



DS251en

Data Sheet



TDI2-Series (T)

Duct Temperature Sensor
with Passive Output

The TDI2-Series (T) is designed to measure temperature in air ducts or water pipes

Several lengths are available to cover all common duct sizes

Professional and practical product design

Withstands rough environmental conditions

The temperature sensor output is active



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

All Sensors with outstanding accuracy

Professional and practical product design, withstands rough environmental conditions

Cover/bottom housing connected with magnets and two screws

Different immersion lengths for all common air duct and water pipe sizes

Easy to use, install and maintain

Product Range

Order Code	Duct / Pipe Sensor			Thermowell					
	Sensor Output*	Sensor Accuracy	Sensor Pocket (L)	Order Code	Lengths (L)	Thread	max. flow	Pressure Rating	Material
TDI2G.HG	PT1000	±0.15 °C @ 0 °C	ø6×50 mm	TPA0G.Ga	ø9×50 mm	G1/2"	28 m/s	PN40	V4A
TDI2G.HP	NTC10k	±0.25 °C @ 25°C							
TDI2G.IG	PT1000	±0.15 °C @ 0 °C	ø6×100 mm	TPA0G.Ma	ø9×100 mm	G1/2"	11 m/s	PN40	V4A
TDI2G.IP	NTC10k	±0.25 °C @ 25°C							
TDI2G.KG	PT1000	±0.15 °C @ 0 °C	ø6×150 mm	TPA0G.Ha	ø9×150 mm	G1/2"	7 m/s	PN40	V4A
TDI2G.KP	NTC10k	±0.25 °C @ 25°C							
TDI2G.LG	PT1000	±0.15 °C @ 0 °C	ø6×200 mm	TPA0G.la	ø9×200 mm	G1/2"	6 m/s	PN40	V4A
TDI2G.LP	NTC10k	±0.25 °C @ 25°C							
TDI2G.MG	PT1000	±0.15 °C @ 0 °C	ø6×250 mm	TPA0G.Ka	ø9×250 mm	G1/2"	3 m/s	PN40	V4A
TDI2G.MP	NTC10k	±0.25 °C @ 25°C							
TDI2G.NG	PT1000	±0.15 °C @ 0 °C	ø6×300 mm	TPA0G.La	ø9×300 mm	G1/2"	2 m/s	PN40	V4A
TDI2G.NP	NTC10k	±0.25 °C @ 25°C							
TDI2G.OG	PT1000	±0.15 °C @ 0 °C	ø6×450 mm	TPA0G.Na	ø9×450 mm	G1/2"	1 m/s	PN40	V4A
TDI2G.OP	NTC10k	±0.25 °C @ 25°C							

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

Sensor Specifications	Sensor Specification	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
		Measuring Range	-50 °C to +150 °C
Technical Information	Electrical Information	Terminal Clamp	Screw terminal, max. 1.5 mm ²
	Mechanical Information	Immersion Rod Diameter	Ø6 mm
		Immersion Rod Length	See product range, page 1
		Cable Entry	M16, Ø6~Ø8 mm cables
		Sensing Element Position	External, top of the immersion rod
	Colour and Materials	Housing Cover	ABS, white RAL9001 (Cream White)
		Housing Bottom	ABS, white RAL9001 (Cream White)
		Lock Screws	US:AISI 304; EU: EN X 6 CrNi 18 10; GER: W.N. 1.301
		Lock Nuts	Brass
		Cable Gland	ABS, white RAL9010
		Gland Rubber Seal	TPS, natural
		Protection Caps	ABS, white RAL9010
		Immersion Rod	US: AISI 304; EU: EN X 6 CrNi 18 10; GER: W.N. 1.301
		Cable	TPEE, black
	Environmental Conditions	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
	Environmental Conditions	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
	Norms and Directives	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	
Miscellaneous	Accessories	Mounting Kit, included in delivery	TDK0.G
		Accessory not included in delivery	Immersion Pockets
	Shipping & Handling	Minimum Order	1 box with 2 pieces, multiple of 2 pieces
		Package Material	Rigid cardboard packaging
	Order Notes	Order Code	See product range, page 1, e.g. TD12G.HG

All Information and technical data are subject to alteration

TD12-Series (T) V26.1

Installation Notes

Observe the following general regulation for engineering and installation:



All relevant national and local electrical installation codes

Other country-specific regulations

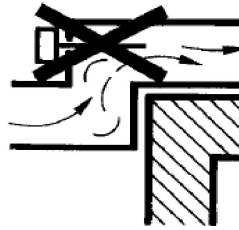
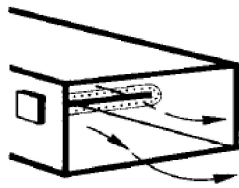
Comply with all local safety regulations, schematics, cable listings, dispositions, specifications,

and arrangements from the engineering office in charge

Third-party specifications, e.g., general contractors' or constructors' notes

Advices

Mounting Advices



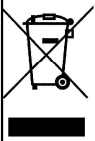
Disposal Notes

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

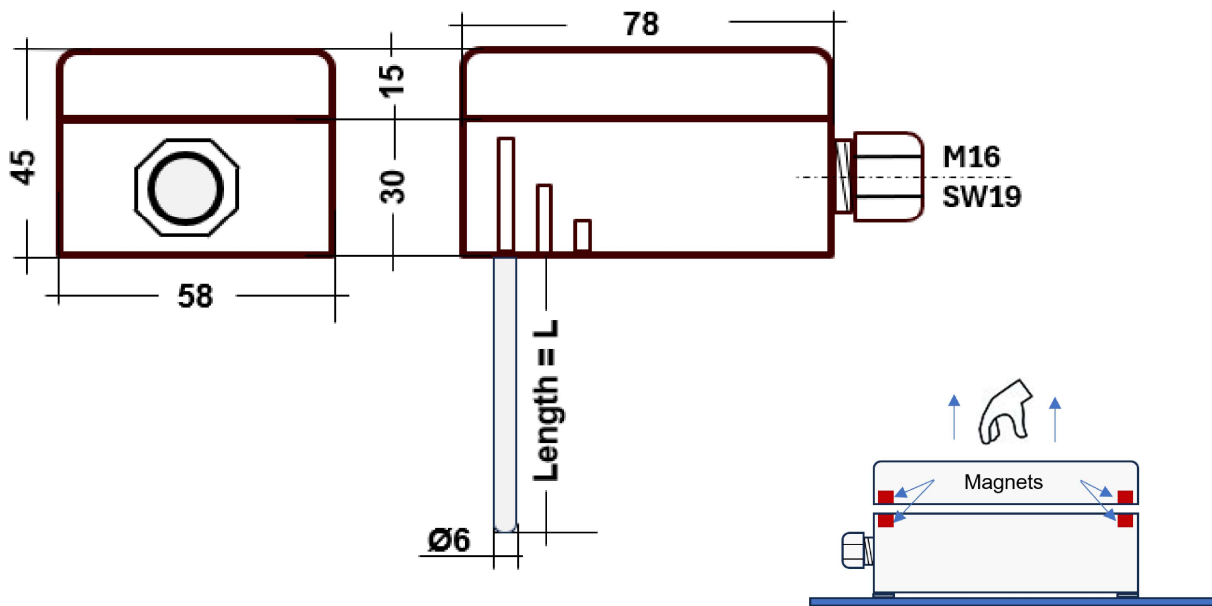
The device may not be disposed as domestic garbage

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



Connection

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