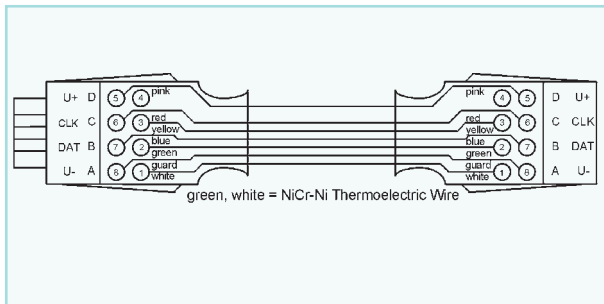


GENERAL ACCESSORIES

Extension Cable for NiCr-Ni Sensors



Extensions up to 4 meters

Passive extension cables ZA9020VK (NiCr-Ni)

Passive 8-pin extension cables with ALMEMO® connectors are available in lengths 1, 2, and 4 meters; for NiCr-Ni thermocouples special extension cables with an integrated compensation line are available (ZA 9020 VK1/2/4).

The cable length between sensor connector and measuring instrument must not exceed four (4) meters; if this maximum length is exceeded, communications with the connector EEPROM may be adversely affected.

👉 The total length of all passive extension cables connected to an ALMEMO® measuring instrument must not exceed four (4) meters. If the total length exceeds this, the device's internal data bus may, depending on environmental conditions, be subject to interference.

Extensions, 5 meters and longer

Longer sensor lines

If distances exceeding this really are necessary, then - instead of extension cables - longer sensor lines should be used.

For this purpose the sensor connector must be detached, the sensor cable extended in the conventional way with a compensation line, and the connector then refitted to the end.

Active extension cables ZA9020VKP (NiCr-Ni)

If for some reason it is not possible to extend the sensor cable itself, an active extension cable ZA9020VKP (NiCr-Ni) can be used.

This cable incorporates an ALMEMO® connector with an integrated EEPROM for data storage; this connector is a copy of the sensor connector. A compensation line is used for the extension.

The terminals in the connectors are also made from thermo material.

If correction values or other sensor-specific settings have been programmed in the sensor connector (e.g. comments, average values, etc.), these must also be programmed (being a copy) in the ALMEMO® connector on the extension cable.

The active extension cable is then sensor-specific.

Types :

Extension cable, from NiCr-Ni compensation line

1 meter long (passive)

2 meters long (passive)

4 meters long (passive)

10 meters long (active, with EEPROM, sensor-specific)

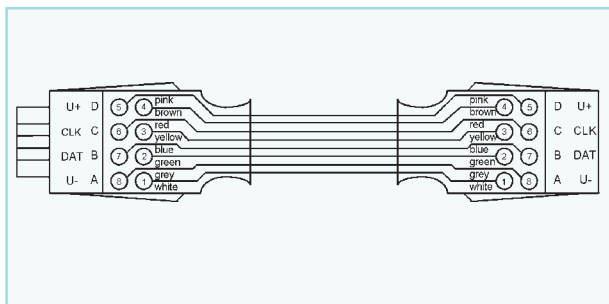
Order No. ZA9020VK1

Order No. ZA9020VK2

Order No. ZA9020VK4

Order No. ZA9020VKP10

Extension cable for all other measuring probes (except thermocouples)



Extensions up to 4 meters

Passive extension cables ZA9060VK

Passive 8-pin extension cables with ALMEMO® connectors are available in lengths of 1, 2, and 4 meters (ZA 9060 VK1/2/4); these are suitable for all sensors (except thermocouples).

The cable length between sensor connector and measuring instrument must not exceed four (4) meters; if this maximum length is exceeded, communications with the connector EEPROM may be adversely affected.

☞ The total length of all passive extension cables connected to an ALMEMO® measuring instrument must not exceed four (4) meters. If the total length exceeds this, the device's internal data bus may, depending on environmental conditions, be subject to interference.

Extensions, 5 meters and longer

Longer sensor lines

If distances exceeding this really are necessary, then - instead of extension cables - longer sensor lines should be used. For this purpose the sensor connector must be detached, the sensor cable extended in the conventional way, and the connector then refitted to the end.

Intelligent extension cables ZA9060-VKC

If for some reason it is not possible to extend the sensor cable itself, an active intelligent extension cable ZA9060-VKC incorporating a microcontroller and suitable for distances up to 100 meters can be used. This microcontroller transmits EEPROM data from the sensor connector slowly and interference-resistant in both directions and makes this data available for the measuring instrument. Sensors can thus be interchanged as and when necessary (e.g. calibrated sensors with correction values).

☞ Intelligent extension cables cannot be used for thermocouples or for sensors with a pulsed output or digital range (e.g. : turbines / rotating vanes FVA915, frequency / pulse / speed ZA9909AKx / FUA9192, AC / DC / NiCr-Ni measuring modules ZA99xx-AB, carbon dioxide sensor FYA600CO2H, thermoanemometer FVA935TH, meteo-multisensor FMA510, dew point sensor FHA646DTC1).

Types :

Extension cable for all other sensors (max. 5 meters passive)

1 meter long (passive)

2 meters long (passive)

4 meters long (passive)

5 meters long (intelligent, with microcontroller, not sensor-specific)

10 meters long (intelligent, with microcontroller, not sensor-specific)

20 meters long (intelligent, with microcontroller, not sensor-specific)

30 meters long (intelligent, with microcontroller, not sensor-specific)

50 meters long (intelligent, with microcontroller, not sensor-specific)

100 meters long (intelligent, with microcontroller, not sensor-specific)

Order No. ZA9060VK1

Order No. ZA9060VK2

Order No. ZA9060VK4

Order No. ZA9060VK5

Order No. ZA9060VK10

Order No. ZA9060VK20

Order No. ZA9060VK30

Order No. ZA9060VK50

Order No. ZA9060VK100

GENERAL ACCESSORIES

Thermo Add-On Printer



Accessories (for re-ordering):

Printer data cable	Order No. ZA1981DK
Roll temperature sensitive paper	Order No. ZK1080TP

Technical Data:

Print mechanism:	matrix, 7 x 9 dots
Interface:	RS232C 9-pin DSUB
Power supply:	integrated rechargeable battery/mains adapter
Power supply adapter:	6.5 V / 2 A
Characters:	40 / 80 characters per line
Paper:	temperature sensitive paper (UV-protected storage required), 112mm wide, roll: Ø 38mm
Operating temperature:	0° to 40°C
Dimensions:	H 66,5 x W 170 x D 160mm
Weight:	printer appr. 1kg mains adpter appr. 1kg

Extent of the delivery:

Thermo printer including
Mains adapter, printer data cable,
2 rolls of temperature sensitive paper **Order No. DK2081**

Stand



Types:

Large tripod stand
for complex, mobile
measurement setups

Order No. ZX9000ST3

GENERAL ACCESSORIES

Accessories for measuring instruments
ALMEMO® 2450, 2490, 2590
and output interface ZA8006RTA

new!

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Rubber safety holster, green
Rubber safety holster, gray

Order No. ZB2490GS1
Order No. ZB2490GS2



Top hat rail mounting
1 battery compartment cap with top hat rail holder fitted,
including top hat

Order No. ZB2490HS



Magnetic fastening
2 pot magnets, including 2 screws
(for battery compartment cap)

Order No. ZB2490MH

Batteries and Rechargeable Batteries



Types:

9V battery (spare)
Charger, int. in connector
incl. 9V bat.
9V rechargeable battery
AA battery, 1.5 V
AA NiMH rechargeable battery, 1.2 V, 1600 mA, coded
for charging in ALMEMO® unit
(e.g. ALMEMO® 2690-8)

Order No. ZB2000B9

Order No. ZB2000LS

Order No. ZB2000A9

Order no. ZB2000B1

Order no. ZB2000A1NM

GENERAL ACCESSORIES

Mains Adapter



Types:

- 12VDC, 200mA, DIN hollow connector, e.g. for ALMEMO® 2390, 8490 **Order No. ZB2290NA**
- 12 V DC, 1A, DIN hollow connector for ALMEMO 2890-9, 6290-7B2 **Order No. ZB1112NA7**
- 12 V DC, 200 mA, ALMEMO® connector for hand-held device ALMEMO® 2450, 2490, 2590 **Order No. ZA1312NA1**
- 12 V DC, 1A, ALMEMO® connector for ALMEMO® 2690-8 **Order No. ZA1312NA7**
- 12VDC, 1A, 3-pin bayonet coupling, for ALMEMO® 8590-9 **Order No. ZB1212NA7**
- 12VDC, 3A, 3-pin bayonet coupling, e.g. for ALMEMO® 5690, 8690 **Order No. ZB1212NA6**
- 12VDC, 200mA, with free ends **Order No. ZB1012NA1**
- 12VDC, 1A, with free ends **Order No. ZB1012NA7**

DC Power Supply Cables



Types:

- 10 to 30VDC, electr. isol., with DIN hollow connector for ALMEMO® 2390, 8490
Output: 12VDC/250mA (max.) **Order No. ZB2290UK**
- 10 to 30 V DC, electrically isolated, with DIN hollow connector for ALMEMO® 2890-9, 6290-7B2
Output : 12V DC / 1 A (max.) **Order No. ZB2590UK**
- 10 to 30 V DC, electrically isolated, with ALMEMO® connector for ALMEMO® 2450, 2490, 2590, 2690-8
Output: 12 V DC / 250 mA (max.) **Order no. ZA2690UK**
- 10 to 30VDC, electr. isol., with bayonet coupling for ALMEMO® 8590
Output: 12VDC/250mA (max.) **Order No. ZB3090UK**
- 10 to 30VDC, electr. isol., with bayonet coupling, for ALMEMO® 5690-9, 8690
output: 12V DC / 1.25A (max.) **Order No. ZB3090UK2**
- Adapter cable with universal car connector **Order No. ZB1000AKU**

- ▶ Usage for car and electric fence batteries.
- ▶ For instruments that need to be supplied from the car battery.

10/2008 We reserve the right to make technical changes.

GENERAL ACCESSORIES

Instrument Cases and Standby Bags

new!

10/2008 We reserve the right to make technical changes.



ZB2590TK2



ZB5600TK3



ZB2490TK



ZB2890TK



ZB2280LK



ZB5090RC

Types:

Carry cases (approx. dimensions in cm)

Carry case, large, aluminum profile frame / ABS (acrylonitrile butadiene styrene) - e.g. for ALMEMO® 2690 / 2890 hand-held devices, Inside dimensions 48 x 35 (WxD) x 6 (H) + 6 cm (removable insert)

Order No. ZB2590TK2

Carry case, universal, high, aluminum profile frame / ABS, e.g. for ALMEMO® 5690 measuring systems

Inside dimensions 48 x 25 (WxD) x 16 (H) + 10 cm (removable insert)

Order No. ZB5600TK3

Instrument case for ALMEMO 2690 / 2890, inside dimensions (WxDxH) 38 x 28 x 7 (divided into compartments, see photograph)

Order No. ZB2890TK

Instrument case for ALMEMO 2450 / 2490 / 2590, inside dimensions (WxDxH) 38 x 28 x 7 (divided into compartments, see photograph)

Order No. ZB2490TK

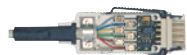
Storage case (light-weight version), inside dimensions (WxDxH) 43 x 33 x 6 (divided into compartments, see photograph)

Order No. ZB2280LK

Rack case (approx. dimensions in cm)

Rack case with carrying handle, for ALMEMO® MA5690xxBT8 measuring systems, in 19-inch sub-rack, 84 DU, height 5 HU Outside dimensions (WxDxH) 54 x 50 x 27, with integrated lockable rack draw, inside dimensions (WxDxH) 40 x 37 x 7 (for cables, accessories, or laptop)

Order No. ZB5090RC



ALMEMO® input connectors also available for your existing sensor equipment, see section 3. ALMEMO® output modules, e.g. data cables RS232, Ethernet, fiber optic transmission, relay adapter can be found in section 4.



Radio and modem transmission is described in Chapters 04 and 05.



Products for networking decentrally (locally) arranged ALMEMO® devices for central PC data acquisition can be found in section 5.



Software for the presentation and evaluation of measuring data, including many notes, is described in section 6. The software 'AMR-Control' for measurement setup and convenient device handling, as well as the manual, are included with the delivery of all ALMEMO® devices with digital outputs.