



TI350en

Technical Information

thermokon
 asia pacific

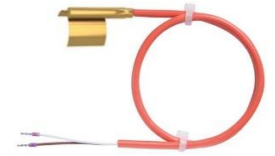
TPS2- Series (T)

Pipe Surface Temperature Sensor with Passive Output

The TPS2- Series (T) is designed to measure temperature on pipe surfaces

Several cable lengths are available

The sensor output is passive



Use

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

Universal temperature measurement in air and water applications

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

Features

Sensor with passive output

All Sensors with upgraded accuracy

Different cable lengths are available

High performance, silicon cables

Professional and practical product design, withstands rough environmental conditions

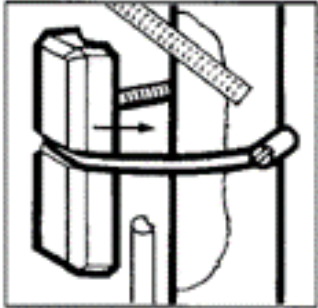
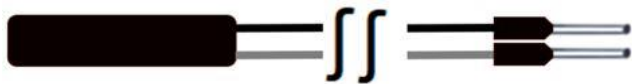
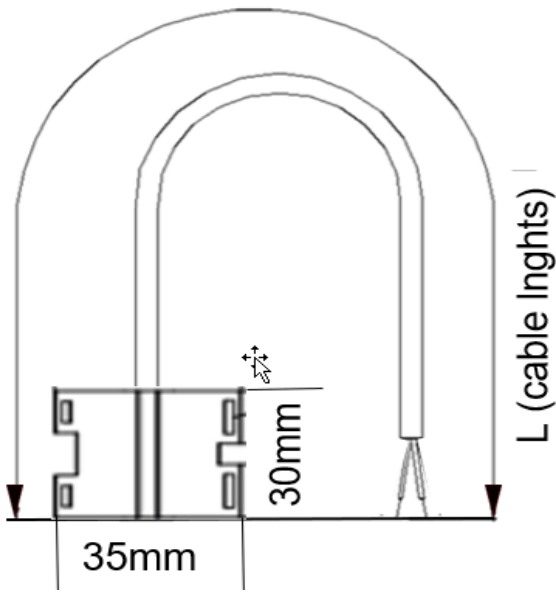
Product Range

Order Code	Sensor	Sensor Accuracy	Cable Lengths	Sensor Housing	Measuring Range	Protection	Cable Temperature Rating
TPS2.AF	PT100	± 0.15K @ 0°C DIN EN 60751, class A	1m cable	Copper plate (30x34mm,R=23mm)	-50...150°C	IP65 to IEC60529	-50...250°C
TPS2.AG	PT1000						
TPS2.AP	NTC10K	± 0.25K @ 25°C					
TPS2.AQ	NTC10k Pre						
TPS2.AR	NTC20k						
TPS2.AK	NI1000	± 0.4K @ 0°C DIN EN 43760, class B					
TPS2.AL	LG-NI1000						
TPS2.BF	PT100	± 0.15K @ 0°C DIN EN 60751, class A	2m Cable				
TPS2.BG	PT1000						
TPS2.BP	NTC10K	± 0.25K @ 25°C					
TPS2.BQ	NTC10k Pre						
TPS2.BR	NTC20k						
TPS2.BK	NI1000	± 0.4K @ 0°C DIN EN 43760, class B					
TPS2.BL	LG-NI1000						

All Information and technical data are subject to alteration

Sensor Specification	Sensor Specification	Measured	Temperature
		Sensor Characteristics	Passive
		Sensor Output (s)	NTC, PT, NI1000
		Measuring Current	<1mA
		Accuracy	
		PT100 / PT1000	± 0.15K @ 0°C DIN EN 60751, class A
Technical Information	Technical Information	NTC10k / NTC10k Pre / NTC20k	± 0.25K @ 25°C
		NI1000 / LG-NI1000	± 0.4K @ 0°C DIN EN 43760, class B
		Measuring Range (s)	-50°C...+150°C
		Electrical Information	Voltage Rating
			300V
			Dialectic Resistant
			1750V/90sec.
		All Sensors with upgraded accuracy	
		Core Wire Resistance	<95Ω/km @20°C
		Spark Test	3000V @ 0.15sec.
		Mechanical Information	Cable Jacket Diameter
			ø 4.85mm ±0.15mm
			Cable Jacket Thickness
			1.35mm ±0.5mm
			Core wire Diameter
			0.51mm ² (AWG24)
			Core wire Thickness
			0.115mm ±0.5mm
			Core wire Construction
			Stranded, 7 / ø0.20mm ±0.005mm
			Temperature Rating
			-50...250°C
			Deformation Strength
			Shore3
			Tensile Strengths
			>0.353kg/mm ²
			Sensing Element Position
			Top of the sensor pocket
			Cable End
			Cable end sleeves
		User Interface	n/A
		Color and Materials	Sensor Pocket
			US:AISI 304; EU: EN X 6 CrNi 18 10; GER: W.N. 1.301
			Sensor Pocket Shield
			Copper
			Cable Jacket Color
			RAL3001 (Signal Red)
			Core wire Material
			Silicon
			Core wire Color
			Brown / White
		Environmental Conditions	Operation Temperature
			-25°C...+70°C
			Operation Humidity
			100% r.h., with condensation
			Transport Temperature
			-35°C...+70°C
			Transport Humidity
			< 90% r.h.
			Storage Temperature
			-10°C...+70°C
			Storage Humidity
			< 85% r.h., no condensation
		Norms and Directives	IP- Rating
			IP65 to IEC60529
			Safety Class
			III to EN 60 730
			Product Standard 1
			Automatic Electric. Controls for household and similar use
			RoHS Compatibility
			RoHS 3, Directive 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	Miscellaneous	Accessories	Accessory included in delivery
			TPK0.A
		Shipping & Handling	Minimum Order
			1 box with 10 pieces
			Package Material
			Rigid Cardboards Packaging
		Order Notes	Order Code
			See Product Range, Page 1, e.g. TPS2.AF

All Information and technical data are subject to alteration

Advices	Security Advice  Observe the following general regulation for engineering and implementation: All relevant national and heavy power regulations Other country specific regulations Country-specific regulations Local electrical supply authority regulation Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge Third party specifications, e.g. general contractors or constructors
	Mounting Advices  All Sensors with upgraded 
	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 complying with local currently applying laws and regulations.
Connection	
Dimensional Drawing	 Fastener Strap L=240mm  