

Interface converters

Communication RS232 – RS485

The K-10X series interface converter is best used with KELLER products and enables communication between a device and computer via an RS232 interface. Communication is established with the connected devices via an RS485 bus interface (half-duplex).

Description

For K-102 and K-103-A converters, the connected devices must have their own power supply (e.g. battery or mains). The K-102I converter must be powered by the adapter supplied with it, via which it can also power connected devices. Devices connected to the K-107 converter are powered by the integrated battery or an external power adapter.

K-102 properties

- Screw-type terminal connection (3-pole)
- No termination resistor
- Converter powered via DTR / RTS in the RS232 interface

- Not possible to power connected devices via the converter

K-102I properties

- Screw-type terminal connection (5-pole)
- Termination resistor possible (connect via screw-type terminal RS485 A + B)
- Galvanic isolation of signal lines RS485 A + B

- Status display: green LED
- Converter and connected devices powered by 15 VDC adapter (included in scope of delivery)

K-103-A properties

- Fischer plug-in connector series 103/5-pole with 2 m cable
- No termination resistor
- Converter powered via DTR/RTS in the RS232 interface

- Not possible to power connected devices via the converter

K-107 properties

- Binder plug series 680/5-pole, cable length 0,75 m
- No termination resistor
- Power adapter (15 VDC and battery 9 VDC / type 6 LR 61, included in scope of delivery)

- Connected devices powered by 9 V battery or adapter (automatically switched on during communication). Converter electronics powered via DTR / RTS in the RS232 interface



K-102



K-102I



K-103-A



K-107

Technical specifications

Interface parameters
Baud rate

8 data bits, 1 start bit, 1 stop bit, no parity, half-duplex, echo is generated
9600 baud, 115200 baud (automatic detection)
automatic transmit/receive changeover
RS232 / D-SUB 9-pole female

Interface / plug type

RS485 bus devices
RS485 driver
RS485 output level

up to 128 bus devices (1/4 unit load)
"Slew rate limited", fail-safe
5 V (K-102, K-10 I, K-103-A), 3.3 V (K-107)

Storage / operating temperature

-10...50 °C

Protection

IP40

Plug-in adapter (optional)

Dimensions (H x W x D)

15 VDC / 500 mA (1,8 m cable)

K-102: 55 x 31 x 15 mm

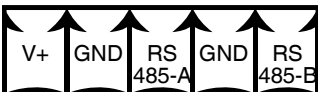
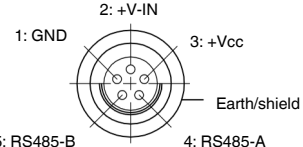
K-102I: 80 x 42 x 21 mm

K-103-A: 55 x 31 x 15 mm

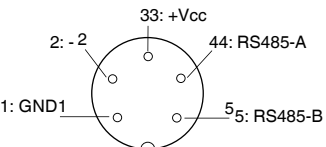
K-107: 60 x 105 x 22 mm

Product overview

The product overview shows the compatibility between the product and the interface converters. The converter can also be expanded using additional cable options. Both the detailed operating instructions and the open-source KELLER software for the interface converters can be found at www.keller-druck.com.

K-102	K-102I	K-103-A
		
f	f	m f
PN: 309010.0004 Application: X-line pressure transmitter with cable RS232 connector: D-SUB plug 9-pole (f) RS485 connector: 3-pole plug-in screw terminal (MC 1,5 / 3-ST-3.81)	PN: 309010.0012 Application: X-line pressure transmitter with cable RS232 connector: D-SUB plug 9-pole (f) RS485 connector: 5-pole plug-in screw terminal (MC 1,5 / 5-ST-3.81)	PN: 309010.0002 Application: DCX-16, DCX-22, DCX-25PVDF, DCX-38, LEO-Record, LEX1, ARC1, LPX, MPX, HPX RS232 connector: D-SUB plug 9-pole (f) RS485 connector: Fischer plug-in connector series 103/5-pole (m) Total cable length: 2 m
		

K-107

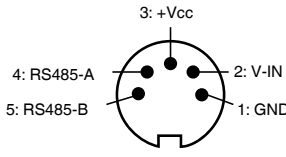
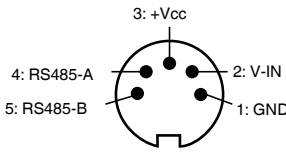
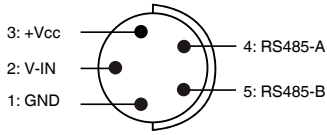
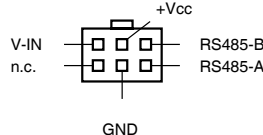
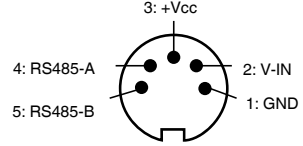
f f
PN: 309010.0003 Application: X-line, LEO3 RS232 connector: D-SUB plug 9-pole (f) RS485 connector: Binder plug series 581/5-pole (f) Total cable length: 1,9 m


Scope of delivery

- K-102 – K-102 Converter
- K-102I – K-102I Converter
 - Cable D-SUB 2 m / 9-pole
 - 15 VDC power adapter, suitable for EU/GB/US/JP
- K-103-A – K-103-A Converter
- K-107 – K-107 Converter
 - Battery 9 VDC / type 6LR61
 - 15 VDC power adapter, suitable for EU/GB/US/JP

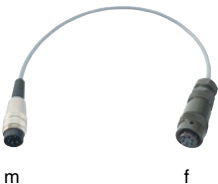
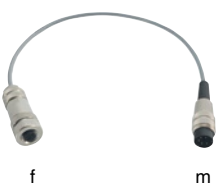
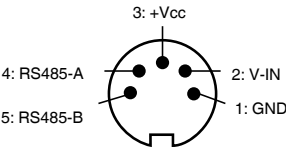
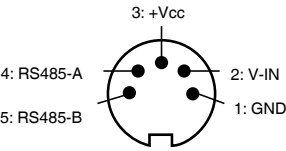
Accessories

Various adapter cables:

Cable option 1 for K-107	Cable option 3 for K-107	Cable option 7 for K-107															
 m	 f m	 m m															
PN: 309010.0014 Suitable for X-line pressure transmitters with cable gland Cable length: 0,4 m	PN: 309010.0016 Suitable for X-line pressure transmitters, LEO1, LEO2, ECO2 Cable length: 0,4 m	PN: 309010.0082 Suitable for DCX, LEO-Record, LEX1 Cable length: 0,4 m															
Binder plug-in connector series 680/5-pin (m)	Binder plug-in connector series 680/5-pin (m)	Fischer plug-in connector series 103/5-pole (m)															
																	
Licenced connection terminals +	Molex plug 6-pole (f)	Binder plug-in connector series 680/5-pin (m)															
<table border="1"> <tr><td>black</td><td>BK</td><td>Vcc</td></tr> <tr><td>white</td><td>WH</td><td>GND</td></tr> <tr><td>yellow</td><td>YE</td><td>RS485-B</td></tr> <tr><td>blue</td><td>BU</td><td>RS485-A</td></tr> <tr><td>red</td><td>RD</td><td>V-IN</td></tr> </table>	black	BK	Vcc	white	WH	GND	yellow	YE	RS485-B	blue	BU	RS485-A	red	RD	V-IN		
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white	WH	GND															
yellow	YE	RS485-B															
blue	BU	RS485-A															
red	RD	V-IN															

Accessories

Various adapter cables:

Cable option 8 for K-107	Cable option 9 for K-107
	
PN: 309010.0123 Suitable for X-line pressure transmitters with Souriau plug Cable length: 0,4 m	PN: 309010.0127 Suitable for X-line pressure transmitters with M12 plug Cable length: 0,4 m
Binder plug-in connector series 680/5-pin (m)	Binder plug-in connector series 680/5-pin (m)
	
MIL plug series C-26482/6-pole (f)	M12 plug A-coded/5-pole (f)
