

ALMEMO® MEASURING INSTRUMENTS

ALMEMO® Measuring Ranges

Type of Sensor	Model	Meas. Range	Dim.	Resol.	Linearisation Accuracy	Connector Progr.
Resistance-based temperature sensors:						
Pt100/1000-1 4-conductor	FP Axxx	-200.0 ... +850.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9030-FS1 / 4
Pt100/1000-2 4-conductor	FP Axxx	-200.00 ... +400.00*	°C	0.01 K	±0.05 K	ZA 9030-FS2 / 5
Pt100-3 4-conductor	FP Axxx	0.00 ... +65.00*	°C	0.001 K	±0.005 K	ZA 9030-FS7
Ni100/1000 4-conductor		-60.00 ... +240.00	°C	0.1 K	±0.05 K	ZA 9030-FS3 / 6
Ntc type N	FN Axxx	-50.00 ... +125.00	°C	0.01 K	±0.05 K	ZA 9040-FS
Thermocouples:						
NiCr-Ni (K)	FT Axxx	-200.0 ... +1370.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9020-FS
NiCroSil-Nisil (N)		-200.0 ... +1300.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9020-FSN
Fe-CuNi (L)		-200.0 ... +900.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9021-FSL
Fe-CuNi (J)		-200.0 ... +1000.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9021-FSJ
Cu-CuNi (U)		-200.0 ... +600.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9000-FSU
Cu-CuNi (T)		-200.0 ... +400.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	ZA 9021-FST
PtRh10-Pt (S)		0.0 ... +1760.0	°C	0.1 K	±0.3 K	ZA 9000-FSS
PtRh13-Pt (R)		0.0 ... +1760.0	°C	0.1 K	±0.3 K	ZA 9000-FSR
PtRh30-PtRh6 (B)		+400.0 ... +1800.0	°C	0.1 K	±0.3 K	ZA 9000-FSB
AuFe-Cr		-270.0 ... +60.0	°C	0.1 K	±0.1 K	ZA 9000-FSA
Electrical and digital signals:						
Millivolt DC		-10.0 ... +55.0	mV	1 µV	-	ZA 9000-FS0
Millivolt 1 DC		-26.0 ... +26.0	mV	1 µV	-	ZA 9000-FS1
Millivolt 2 DC		-260.0 ... +260.0	mV	0.01 mV	-	ZA 9000-FS2
Volt DC		-2.6 ... +2.6*	V	0.1 mV	-	ZA 9000-FS3
Volt DC		-26 ... +26	V	1 mV	-	ZA 9602-FS
for measuring bridges, supply 5V (example)		-26.0 ... +26.0	mV	1 µV	-	ZA9650FS1V
for potentiometer, supply 2.5V		-2.6 ... +2.6*	V	0.1mV	-	ZA9025FS3
Volt AC (50Hz...2kHz) (example)		0 ... +26	V	0.1 V	-	ZA 9603-AK3
Volt AC (11Hz...250Hz) (example)		0 ... +400	V	1 V	-	ZA 9903-AB5
Ampere AC (11Hz...250Hz) (example)		0 ... +10.00	A	0.01 A	-	ZA 9904-AB2
Volt DC (sampling rate 1kHz) (example)		0 ... +400	V	1 V	-	ZA 9900-AB5
Ampere DC (sampling rate 1kHz) (example)		0 ... +10.00	A	0.01 A	-	ZA 9901-AB4
Milliamper DC		-32.0 ... +32.0	mA	1 µA	-	ZA 9601-FS1
Percent (4-20mA DC)		0.0 ... 100.0	%	0.01 %	-	ZA 9601-FS2
Ohm		0.00 ... 500.00*	Ω	0.01 Ω	-	ZA 9003-FS
Ohm		0.0 ... 5000.0*	Ω	0.1 Ω	-	ZA 9003-FS2
Frequency		0 ... 15000	Hz	1 Hz	-	ZA 9909-AK1U
Pulses/measuring cycle		0 ... 65000			-	ZA 9909-AK2U
Digital interface		0 ... 65000			-	ZA 9919-AKxx
Digital input		0.00... 100.00	%		-	ZA 9000-ES2
Infrared sensors:						
Infrared 1	FI A628-1/5xSS	0.0 ... +200.0	°C	0.1 K	±0.05 K ±0.05 % of meas.v.	
Infrared 4	FI A628-4xSS	-30.0 ... +100.0	°C	0.1 K	±0.05 K	
Infrared 6	FI A628-6xSS	0.0 ... +500.0	°C	0.1 K	±0.1 K ±0.05 % of meas.v.	
Capacitive humidity sensors:						
Relative humidity	FH A646	5.0 ... 98.0	%H	0.1 %	-	
Relative humidity with TC	FH A646-R	5.0 ... 98.0	%H	0.1 %	±0.5 %	
Dew point temperature		-25.0 ... 100.0	°C	0.1 K	±0.2 K	
Mixture ratio		0.0 ... 500.0	g/kg	0.1 g/kg	±0.5 % of meas.v.	
Partial vapour pressure		0.0 ... 1013.2	mbar	0.1 mbar	±0.1 mbar ±0.1 % of meas.v.	
Enthalpy		0.0 ... 400.0	kJ/kg	0.1 kJ/kg	±0.5 % of meas.v.	
Psychrometer	FN A846					ZA 9846-AK
Humid temperature		0.00 ... +100.00	°C	0.01 K	±0.05 K	
Relative humidity		0.0 ... 100.0	%H	0.1 %	±1.0 %H	
Dew point temperature		-25.0 ... 100.0	°C	0.1 K	±0.2 K	
Mixture ratio		0.0 ... 500.0	g/kg	0.1 g/kg	±0.5% of meas.v.	
Partial vapour pressure		0.0 ... 1013.2	mbar	0.1 mbar	±0.1 mbar ±0.1% of meas.v.	
Enthalpy		0.0 ... 400.0	kJ/kg	0.1 kJ/kg	±0.5% of meas.v.	

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