

**Duct / Immersion Temperature Sensor**

Active sensor (4 to 20 mA) for measuring temperature in duct applications. In combination with a stainless steel or brass thermowell can also be used for pipe applications. NEMA 4X / IP65 rated enclosure.


**Type Overview**

Type	Output Signal	Probe Length	Probe Diameter
	Active Temperature		
22DT-54H	4...20 mA	2" [50 mm]	0.24" [6 mm]
22DT-54L	4...20 mA	4" [100 mm]	0.24" [6 mm]
22DT-54N	4...20 mA	6" [150 mm]	0.24" [6 mm]
22DT-54P	4...20 mA	8" [200 mm]	0.24" [6 mm]
22DT-54R	4...20 mA	12" [300 mm]	0.24" [6 mm]
22DT-54T	4...20 mA	18" [450 mm]	0.24" [6 mm]

**Technical Data**

<b>Electrical Data</b>	Power Supply DC	15...24 V, ±10%, 0.5 W			
	Cable Entry	cable gland PG11 Ø6 to 10 mm, with strain relief Ø6 to 8 mm, 1/2" conduit adapter included			
<b>Functional Data</b>	Multirange	8 fields selectable			
	Output Signal Active Note	current output: max. 500 Ω load			
	Media	air water			
<b>Measuring Data</b>	Measured Values	temperature			
	Measuring range temperature	Active sensor: range selectable Attention: max. measuring temperature is restricted by max. medium temperature (see Safety data) Setting    range [°C]    range [°F]    Factory setting			
		S0	-50°C to 50°C	-30°F to 130°F	
		S1	-10°C to 120°C	0°F to 250°F	
		S2	0°C to 50°C	40°F to 140°F	
		S3	0°C to 250°C	30°F to 480°F	
		S4	-15°C to 35°C	0°F to 100°F	
		S5	0°C to 100°C	40°F to 240°F	
		S6	-20°C to 80°C	40°F to 90°F	
		S7	0°C to 160°C	0°F to 150°F	✓
	Accuracy temperature active	±0.5 °C @ 21 °C			

<b>Materials</b>	Cable Gland	plug adapter: PA66, black nut: PA6, black
	Housing	cover: lexan, Belimo orange NCS S0580-Y6OR base: lexan, Belimo orange NCS S0580-Y6OR seal: 0467 NBR70, black
<b>Safety Data</b>	Ambient Humidity	85% RH non-condensing
	Ambient Temperature	-30°F to 120°F [-35°C to 50°C]
	Medium Temperature	-60°F to 320°F [-50°C to 160°C]
	Housing Surface Temperature (Tsurf)	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 and IEC/EN 60730-2-9
	Certification UL	cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9, CE acc. to 2004/108/EC and 2006/95/EC, NEMA 4X, IP65, UL Enclosure Type 4X
	Degree of Protection IEC/EN	IP65
	Degree of Protection NEMA/ UL	NEMA 4X
	Quality Standard	ISO 9001
Weight	0.10 lbs	

**Safety Notes**


The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorized modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

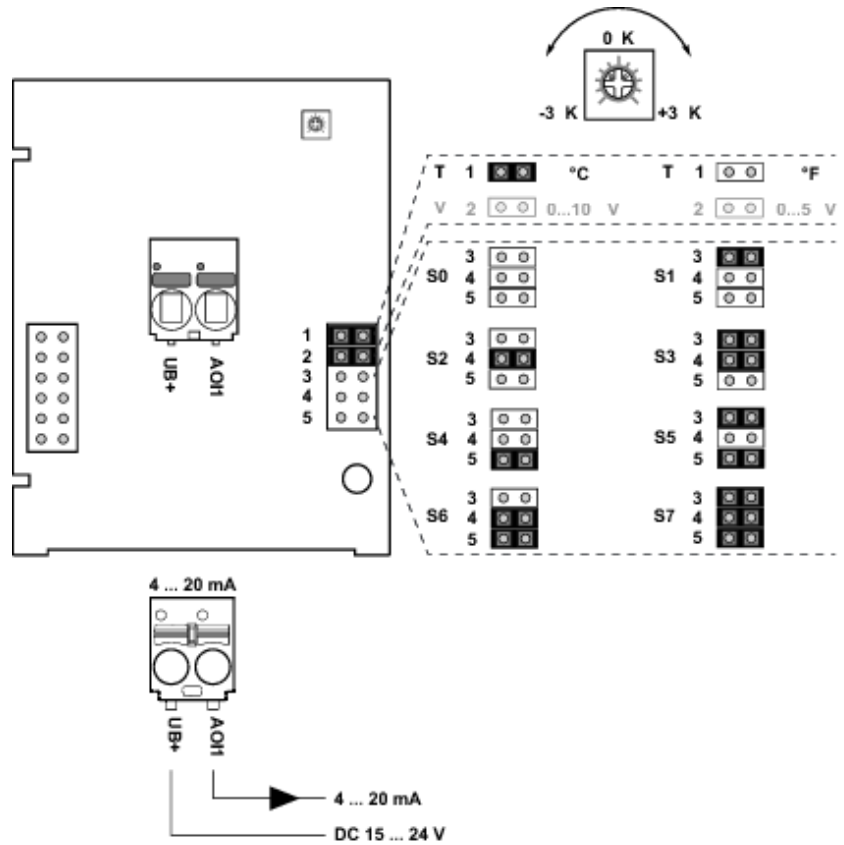
Accessories

**Scope of Delivery** mounting clip  
screws  
adhesive foil  
cable gland nut conduit 1/2" NPT

Optional accessories air	Description	Type
	Mounting flange 0.24" [6 mm], plastic (adjustable), up to max. 248°F [120°C]	A-22D-A03
	Mounting flange 0.24" [6 mm], brass, up to max. 500°F [260°C]	A-22D-A05

Recommended accessories water	Description	Type
	thermowell pocket, stainless steel, 2" [50 mm], 1/2" NPT, wrench size 3/4"	A-22P-A05
	thermowell pocket, brass, 2" [50 mm], 1/2" NPT, wrench size 3/4"	A-22P-A17
	thermowell pocket, stainless steel, 2" [50 mm], 1/2" NPT, wrench size 3/4"	A-22P-A36
	thermowell pocket, stainless steel, 4" [100 mm], 1/2" NPT, wrench size 3/4"	A-22P-A07
	thermowell pocket, brass, 4" [100 mm], 1/2" NPT, wrench size 3/4"	A-22P-A19
	thermowell pocket, stainless steel, 4" [100 mm], 1/2" NPT, wrench size 3/4"	A-22P-A37
	thermowell pocket, stainless steel, 6" [150 mm], 1/2" NPT, wrench size 3/4"	A-22P-A09
	thermowell pocket, brass, 6" [150 mm], 1/2" NPT, wrench size 3/4"	A-22P-A21
	thermowell pocket, stainless steel, 6" [150 mm], 1/2" NPT, wrench size 3/4"	A-22P-A38
	thermowell pocket, stainless steel, 8" [200 mm], 1/2" NPT, wrench size 3/4"	A-22P-A11
	thermowell pocket, brass, 8" [200 mm], 1/2" NPT, wrench size 3/4"	A-22P-A23
	thermowell pocket, stainless steel, 8" [200 mm], 1/2" NPT, wrench size 3/4"	A-22P-A39
	thermowell pocket, stainless steel, 12" [300 mm], 1/2" NPT, wrench size 3/4"	A-22P-A13
	thermowell pocket, brass, 12" [300 mm], 1/2" NPT, wrench size 3/4"	A-22P-A25
	thermowell pocket, stainless steel, 18" [450 mm], 1/2" NPT, wrench size 3/4"	A-22P-A15
	thermowell pocket, brass, 18" [450 mm], 1/2" NPT, wrench size 3/4"	A-22P-A27
	syringe thermal contact fluid	A-22P-A44

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°C to 50°C	-30°F to 130°F	
S1	-10°C to 120°C	0°F to 250°F	
S2	0°C to 50°C	40°F to 140°F	
S3	0°C to 250°C	30°F to 480°F	
S4	-15°C to 35°C	0°F to 100°F	
S5	0°C to 100°C	40°F to 240°F	
S6	-20°C to 80°C	40°F to 90°F	
S7	0°C to 160°C	0°F to 150°F	✓

## Dimensions

