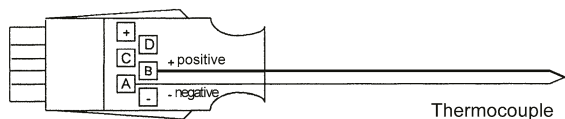


# Input connectors and adapter cables

## ALMEMO® Connector for Thermocouple Types K, N, J, T



**new:** Digital ALMEMO® D7 measuring plug, see page 02.06

- One single plug for different thermocouple types (programmable).
- Fast measuring rate for dynamic temperature changes.
- Best linearization accuracy thanks to calculation methods.
- Calibrated sensor independent of the measuring instrument.
- Increased accuracy thanks to multi-point adjustment.

### Variants ( with thermal material)

Model	Meas. Range	Resolution	Order no.
NiCr-Ni (K)	-200.0 to +1370.0°C.	0.1 K	<b>ZA9020FS</b>
NiCroSil-NiSil (N)	-200.0 to +1300.0°C.	0.1 K	<b>ZA9021FSN</b>
Fe-CuNi (J)	-200.0 to +1000°C.	0.1 K	<b>ZA9021FSJ</b>
Cu-CuNi (T)	-200.0 to +400°C.	0.1 K	<b>ZA9021FST</b>

## ALMEMO® measuring module for thermocouples, types K, J, T, electrically isolated, up to 1000 V Type ZAD 950 AB



- Electrically isolated measurement of thermocouples (in particular bare thermo-wire types) on live parts
- Digital transfer of measured values to the ALMEMO® measuring instrument
- Connecting cable, fitted with ALMEMO® plug

### Technical data

Sensor	Thermocouple		
Measuring range		Electrical isolation	1 kV DC/AC permanent, 4 kV for 1s
ZAD950ABK	NiCr-Ni (K) -200 to 1370 °C	Sensor connection	4-mm safety sockets and safety plugs (with screw terminals)
ZAD950ABJ	Fe-CuNi (J) -200 to 1000 °C	Power supply	6 to 13 VDC via ALMEMO® device
ZAD950ABT	Cu-CuNi (T) -200 to 400 °C	Current consumption	approx. 30 mA
Resolution	0.1 K	Connecting cable	1.5 meters with ALMEMO® plug
Linearization accuracy	±0.05 K ±0.05 % of measured value	Housing	Dimensions (LxWxH) 127x83x38mm, ABS (acrylonitrile butadiene styrene)
Precision class	C (see page 01.05)		
Measuring rate	2.5 measurements/sec.		

### Types:

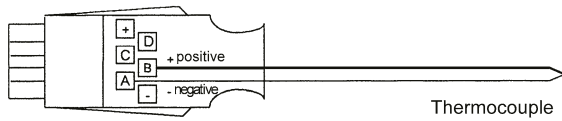
- ALMEMO® measuring module for NiCr-Ni (K), including 1.5 meters ALMEMO® connecting cable
  - ALMEMO® measuring module for Fe-CuNi (J) including 1.5 meters ALMEMO® connecting cable
  - ALMEMO® measuring module for Cu-CuNi (T) including 1.5 meters ALMEMO® connecting cable
- Please note : thermocouple must be ordered extra; e.g. thermo-wires see Chapter Temperature

**Order no.**  
**ZAD950ABK**  
**ZAD950ABJ**  
**ZAD950ABT**

DAkS- or Factory calibration KE90xx, electrically, for digital measuring module, see Chapter Calibration.  
 DAkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.

# Input connectors and adapter cables

## ALMEMO® Connector for Thermocouple Types U, L, S, R, B, AuFe-Cr



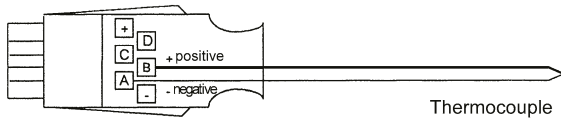
**new:** Digital ALMEMO® D7 measuring plug, see page 02.06

- One single plug for different thermocouple types (programmable).
- Fast measuring rate for dynamic temperature changes.
- Best linearization accuracy thanks to calculation methods.
- Calibrated sensor independent of the measuring instrument.
- Increased accuracy thanks to multi-point adjustment.

### Types

Model	Meas. Range	Resolution	Order no.
Cu-CuNi (U)	-200.0 to +600.0°C	0.1 K	ZA9000FSU
Fe-CuNi (L)	-200.0 to +900°C.	0.1 K	ZA9000FSL
PtRh10-Pt (S)	0.0 to +1760.0°C	0.1 K	ZA9000FSS
PtRh13-Pt (R)	0.0 to +1760.0°C	0.1 K	ZA9000FSR
PtRh30-PtRh6 (B)	+400.0 to +1800.0°C	0.1 K	ZA9000FSB
AuFe-Cr (A)	-270.0 to +60.0°C	0.1 K	ZA9000FSA

## ALMEMO® Connector with integrated cold junction sensor for all thermocouples



For especially exacting applications demanding the highest possible level of precision or performed under unfavorable conditions (e.g. subject to thermal irradiation)

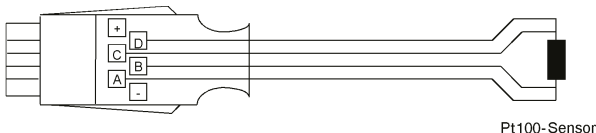
### Programming:

- 1st channel, NTC, integrated cold junction sensor, resolution 0.01 K
- 2nd channel, thermocouple, resolution 0.1 K; please specify type !

### Types:

Model	Meas. Range	Resolution	Order no.
NiCr-Ni (K)	-200.0 to +1370.0°C.	0.1 K	ZA9400FSK
NiCroSil-NiSil (N)	-200.0 to +1300.0°C.	0.1 K	ZA9400FSN
Fe-CuNi (L)	-200.0 to +900°C.	0.1 K	ZA9400FSL
Fe-CuNi (J)	-200.0 to +1000°C.	0.1 K	ZA9400FSJ
Cu-CuNi (T)	-200.0 to +400°C.	0.1 K	ZA9400FST
Cu-CuNi (U)	-200.0 to +600.0°C	0.1 K	ZA9400FSU
PtRh10-Pt (S)	0.0 to +1760.0°C	0.1 K	ZA9400FSS

## ALMEMO® Connector for Pt100 Sensors/Pt1000 Sensors



**New:** Digital ALMEMO® D7 measurement plug, see page 02.07

- Applicable for Pt100 sensors.
- High resolution of 0.01 K up to 850 °C.
- Linearization with calculation method.
- Calibrated sensor independent from the measuring instrument.
- Increased accuracy due to multi-point adjustment.

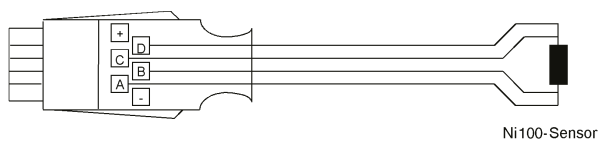
### Types:

Model	Meas. Range	Resolution	Order no.
Pt100 4-conductor	-200.0 to +850.0°C	0.1 K	ZA9030FS1
Pt100 4-conductor	-200.0 to +400.0°C *	0.01 K	ZA9030FS2
Pt1000 4-conductor	-200.0 to +850.0°C *	0.1 K	ZA9030FS4
Pt1000 4-conductor	-200.0 to +400.0°C *	0.01 K	ZA9030FS5

\* Data may vary depending on device; (see data sheet per device)

# Input connectors and adapter cables

## ALMEMO® Connector for Ni100 Sensors/Ni1000 Sensors



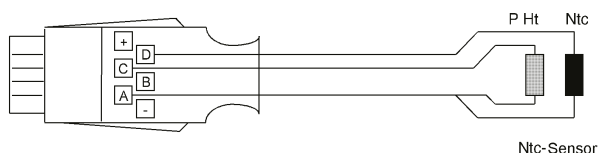
### Types:

Model	Meas. Range	Resolution
Ni100	-60.0 to +240.0°C	0.1 K
Ni1000	-60.0 to +240.0°C	0.1 K

### Order no.

**ZA9030FS3**  
**ZA9030FS6**

## ALMEMO® Connector for Ntc Sensors



**New:** Digital ALMEMO® D6 measurement plug, see page 02.07

- Applicable for NTC sensors.
- High resolution of up to 0.001 K (-20 to 65 °C).
- Linearization with calculation method.
- Input of the Steinhart-Hart coefficients is possible.
- Calibrated sensor independent from the measuring instrument
- Increased accuracy due to multi-point adjustment.

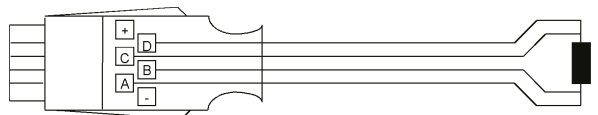
### Types:

Model	Meas. Range	Resolution
Ntc Typ N	-50.0 to +125.0°C	0.01 K
2xNtc Typ N	-50.0 to +125.0°C	0.01 K no electrical isolation

### Order no.

**ZA9040FS**  
**ZA9040FS2**

## ALMEMO® Connector for Resistance



### Technical Data ZA9003SS4:

Connection	2-wire
Linearization accuracy:	±0,2 % ± 0,02 kOhm
	Linearization is saved in the ALMEMO® connector; (this is not available with ALMEMO® 2450, 8390)

### Types:

Model	Meas. Range	Resolution
Ohm	0.00 to 500.00	0.01 Ω*
Ohm	0.0 to 5000.0*	0.1 Ω*
kOhm	0 to 110.00 kOhm	0.01 kOhm

### Order no.

**ZA9003FS**  
**ZA9003FS2**  
**ZA9003SS4**

\* Data may vary depending on device; (see data sheet per device)