

**Duct/Immersion sensor Temperature**

For measuring temperature in duct applications. In connection with a stainless steel or brass thermowell also applicable for pipe applications. NEMA 4X / IP65 rated enclosure.



5-year warranty

**Type Overview**

Type	Output signal	Probe length	Probe diameter
01DT-5MH	NTC10k3 (Precon)	2" [50 mm]	0.24" [6 mm]
01DT-5ML	NTC10k3 (Precon)	4" [100 mm]	0.24" [6 mm]
01DT-5MN	NTC10k3 (Precon)	6" [150 mm]	0.24" [6 mm]
01DT-5MP	NTC10k3 (Precon)	8" [200 mm]	0.24" [6 mm]
01DT-5MR	NTC10k3 (Precon)	12" [300 mm]	0.24" [6 mm]
01DT-5MT	NTC10k3 (Precon)	18" [450 mm]	0.24" [6 mm]

**Technical Data**

<b>Electrical Data</b>	Electrical connection	Pluggable spring loaded terminal block max. 2.5 mm <sup>2</sup>
	Cable entry	Cable gland with strain relief Ø6...8 mm (1/2" NPT conduit adapter included)
<b>Functional Data</b>	Application	air water
	Output signal passive temperature	NTC10k3 (Precon)
<b>Measuring Data</b>	Measured values	Temperature
	Measuring range temperature	-60...300°F [-50...150°C]
	Accuracy temperature passive	±0.35°F @ 77°F [±0.2°C @ 25°C]
	Measuring current	<2.7 mA @ 77°F [25°C]
	Time constant τ (63%) in air duct	Typical 210 s @ 0 m/s Typical 46 s @ 3 m/s
	Time constant τ (63%) in water pipe	With thermowell A-22P-A.. and thermal contact fluid Typical 7 s with thermowell brass Typical 9 s with thermowell stainless steel
<b>Materials</b>	Cable gland	Plug Adapter: PA66, black Nut: PA6, black
	Housing	cover: PC, orange base: PC, orange seal: NBR70, black UV resistant
	Probe material	AISI 316L
<b>Safety Data</b>	Ambient humidity	max. 95% RH, non-condensing
	Ambient temperature	-30...120°F [-35...50°C]
	Fluid temperature	-60...300°F [-50...150°C]
	Housing surface temperature	max. 195°F [90°C]

<b>Safety Data</b>	Protection class IEC/EN	III, Protective Extra-Low Voltage (PELV)
	Power source 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/-2-9
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
	Quality Standard	ISO 9001
	Mode of operation	Type 1
	Control pollution degree	3
	Rated impulse voltage supply	0.8 kV
	Construction	Independently mounted control

**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. Unauthorized 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 authorized 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** Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy. So the supply current should not be higher than the measuring current values specified in this data sheet.

When using lengthy connecting cables (depending on the cross section used), the cable resistance must be taken into account. The lower the impedance of the sensor used, the greater the effect of the line resistance on the measurement, because it generates an offset.

**Scope of delivery**

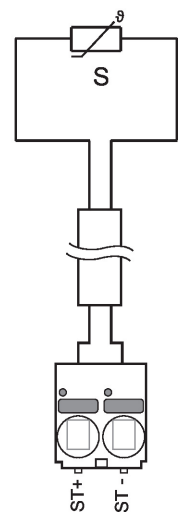
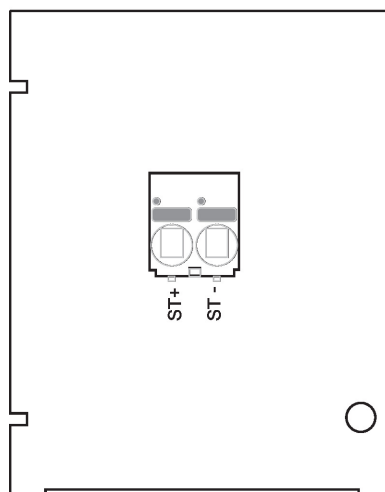
Scope of delivery	Description	Type
	Mounting clip, with screws and adhesive foil	A-22D-A11
	1/2" NPT conduit adapter	

**Accessories**

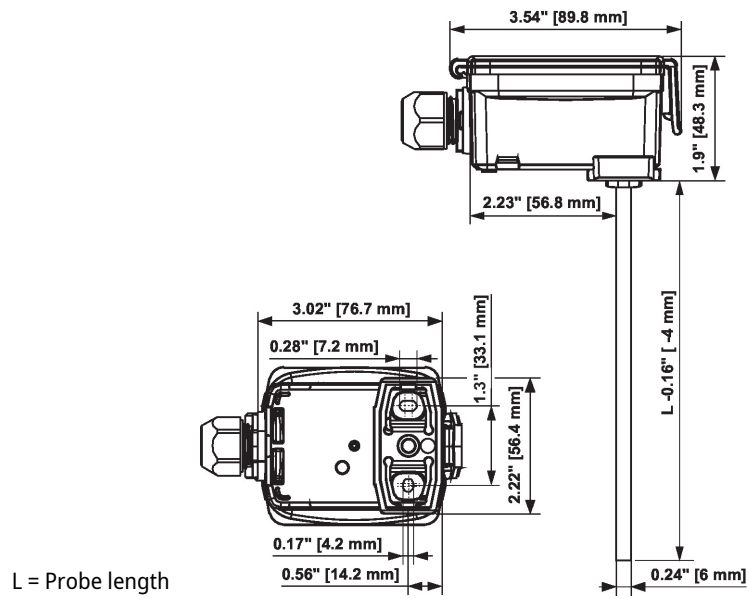
Optional accessories	Description	Type
	Mounting plate S housing	A-22D-A09
	Connection adapter, M20x1.5, for cable 1x6 mm, Multipack 10 pcs.	A-22G-A01.1
Optional accessories air	Description	Type
	Mounting flange for sensor probe 6 mm, up to max. 120°C [248°F], Plastic	A-22D-A03
	Mounting flange for sensor probe 6 mm, up to max. 260°C, Brass	A-22D-A05

**Recommended accessories water**

Description	Type
Thermowell pocket (fabricated) Stainless steel, 2" [50 mm], 1/2" NPT, wrench size 3/4"	A-22P-A05
Thermowell pocket (fabricated) Stainless steel, 4" [100 mm], 1/2" NPT, wrench size 3/4"	A-22P-A07
Thermowell pocket (fabricated) Stainless steel, 6" [150 mm], 1/2" NPT, wrench size 3/4"	A-22P-A09
Thermowell pocket (fabricated) Stainless steel, 8" [200 mm], 1/2" NPT, wrench size 3/4"	A-22P-A11
Thermowell pocket (fabricated) Stainless steel, 12" [300 mm], 1/2" NPT, wrench size 3/4"	A-22P-A13
Thermowell pocket (fabricated) Stainless steel, 18" [450 mm], 1/2" NPT, wrench size 3/4"	A-22P-A15
Thermowell pocket (fabricated) Brass, 2" [50 mm], 1/2" NPT, wrench size 3/4"	A-22P-A17
Thermowell pocket (fabricated) Brass, 4" [100 mm], 1/2" NPT, wrench size 3/4"	A-22P-A19
Thermowell pocket (fabricated) Brass, 6" [150 mm], 1/2" NPT, wrench size 3/4"	A-22P-A21
Thermowell pocket (fabricated) Brass, 8" [200 mm], 1/2" NPT, wrench size 3/4"	A-22P-A23
Thermowell pocket (fabricated) Brass, 12" [300 mm], 1/2" NPT, wrench size 3/4"	A-22P-A25
Thermowell pocket (fabricated) Brass, 18" [450 mm], 1/2" NPT, wrench size 3/4"	A-22P-A27
Thermowell pocket (machined) Stainless steel, 2" [50 mm], 1/2" NPT, wrench size 3/4"	A-22P-A36
Thermowell pocket (machined) Stainless steel, 4" [100 mm], 1/2" NPT, wrench size 3/4"	A-22P-A37
Thermowell pocket (machined) Stainless steel, 6" [150 mm], 1/2" NPT, wrench size 3/4"	A-22P-A38
Thermowell pocket (machined) Stainless steel, 8" [200 mm], 1/2" NPT, wrench size 3/4"	A-22P-A39
Syringe with thermal paste	A-22P-A44
Cold barrier, Plastic, L 50 mm, for thermowell A-22P-A..	A-22P-A51

**Wiring Diagram**


## Dimensions



Type	Probe length	Weight
01DT-5MH	2" [50 mm]	0.26 lb [0.12 kg]
01DT-5ML	4" [100 mm]	0.26 lb [0.12 kg]
01DT-5MN	6" [150 mm]	0.29 lb [0.13 kg]
01DT-5MP	8" [200 mm]	0.29 lb [0.13 kg]
01DT-5MR	12" [300 mm]	0.31 lb [0.14 kg]
01DT-5MT	18" [450 mm]	0.33 lb [0.15 kg]