

### **Product overview**

For measuring temperature in outdoor areas, in cold stores and green houses, production plants and warehouses.

Designed for locking on to control and display systems. For type AGS54ext the sensor is sealed in an external pocket.





Types available

Type code	Туре	Description
EXT-TN-1069280	AGS54 Ni1000	Ni1000
EXT-TN-1066555	AGS54 PT1000	PT1000
EXT-TN-1069297	AGS54 NTC10k	NTC10k
EXT-TN-1072075	AGS54 NTC10kPRE	NTC10k Precon
EXT-TN-1069303	AGS54 NTC20k	NTC20k
EXT-TN-1069358	AGS54ext Ni1000	Ni1000
EXT-TN-1069402	AGS54ext PT1000	PT1000
EXT-TN-1069372	AGS54ext NTC20k	NTC20k
EXT-TN-1069426	AGS54ext TRA MultiRange	420mA
EXT-TN-1066562	AGS54ext TRA1	420mA
EXT-TN-1069464	AGS54ext TRV MultiRange	010V

## **Technical data**

Standards	CE conformity	89/336/EWG Electromagnetic compatibility
	EN conformity	- EN60730-1 ( 2000) Interference resistance
	•	- EN60730-1 (2000) Emitted interference
General data	Sensor bushing	Stainless steel, material 1.4571, Ø=6x25mm
		(AGS54ext only)
	Enclosure	Polyamide, colour white
	Protection	IP65 according to EN60529
Type sensor	Measuring element	Sensor according to customer's request
••	Measuring range	Depending on sensor used
	Accuracy	Depending on sensor used
	Measuring current	<1mA
	Clamps	- 2 pole (two wire)
		- 3 pole (three wire)
		- 4 pole (four wire)
		Terminal screw max. 1.5mm <sup>2</sup>
	Cable entry	Single entry, M16 for cable max. D=8mm
	Ambient temperature	Enclosure
		-3590°C
	Weight	- AGS54 : 75g
		- AGS54ext: 85g



### Technical data (cont.)

Type	TRA	(AGS54ext o	nlv)
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Type TRV (AGS54ext only)

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Power supply	DC 15-24V(±10%)
Power consumption	Max. 20mA / DC 24V
Measuring range	Adjustable at the transducer
	TRA1: -50°C+50°C
	TRA2: -10°C+120°C
	TRA3: 0°C+50°C
	TRA4: 0°C+160°C
	TRA5: 0°C+250°C
	TRA8: -15°C+35°C
Output	420mA, max. load 500Ω / DC 24V
Accuracy@21°C	Typical 1% of measuring range
Clamps	2 pole (two wire)
	Terminal screw max. 1.5mm <sup>2</sup>
Cable entry	Single entry, M20 for cable max. D=8mm
Ambient temperature	Enclosure
	-3570°C
Transport	-3570°C / max 85% RH, non-condensing
Weight	110g
Power supply	DC 15-24V(±10%) or AC 24V(±10%)
Power consumption	Typical 0.42W / 0.84VA
Measuring range	Adjustable at the transducer
	TRV1: -50°C+50°C
	TRV2: -10°C+120°C
	TRV3: 0°C+50°C
	TRV4: 0°C+160°C
	TRV5: 0°C+250°C
	TRV8: -15°C+35°C
Output	010V, min. load 5kΩ
Accuracy@21°C	Typical 1% of measuring range
Clamps	3 pole (three wire)
·	Terminal screw max. 1.5mm²
Cable entry	Single entry, M20 for cable max. D=8mm
Ambient temperature	Enclosure
•	-3570°C
Transport	-3570°C / max 85% RH, non-condensing
Weight	110g

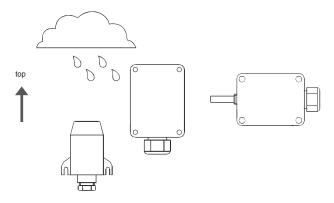
# Security advice /



The modules must not be used with equipment that supports, directly or indirectly, human health or life or with applications that can result in danger for people or animals.

### Mounting advice

For outdoor installation avoid direct rain and sun contact.





#### **Electrical connection**

The devices are constructed for the operation of protective low voltage (SELV). For the electrical connection, the technical data of the corresponding device is valid.

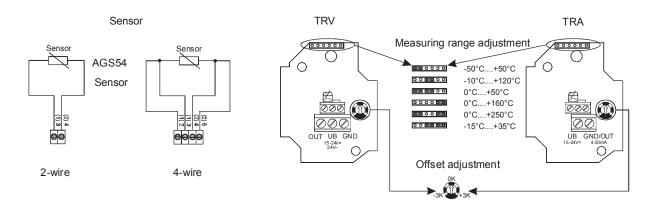
With regard to passive sensors (e.g. PT100 etc.) in 2 wire conductor versions, the wire resistance of the supply wire has to be considered. It is likely that same has to be compensated by the following electronics.

Due to the self heating, the wire current affects the accuracy of the measurement. Therefore it should not exceed 1mA.

Sensing devices with transducers should in principle 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.

The adjustment of the measuring ranges is made by changing the bonding jumpers (see terminal connection diagram). The output value in the new measuring range is available after approximately 2 seconds.

#### Terminal connection plan



#### **Dimensions (mm)**

