

**Outside Temperature Sensor**

Active sensor (4...20 mA) for measuring temperature in outdoor areas. Typical applications at cold stores, greenhouses, production plants and warehouses. NEMA 4X / IP65 rated enclosure.


**Type Overview**

Type	Output signal active temperature	Additional features
22UT-54	4...20 mA	External sensor

**Technical Data**

<b>Electrical Data</b>	Power supply DC	15...24 V, $\pm 10\%$ , 0.5 W			
	Electrical connection	Removable spring loaded terminal block max. 2.5 mm <sup>2</sup>			
	Cable entry	Cable gland with strain relief $\varnothing 6...8$ mm (1/2" NPT conduit adapter included)			
<b>Functional Data</b>	Multirange	8 measuring ranges selectable			
	Output signal active note	current output: max. 500 $\Omega$ load			
	Application	air			
<b>Measuring Data</b>	Measuring values	temperature			
	Measuring range temperature	Active sensor: range selectable Attention: max. measuring temperature is restricted by max. fluid temperature (see Safety data)			
		Setting	range [°C]	range [°F]	Factory setting
		S0	-50...50°C	-30...130°F	✓
		S1	-10...120°C	0...250°F	
		S2	0...50°C	40...140°F	
		S3	0...250°C	30...480°F	
		S4	-15...35°C	0...100°F	
		S5	0...100°C	40...240°F	
		S6	-20...80°C	40...90°F	
		S7	0...160°C	0...150°F	
	Accuracy temperature active	$\pm 0.9^\circ\text{F}$ @ 70°F [ $\pm 0.5^\circ\text{C}$ @ 21°C]			
<b>Materials</b>	Cable gland	PA6, black			
	Mounting plate	Lexan, gray RAL7001			
	Housing	cover: lexan, gray base: lexan, gray seal: 0467 NBR70, black UV resistant			

<b>Safety Data</b>	Ambient humidity	max. 95% r.H., non-condensing
	Ambient temperature	-30...120°F [-35...50°C]
	Fluid temperature	-30...120°F [-35...50°C]
	Housing surface temperature	max. 160°F [70°C]
	Protection class IEC/EN	III protective extra-low voltage (pelv)
	Protection class UL	UL Class 2 Supply
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Certification UL	cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9
	Degree of protection IEC/EN	IP65
	Quality Standard	ISO 9001

**Safety Notes**


This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Remarks**
**General Remarks Concerning Sensors**

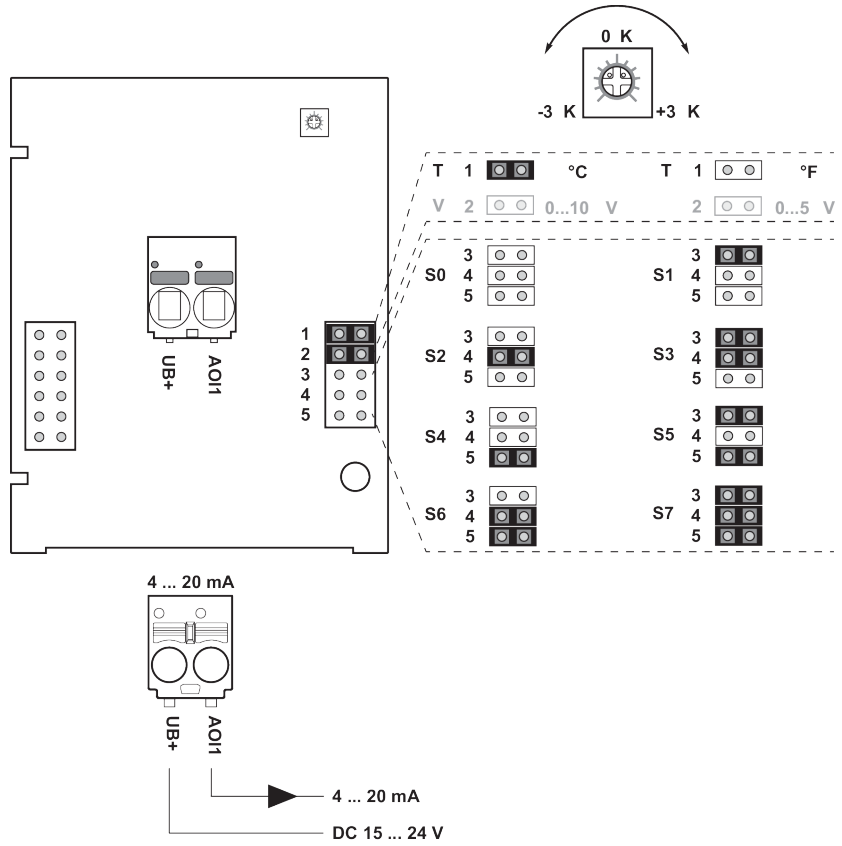
When using lengthy connection wires (depending on the cross section used) the measuring result might be falsified due to a voltage drop at the common GND-wire (caused by the voltage current and the line resistance). In this case, 2 GND-wires must be wired to the sensor - one for supply voltage and one for the measuring current.

Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage ( $\pm 0.2$  V). When switching the supply voltage on/off, onsite power surges must be avoided.

**Scope of delivery**

Scope of delivery	Description	Type
	Mounting plate S housing	A-22D-A09
	Dowel	
	Screws	
	1/2" NPT conduit adapter	

Wiring Diagram

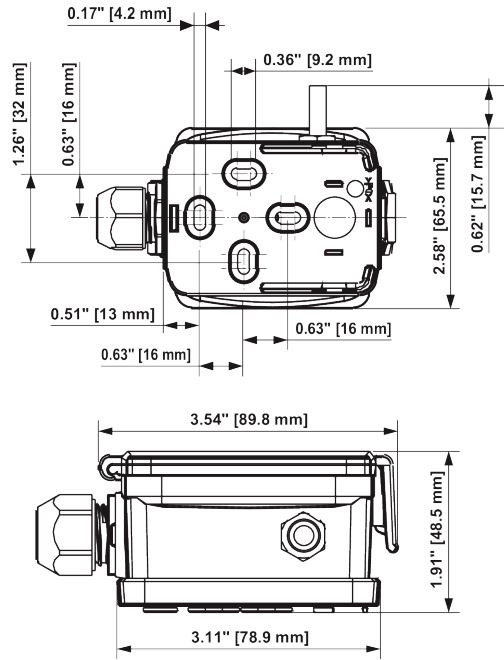


The adjustment of the measuring ranges is made by changing the bonding jumpers. The output value in the new measuring range is available after 2 seconds.

Setting	range [°C]	range [°F]	Factory setting
S0	-50...50°C	-30...130°F	✓
S1	-10...120°C	0...250°F	
S2	0...50°C	40...140°F	
S3	0...250°C	30...480°F	
S4	-15...35°C	0...100°F	
S5	0...100°C	40...240°F	
S6	-20...80°C	40...90°F	
S7	0...160°C	0...150°F	

Dimensions

Dimensions



Type	Probe length	Weight
22UT-54	1" [25 mm]	0.29 lb [0.13 kg]