



DS450en

**Data Sheet**

TOW2-Series (T)

**Outdoor Temperature  
with Passive Output**

The TOW2-Series (T) is designed to measure temperature in outdoor areas, plant rooms, cold stores, greenhouses, production plants and warehouses

The temperature sensor with internal or external sensor

The temperature output is passive

**Use**

Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

**Features**

Sensor with passive output ( 2-, 3- and 4-wire connection available)

All Sensors with outstanding accuracy

Sensor in external stainless steel sensor pocket

Cover/bottom housing connected with magnets and two screws

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

**Product Range**

Order Code	Sensor Output Sensing Elements*	Sensor Accuracy	Measuring Element	Measuring Range	IP Rating	Product Dimension
TOW2G.BG	PT1000	±0.15 °C @ 0 °C DIN EN 60751, class A	External Sensing pocket	-50 °C to +150 °C	IP65 to IEC60529	78 mm x 58 mm x 45 mm
TOW2G.BP	NTC10k	±0.25 °C @ 25 °C				

\*Other sensing elements are available. Contact your Sales Manager for more information

<b>Sensor Specification</b>	<b>Sensor Specification</b>	Measured	Temperature
		Sensor Characteristics	Passive
		Sensor Output (s)	PT, NTC
		Measuring Current	<1 mA
		Accuracy	
		PT	±0.15 °C @ 0 °C DIN EN 60751, class A
		NTC	±0.25 °C @ 25 °C
<b>Technical Information</b>	<b>Electrical Information</b>	Terminal Clamp	Screw terminal, max. 1.5 mm <sup>2</sup>
	<b>Mechanical Information</b>	Sensor Pocket Diameter	6 mm
		Sensor Pocket Length	35 mm
		Cable Entry	M16, Ø6~Ø8 mm cables
		Sensing Element Position	External or internal
	<b>User Interface</b>	N/A	
	<b>Materials and Colours</b>	Housing Cover	ABS, white RAL9001 (Cream White)
		Housing Bottom	ABS, white RAL9001 (Cream White)
		Lock	2 × Metal screws 2 × Magnets
		Cable Gland	ABS, white RAL9001 (Cream White)
		Gland Rubber Seal	TPS, natural
		Sensor Pocket	US:AISI 304; EU: EN X 6 CrNi 18 10; GER: W.N. 1.301
	<b>Environmental Conditions</b>	Operation Temperature	-25 °C to +70 °C
		Operation Humidity	100 % RH, with condensation
		Transport Temperature	-35 °C to +70 °C
		Transport Humidity	<90 % RH
		Storage Temperature	-10 °C to +70 °C
		Storage Humidity	<85 % RH no condensation
	<b>Norms and Directives</b>	IP-Rating	IP65 in accordance with IEC60529
		REACH Regulation	Regulation (EC) No. 1907/2006
		Product Safety	Safety class III, in accordance with EN IEC 60730-1
		Product Standard	Automatic electrical controls for household and similar use in accordance with EN IEC 60730-1:2022
		CE Compliance	IEC/EN60730-1
	RoHS Compliance, in accordance with	Directive 2011/65/EU, as amended by (EU) 2015/863	
	Operation Climatic Condition	IEC 60 721-3-3	
	Operation Mechanical Condition	IEC 60 721-3-2 to class2M2	
	Transport to Climatic Condition	IEC 60 721-3-2	
	Transport Mechanical Condition	IEC 60 721-3-2 to class2M2	
	Storage Climatic Condition	IEC 60 721-3-1	
	Storage Mechanical Condition	IEC 60 721-3-1 to class2M2	
<b>Miscellaneous</b>	<b>Accessories</b>	N/A	
	<b>Shipping &amp; Handling</b>	Minimum Order	1 box with 2 pieces, multiple of 2 pieces
		Package Material	Rigid cardboard packaging
	<b>Order Notes</b>	Order Code	See product range, page 1, e.g. TOW2G.AF

**Installation Notes**

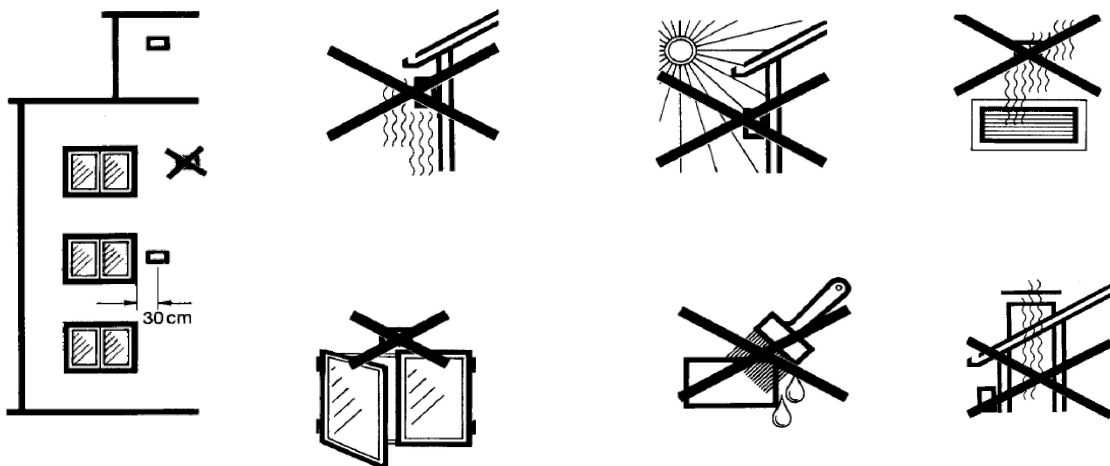
Observe the following general regulation for engineering and installation:



- All relevant national and local electrical installation codes
- Other country-specific regulations
- Comply with all local safety regulations, schematics, cable listings, dispositions, specifications, and arrangements from the engineering office in charge
- Third-party specifications, e.g., general contractors' or constructors' notes

**Mounting Advices**

Advices



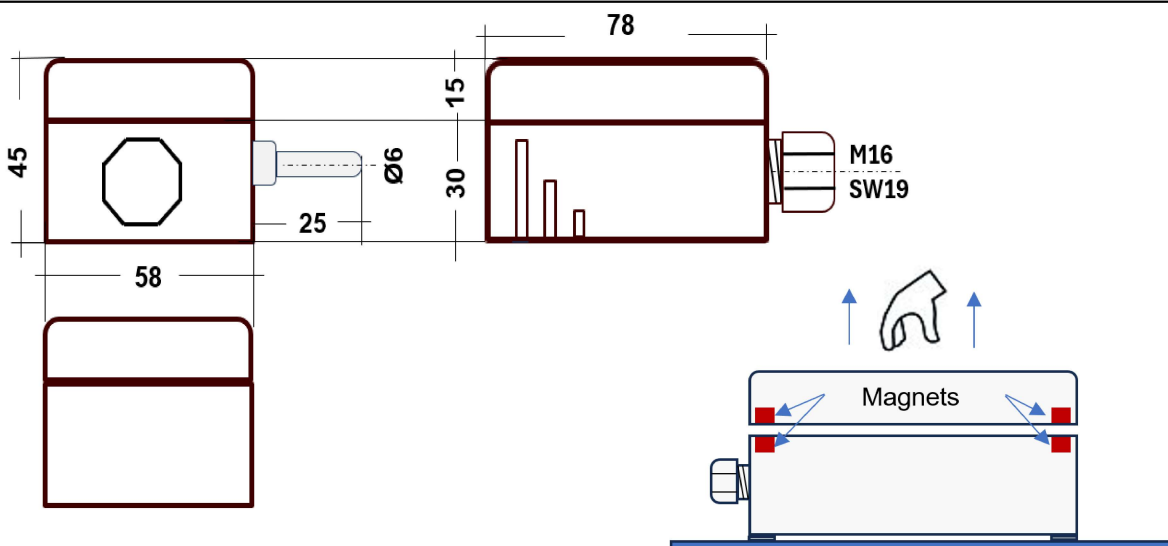
**Disposal Notes**

The device is considered an electronic device for disposal in terms of the European Directive 2012/19/EU



- The device may not be disposed as domestic garbage
- The device must be disposed through channels provided for this purpose
- It is mandatory to comply with local currently applying laws and regulations

Dimensional Drawing



Connections

1	1	2	2
Optional 3-wire	Sensor +	Sensor -	Optional 4-wire