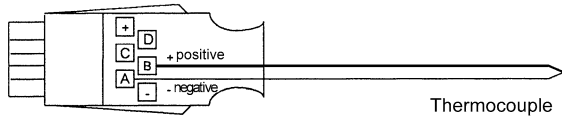


Input connectors and adapter cables

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



new: Digital ALMEMO® D7 measuring plug, see page 02.24

- 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	ZA9020FS
NiCroSil-NiSil (N)	-200.0 to +1300.0°C.	0.1 K	ZA9021FSN
Fe-CuNi (J)	-200.0 to +1000°C.	0.1 K	ZA9021FSJ
Cu-CuNi (T)	-200.0 to +400°C.	0.1 K	ZA9021FST

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

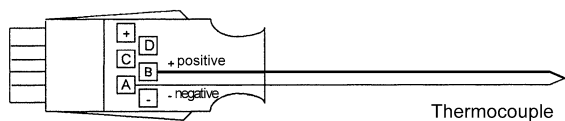
Types:

Types:	Order no.
ALMEMO® measuring module for NiCr-Ni (K), including 1.5 meters ALMEMO® connecting cable	ZAD950ABK
ALMEMO® measuring module for Fe-CuNi (J) including 1.5 meters ALMEMO® connecting cable	ZAD950ABJ
ALMEMO® measuring module for Cu-CuNi (T) including 1.5 meters ALMEMO® connecting cable	ZAD950ABT
Please note : thermocouple must be ordered extra; e.g. thermo-wires see Chapter Temperature	

DAkkS- or Factory calibration KE90xx, electrically, for digital measuring module, see Chapter Calibration.
DAkkS 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



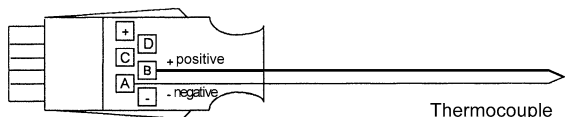
new: Digital ALMEMO® D7 measuring plug, see page 02.24

- 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)

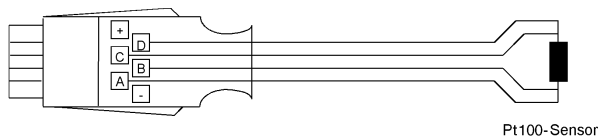
Programming:

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 02.06

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

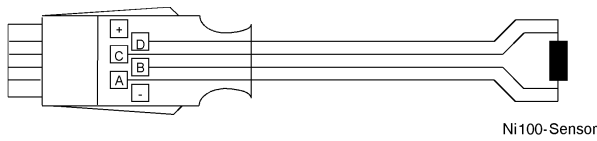
Types:

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

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

Input connectors and adapter cables

ALMEMO® Connector for Ni100 Sensors/Ni1000 Sensors

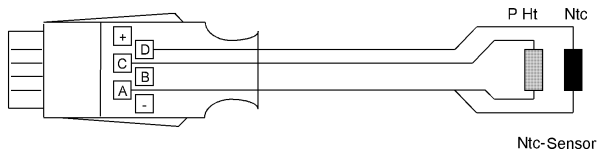


Ni100-Sensor

Types:

Model	Meas. Range	Resolution	Order no.
Ni100	-60.0 to +240.0°C	0.1 K	ZA9030FS3
Ni1000	-60.0 to +240.0°C	0.1 K	ZA9030FS6

ALMEMO® Connector for Ntc Sensors



Ntc-Sensor

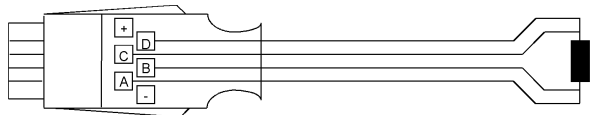
New: Digital ALMEMO® D6 measurement plug, see page 02.07

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

Types:

Model	Meas. Range	Resolution	Order no.
Ntc Typ N	-50.0 to +125.0°C	0.01 K	ZA9040FS
2xNtc Typ N	-50.0 to +125.0°C	0.01 K no electrical isolation	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	Order no.
Ohm	0.00 to 500.00	0.01 Ω*	ZA9003FS
Ohm	0.0 to 5000.0*	0.1 Ω*	ZA9003FS2
kOhm	0 to 110.00 kOhm	0.01 kOhm	ZA9003SS4

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