

ALMEMO® MEASURING INSTRUMENTS

Measuring ranges ALMEMO® 2450, 2490, 2590

Type of sensor / Meas. ranges	Designation	MA2450-x	MA2490-x	MA2590-x
Temperature				
Thermocouples:				
NiCr-Ni Typ K (NiCr)	FTAxxx	X	X	X
NiCroSil-NiSi Typ N (NiSi)		X	X	X
Fe-CuNi Typ L/J (FeCo/IrCo)		X	X	X
Cu-CuNi Typ U/T (CuCo/CoCo)		X	X	X
PtRh10-Pt Typ S (Pt10)		X	X	X
PtRh13-Pt Typ R (Pt13)		range	X	X
PtRh30-PtRh6 Typ B (EL18)		range	X	X
AuFe-Cr (AuFe)		range	X	X
Resistor-based temperature sensor:				
Pt100/1000 (P104, P204)	FPAxxx	range	X	X
Ni100/1000 (N104)		range	X	X
NTC Typ N (NTC)	FNAxxx	X	X	X
Heat flow	FQAxxx	X	X	X
Air humidity				
Capacitive with NTC	FHA646xxx	X	X	X
Digital humidity/temperature	FHAD 46x	X	X	X
Digital humidity/temperature	FHAD 36 Rx	X	X	X
Psychrometric with NTC	FNA846,FNA8463, FNA8463	range	X	X
Psychrometric with Pt100	FPA8363	range	X	X
Dew-point				
Digital dew-point sensor	FHA646DTC1	X	X	X
Dew-point detector	FHA9461	X	X	X
Moisture				
Water detector probe	FHA936WD	X	X	X
Moisture sensor	FHA696MF	function	function	
Wood moisture sensor	FHA636MF	X	X	X
Material moisture sensor for granulates	FHA696GF1	X	X	X
Tensiometer for moisture in the soil	FDA602TM1	X	X	X
air flow				
Rotating vanes for air and gases	FVA915sxxx, FVA915MA1	X*	X*	X
Pilotes tubes for differential pressure	FDA602S1K, FDA602S6K	adjustment	X*	X
Thermo-anemometer probe	FVA935THxx	X*	X*	X
Thermoelectric flow sensor	FVA605TAXx	X*	X*	X
* no average channel for flow measurement possible (no start of a continuous or cyclic measurement possible), only possible for MA2590				
Pressure				
Pressure transducer for liquid and gaseous substances	FDA602Lxx	X	X	X
Temp.-compensated pressure sensors	FD8214	X	X	X
Differential transmitter	FDA602D	X	X	X
Pressure sensor for wall mounting	FD8612DPS/APS/DPT	X	X	X
Barometric pressure	FDA612SA	range	X	X
Connector for differential pressure	FDA612SR,FDA602SxK	range	X	X
Force				
Tension and compression	FKA xxx	X*	X*	X
* only temporary zero-correction possible (no final value adjustment)				
Rotational speed sensor				
Rotational speed sensor	FUA9192	X	X	X

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Displacement				
Displacement sensor, potentiometric	FWAxxxT	X*	X*	X
Displacement tracer, potentiometric	FWAxxxTR	X*	X*	X
* only temporary zero-correction possible (no final value adjustment)				
Flow				
Axial turbine flowmeter for liquids	FVA915VTHxxx	X	X	X
Flow sensor with temperature	FVA645 GVCx	X	X	X
Electrical variables				
Split-core	FEA6042, FEA604MN, FEA6044N	X X	X X	X X
Almemo® measuring modules for				
DC voltage, DC current	ZA9900ABx, ZA9901ABx, ZA9903ABx, ZA9904ABx	X	X	X
AC voltage, AC current	FUA919SZ	function	function	X
Meteorology				
Meteo-multisensor	FMA510, FMA510H	function	X	X
Wind velocity sensor	FVA615-2	X	X	X
Wind direction sensor	FVA614	X	X	X
Rainfall sensor	FRA916, FRA916H	function	function	X
Precipitation detector	FRA616D	X	X	X
Radiation probe	FLA613x	X	X	X
Star paranometer	FLA628S	X	X	X
Room air conditions				
Globe thermometer	FPA805GTS	range	X	X
Optical radiation				
Radiation probe	FLA 603 x	X	X	X
Radiation probe	FLA 613 x	X	X	X
Radiation probe	FLA 623 x	X	X	X
Water analysis				
pH one bar measuring chain	FY96PHx	adjustment	X	X
Redox one bar measuring chain	FY96RXEK	adjustment	X	X
Conductivity probe	FYA641LFxxx	range/adjustment	X	X
Oxygen sensor	FYA64002	adjustment	X	X
Gas concentration in air				
Carbon dioxide sensor, hand held	FYA600CO2H	X	X	X
Carbon dioxide probe	FYA600CO2	range	X	X
Carbon monoxide probe	FYA600CO	X	X	X
Oxygen probe	FYA600O2	adjustment	X	X
Ozone measuring, meas. transducer	FYA600O3	X	X	X
Gas probes	FYA600Ax	X	X	X
Infrared temperature measurement				
ALMEMO® infra-red probe head	FIA 844	X	X	X
IR probe head	MR 7838, MR 7842	X	X	X
Hand-held IR device	MR 781420 SB	X	X	X

Conditions that lack for a correct functioning :

- **range:** lacking or limited measuring range > measured value cannot be displayed
- **function:** lack of function, in order to show sensor-specific measuring data (e.g. average / cycle) or to make necessary programming
- **adjustment:** no measuring-value adjustment of the sensor possible (pressure, force, displacement, O₂, pH, conductivity)