



DTP-M

Digital temperature pipe sensor

The DTP-M series are digital temperature water pipe sensors powered over Modbus with 24 VDC via an RJ45 connector. They are intended for mounting onto metal pipes and are compatible with various temperature control systems. Thanks to the copper contact plate, we can ensure faster response time and a more accurate temperature measurement of the media within the pipe.

Key features

- Wide temperature range: 0–85 °C
- Modbus RTU communication
- Easy wiring via an RJ45 socket
- Quick and easy mounting via a cable tie
- Copper plate for enhanced thermal conductivity
- Heat resistant cable tie 300 x 4,8 mm included
- Thermal pad for a more accurate temperature measurement included (19 x 14 x 1,5 mm)

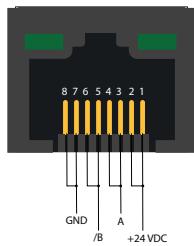
Technical specifications

Supply voltage	24 VDC, Power over Modbus	
Power consumption	Maximum: 0,192 W	
	Nominal: 0,18 W	
	Imax: 8 mA	
Sensor range	0–85 °C	
Accuracy	±1 °C	
Protection standard	IP65	
Ambient conditions	Temperature	-30–85 °C
	Rel. humidity	5–95 % rH (non-condensing)

Wiring and connections

RJ45 sockets (Power over Modbus)

Pin 1	24 VDC	Supply voltage
Pin 2		
Pin 3	A	Modbus RTU communication, signal A
Pin 4		
Pin 5	/B	Modbus RTU communication, signal /B
Pin 6		
Pin 7	GND	Ground, supply voltage
Pin 8		



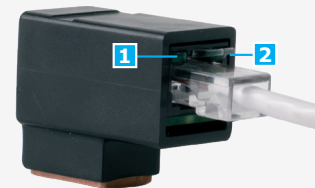
Article codes

Article code	Supply
DTP-M	24 VDC, PoM

Area of use

- Measuring temperature in metal water pipes

Indications RJ45




RJ45 socket		Plug the communication and power cable into the socket
1 - Green LED on the left	On	In normal operation, the left LED on is activated, indicating the presence of 24 VDC power supply
2 - Green LED on the right	On	Indicates active Modbus communication



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Standards

- EMC directive 2014/30/EU: 
- EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
- EN 61326-2-3:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
- EN 61326-2-5:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-5: Particular requirements - Test configurations, operational conditions and performance criteria for devices with field bus interfaces according to IEC 61784-1

• WEEE Directive 2012/19/EU

• RoHS Directive 2011/65/EU

Packaging

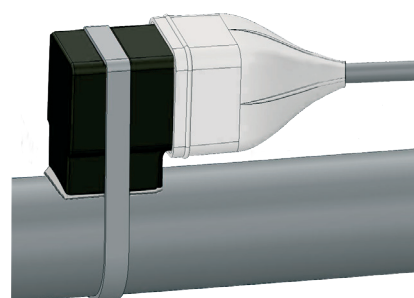


Article	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
DTP-M	Unit (1 pc.)	100	-	120	0,024 kg	0,03 kg

Global trade item numbers (GTIN)

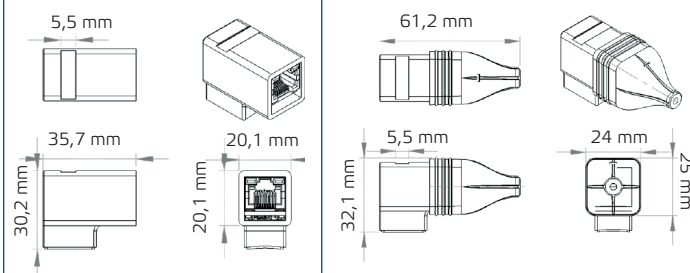
Packaging	DTP-M
Unit	05401003002070
Carton	05401003300640
Box	05401003500859

Fixing and dimensions



Without protective cover

With protective cover





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Application example

