TR

IEPE sensor cable for measuring IEPE sensors using an AD4 OE100 module, with integrated TEDS chip

### **Connectors**

A Plug LEMO 1B 8-pole code G

**B** Socket BNC

ART1420310 K645-0050 Length: 0.5 m



### K701

SC, L1B 8p, BNC

Sensor cable for measuring sensors with BNC (female) connector

### **Connectors**

A Plug LEMO 1B 8-pole code G

**B** Plug BNC

ART1420321 K701-0120 Length: 1.2 m



### Alternatively with integrated TEDS chip

### K650

SC, L1B 8p, BNC, TR

ART1420320 K650-0120 Length: 1.2 m

### K662

EC, L1B 8p, L1B 8p

Sensor extension cable

### Connectors

A Plug LEMO 1B 8-pole code GB Connector LEMO 1B 8-pole code G

ART1430400 K662-0300 Length: 3 m



### K695

SC, L1B 8p, Micro, IEPE\_U, TR

Cable between a measurement module and a triaxial sensor

### **Connectors**

A Plug LEMO 1B 8-pole code G B Socket Microcom 4-pole

ART1427000 K695-0180 Length: 1.8 m



### **HV Sensor Cables**

### K902

SC, R2P 8p, open

Connection cable between an HV analog measurement module and four sensors (without sensor supply) with measurement voltages up to 90 V, shielding per channel for suppressing interferences

### Connectors

A Multi connector LEMO Redel 2P 8-pole code B

**B** 4 x open cable end, 2 wires + shield each

ART1423803	K902-0200	Length: 2 m	
ART1423804	K902-0300	Length: 3 m	



### K903

SC, R2P 8p, open

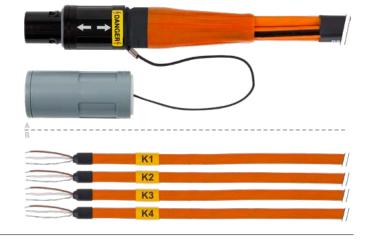
Connection cable (4 x HV single channel cable) between an HV analog measurement module and 4 sensors (without sensor supply) and measurement voltage up to 90 V, shielding per channel for suppressing interferences, HV safe single channel from plug end

### **Connectors**

A Multi connector LEMO Redel 2P 8-pole code B

**B** 4 x open cable end, 2 wires + shield each

ART1423806	K903-0200	Length: 2 m



### K912

SC, R2P 8p, open

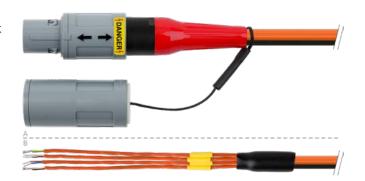
Connection cable between an HV analog measurement module and four sensors (without sensor supply) with measurement voltages up to 1,000 V, shielding per channel for suppressing interferences

### Connectors

A Multi connector LEMO Redel 2P 8-pole code D

**B** 4 x open cable end, 2 wires + shield each

ART1423703	K912-0200	Length: 2 m	
ART1423704	K912-0300	Length: 3 m	



### K913

SC, R2P 8p, open

Connection cable (4 x HV single channel cable) between an HV analog measurement module and 4 sensors (without sensor supply) and measurement voltage up to 1,000 V, shielding per channel for suppressing interferences, HV safe single channel from plug end

#### **Connectors**

A Multi connector LEMO Redel 2P 8-pole code D

**B** 4 x open cable end, 2 wires + shield

ART1423706 K913-0200 Length: 2 m



### **K920**

SC, R2P 8p, open

Connection cable between an HV analog measurement module and 2 sensors (with sensor power supply)

### **Connectors**

- A Multi connector LEMO Redel 2P 8-pole code C
- B 2 x open cable end, 4 wires + shield

ART5810400	K920-0200	Length: 2 m
ART5810401	K920-0300	Length: 3 m



### K960

SC, R2P 8p, open

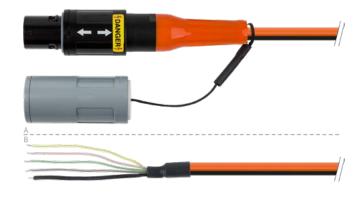
Connection cable between an HV IEPE3 FL100 measurement module and IEPE-Sensor (triaxial, uniaxial)

### **Connectors**

A Multi connector LEMO Redel 2P 8-pole code C

B open cable end, 4 wires + shield

ART1424000 K960-0200 Length: 2 m





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### K963

SC, R2P 8p, Micro 4p

Connection cable between an HV IEPE FL 100 measurement module and ICP sensor (triaxial)

### **Connectors**

- A Multi connector LEMO Redel 2P 8-pole code C
- B Socket Microcom 4-pole, led out cable shield with ring eyelet

ART1424300 K963-0200 Length: 2 m



### K981

SC, R2P 8p, open

Connection cable between an HV STG measurement module an DMS fullbridge or halfbridge

#### **Connectors**

- A Multi connector LEMO Redel 2P 8-pole code E
- **B** 4 x open cable end, 2 wires + shield

ART1424210	K981-0200	Length: 2 m
ART1424211	K981-0300	Length: 3 m



### Alternatively with integrated TEDS chip

### K980

SC, R2P 8p, open, TR

ART1424200	K980-0200	Length: 2 m
ART1424201	K980-0300	Length: 3 m

## **CAN Connection Cable**

### **K70**

CC, L0B 5p, L0B 5p

Connection cable between CAN-based measurement modules and XCP-Gateway

### **Connectors**

A B	Plug Plug	LEMO 0B LEMO 0B	5-pole 5-pole	code G code G	
AR	T0201070	K70-00	25	Length: 0.25	ō m
AR	T0201054	K70-00	50	Length: 0.5	m
AR	T0201055	K70-01	00	Length: 1 m	
AR	T0201056	K70-02	00	Length: 2 m	
AR	T0201052	K70-03	00	Length: 3 m	
AR	T0201057	K70-05	00	Length: 5 m	
AR	T0201058	K70-10	00	Length: 10 r	m
AR	T1040100	K70-20	00	Length: 20 i	m



## **Sync Cable**

### K665

CC, L0B 2p, Bi 712 3p

Sync adapter cable for Vetor Sync function. Connects an XCP-Gateway with LEMO socket and a Vector interface with Binder connector.

### Connectors

A B	Plug Socket	LEMO 0B 2-pole Binder 712 3-pole	code G	
AR	T1403000	K665-0200	Length: 2 m	





# Plugs

### **Protection Plug**

Plug for protecting connectors from pollution

ART1030500	LEMO 0B, code G	socket CAN IN/ OUT
ART1030600	LEMO 1B, code G	signal input socket
ART1030601	LEMO 1B, code A	socket ECAT OUT
ART1461100	LEMO 1B, code L	socket ECAT IN



### **Antenna**

### **GPS Magnetic Antenna**

SMA

Antenna for XCP-Gateway 4S pro with integrated magnet for simple and fast mounting.

	S
Frequency	1575.42 MHz, circularly polarised, clockwise
Power Supply	2.7 - 5 V typ. 25 mA/max. 30 mA
Connection	SMA Plug
Dimensions (Ø x h)	approx. 68 x 14 mm
Operating temperature range	-40 °C to +85 °C
ART0650001	Length: 3 m



### **About us**

### CSM Computer-Systeme-Messtechnik GmbH

CSM is a leading, highly innovative manufacturer of distrbuted networked, robust measurement technology and data loggers for use on test benches and in vehicles. We have been setting technological standards in this field for more than 40 years. Our products are successfully used worldwide by almost all well-known manufacturers of passenger cars and commercial vehicles as well as their suppliers and service providers.

Permanent innovation and long-term satisfied customers are our guarantee for success. With our high-voltage safe measurement and breakout modules, developed for fast and synchronous measurements on electric and hybrid vehicles, we actively accompany our customers' transition to, or entry into electromobility.

Together with our partner Vector Informatik, we offer harmonized solutions for measurement data aquisition and analysis based on CSM measurement hardware and Vector's interfaces and software, such as the E-Mobility Measurement System: A scalable complete solution for analyzing, calibrating, testing, validating and also homologating electric and hybrid vehicles.





### **Service & Support**

Do you have special questions or technical requests for the use of the CSM measurement technology? Please contact us, our Service & Support is at your disposal.

Please use our telephone hotline:

### +49 711 - 77 964 - 444

Or contact us via our website: **www.csm.de** under the keyword »Support «.

# All Products, Data, and Information at a Glance

Our website **www.csm.de** provides you with further information about the CSM measurement modules and data loggers. Make use of our solutions for the development and testing of passenger cars, commercial and special vehicles, construction and agricultural machinery, cranes, wind turbines, airplanes, ships etc.

- Overview of the entire product portfolio
- ► Application examples
- Direct download: the latest CSM software versions
- ► Easy access to data sheets and product information





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DATRON-TECHNOLOGY (Slovakia, Czech Republic)

Our partners guarantee you worldwide availability. Feel free to contact us.

Our company is certified.





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