



## KS/B-1W

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### 1-wire cable temperature sensor with silicone cable

Measuring size: temperature

Output: DS18B20+

Highlights: moisture sealed rolled, Protection sleeve: stainless steel, with core cable ends



### Description

The KS/B-1W cable probe measures the temperature in the range of -55 up to +125°C in gasiform or liquid medium and converts the measured value into a digital output signal. The resolution of the conversion is configurable from 9-bit to 12-bit (0,5/0,25/0,125/0,0625 K). The 1-Wire protocol allows a cost efficient wiring of multiple sensing devices as series, ring or tree topology in 2- or 3-wire connection. Optionally, each device has a serial number label, whereby a quick and easy start-up is possible. The stainless steel sleeve protects the sensor e.g. against mechanical impacts, is with the cable moisture sealed rolled and can be mounted by an immersion sleeve, tension band or compression clamp.



## Technical Specifications

Measurement range temp.	-55...+125°C, -30...+85°C (2-wire connection, parasite powered)
Sensor	DS18B20+
Accuracy	±0,5 K (-10...+85°C), sonst ±2 K
Resolution	9-12 Bit (+0,5°C up to +0,0625°C)
Circuit type	2-, 3-wire connection
Supply voltage	3...5,5 V
Current consumption	typ. 1,5 mA
Electrical connection	stripped ends with ferrules
Cable	silicone cable (3x0,25 mm <sup>2</sup> , max. +180°C) with core cable ends in different lengths
Material	Protection sleeve: stainless steel VA 1.4571
Dimensions	Protection sleeve: Ø 6 x 50 mm
Protection type	IP67 (moisture sealed rolled)
Protection class	III
Storage temperature	-20...+70°C
Installation	immersion sleeve, mounting flange, compression fitting (not in scope of delivery)
Approvals	CE, EAC, RoHS

## Variants

<b>Article Number</b>			
Sensor	Temperature	Cable	Serial number
<b>KS/B-1W/2</b>			
DS18B20+ (12 Bit, ±0,5 K)	-55...+125°C	2 m silicone (3x0,25 mm <sup>2</sup> )	n/a
<b>KS/B-1W/2-dec</b>			
DS18B20+ (12 Bit, ±0,5 K)	-55...+125°C	2 m silicone (3x0,25 mm <sup>2</sup> )	dec
<b>KS/B-1W/2-hex</b>			
DS18B20+ (12 Bit, ±0,5 K)	-55...+125°C	2 m silicone (3x0,25 mm <sup>2</sup> )	hex
<b>KS/B-1W/5</b>			
DS18B20+ (12 Bit, ±0,5 K)	-55...+125°C	5 m silicone (3x0,25 mm <sup>2</sup> )	n/a
<b>KS/B-1W/5-dec</b>			
DS18B20+ (12 Bit, ±0,5 K)	-55...+125°C	5 m silicone (3x0,25 mm <sup>2</sup> )	dec
<b>KS/B-1W/5-hex</b>			
DS18B20+ (12 Bit, ±0,5 K)	-55...+125°C	5 m silicone (3x0,25 mm <sup>2</sup> )	hex



## Accessories

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KV/E  
Compression Clamp



SZ/E  
Accessories



ZT/E  
Immersion sleeve



MFL/E  
Mounting flange



### Dimensional Drawing

