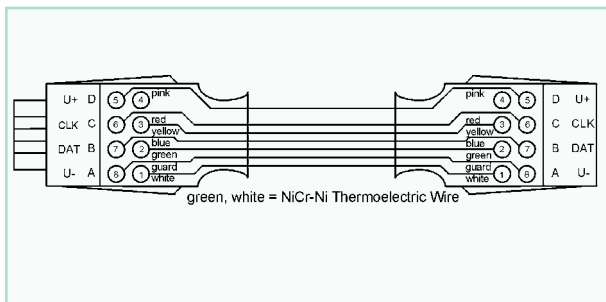


# GENERAL ACCESSORIES

## 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**

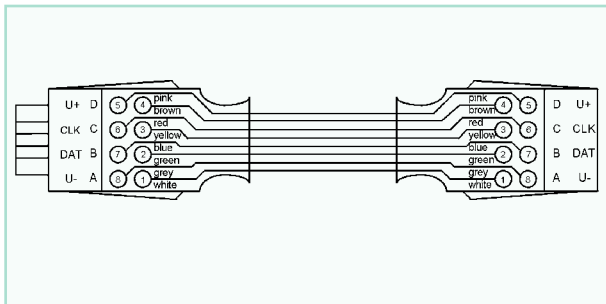
**Order no. ZA9020VK2**

**Order no. ZA9020VK4**

**Order no. ZA9020VKP10**

## Extension cable for all other measuring probes (except thermocouples)

**new!**



### 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.

#### New

#### Intelligent extension cable ZA 9090 VKC with RS485 from 5 meters and above

If the sensor cable cannot be extended as such, it is still possible to use new intelligent extension cable(s) ZA9060-VKC with microcontroller for up to 100 meters. Two microcontrollers transmit EEPROM data from the sensor connector and measured data from digital sensors (DIGI) in both directions via RS485 and make this interference-resistant data available for the measuring instrument. Sensors can thus be freely interchanged as and when necessary (e.g. calibrated sensors with correction values, multi-point calibration or special linearization (ZAxxxSS)).

- + These intelligent extension cables cannot be used for thermocouples or for sensors with a frequency / pulse output (e.g. turbines / rotating vanes FVA915, frequency / pulse / rotational speed ZA 9909 AKx / FUA 9192, DC measuring modules ZA 99xx AB).
- + When using extension cable(s) operation in sleep mode is not possible.

### Types :

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

- 1 meter long (passive)
- 2 meters long (passive)
- 4 meters long (passive)

#### New

- 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. ZA9090VKC5  
Order no. ZA9090VKC10  
Order no. ZA9090VKC20  
Order no. ZA9090VKC30  
Order no. ZA9090VKC50  
Order no. ZA9090VKC100

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# GENERAL ACCESSORIES

## GPS mouse for determining position

**new!**



### Variants

Fix for current location via GPS  
Measuring channels for latitude and longitude

GPS mouse with cable and ALMEMO® connector

**Order no. ZAD919GPS**

## Thermo Add-On Printer



### 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

### Accessories (for re-ordering):

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

### 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

07

Accessories for measuring instruments  
ALMEMO® 2450, 2490, 2590  
and output interface ZA 8006 RTA

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Rubber safety holster, green  
Rubber safety holster, gray  
including carry strap

**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)

**Order no. ZB2000B9**

Charger, int. in connector  
incl. 9V bat.

**Order no. ZB2000LS**

9V rechargeable battery

**Order no. ZB2000A9**

AA battery, 1.5 V

**Order no. ZB2000B1**

AA NiMH rechargeable battery, 1.2 V, 1600 mA, coded  
for charging in ALMEMO® unit  
(e.g. ALMEMO® 2690-8)

**Order no. ZB2000A1NM**

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# GENERAL ACCESSORIES

## Mains Adapter



ZA 1312 NA8



ZA 1312 NA9

**new!**

### Variants

Switching power supply / connector variant 90 to 260 VAC

12 VDC, 1 A DIN hollow connector

for ALMEMO® 2890-9, 6290-7B2 **Order no. ZB1112NA8**

12 VDC, 1 A ALMEMO® connector e.g. for hand-held devices

ALMEMO® 2450, 2490, 2590, 2690 **Order no. ZA1312NA8**

12 VDC, 1 A 3-pin bayonet coupling e.g.

for ALMEMO® 8590-9

**Order no. ZB1212NA8**

12 VDC, 2.5 A 3-pin bayonet coupling

e.g. for ALMEMO® 5690, 8690

**Order no. ZB1212NA9**

12 VDC, 1 A With free ends

**Order no. ZB1012NA8**

12 VDC, 2.5 A With free ends

**Order no. ZB1012NA9**

### Accessories

Conversion connector for mains-powered devices

Euro-plug to US standard (flat-pin) **Order no. ZB1000UA**

## 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**

Output: 12 V DC / 1 A (max.)

**Order no. ZA2690UK2**

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**

**New** ALMEMO® power supply plug, 9 to 12 VDC, not electr.  
isolated, with clamp connector for ALMEMO® DC socket on  
hand-held devices ALMEMO® 2450, 2490, 2590, 2690

Programming 0.2 A

**Order no. ZA1312FS1**

Programming 1 A

**Order no. ZA1312FS8**

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



## Instrument Cases and Standby Bags



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 connector also for existing sensors (see Chapter 03)

ALMEMO® output modules (analog, relay, trigger) (see Chapter 04)



ALMEMO® data connection, network technology, Bluetooth modules

Wireless and modem transmission (see Chapter 05).



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.

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