KSM/E

Cable temperature transducer with silicon cable

Measuring size: temperature
Output: 0-10 V, 4-20 mA, 2 Relay
Highlights: moisture sealed rolled, 16 measuring ranges per device, 1 freely programmable measurement range

MADE IN GERMANY

Description

The KSM/E cable transducer registers the temperature in gaseous and liquid media and converts this measured value into a linear output signal 0-10 V respectively 4-20 mA.
As an option the temperature transducer has two potential-free changeover contacts and a backlit display. The display content can be rotated in 90° steps using a menu and the measured value, the switching threshold set, the state of the respective relay, the MIN/MAX measured values for the selected intervals(1 h / 6 h / 12 h / 24 h) etc. can be read out.
On the display version the user can, via the menu, specify an individual temperature range.
The stainless steel sleeve protects the sensor, e.g. from mechanical shocks, is rolled moisture proof (waterproof) with the connecting cable and can, using the immersion sleeve, strap or clamping screws be quickly and easily mounted.

Technical Specifications

Measurement range temp.	-50...+180°C
Scales	-50...0°C, -50...+50°C, -50...+150°C, -30...+20°C, -30...+70°C, -20...+50°C, -20...+80°C, -20...+120°C, -20...+150°C, -10...+15°C, 0...+50°C, 0...+100°C, 0...+150°C, 0...+200°C, 0...+250°C, +10...+35°C
Measurement range configuration	1 freely programmable measuring range via the menu input in the display (span min. 25K)
Accuracy	±0,2 K + max. ±1,5% Span
Sensor	Pt100 DIN EN 60751 Cl. B
Supply voltage analog 0-10 V	24 V AC/DC (±5%)
Supply voltage analog 4-20 mA	15...36 V DC, depends on liability (Ubmin = 15 V + Rload*0,02A)
Current consumption at 0-10 V	typ. 10 mA, 30 mA peak current consumption for 50 ms at switching moment at option relay
Current consumption at 4-20 mA	max. 20 mA / output, 40 mA peak current consumption for 50 ms at switching moment at option relay
Analogue output 0-10 V	3-wire connection, min. load resistance 100 kOhm
Analogue output 4-20 mA	2-wire connection (transmitter), max. RLoad(Ohm) = (+Ub - 15 V) / 0,02 A
Alarm output	2 x potential-free change-over contact, 48 V, 1 A
Switching Hysteresis Relay	Temperature: 2K (without display), 0,5...5K adjustable (with display)
Electrical connection	screw terminals max. 1,5 mm²
Cable	2 m silicone cable (max. +180°C)
Housing	Polycarbonate PC UL 94 V0 with hinge locks, color signal white similar to RAL 9003
Cable gland	PG11 high-strength cable gland with strain relief
Display	optional LCD display with backlight on/off/auto
Material	Protection sleeve: stainless steel VA 1.4571
Dimensions	Housing: L 89 x W 80 x H 47 mm, Protection sleeve: Ø 6 x 50 mm
Protection type	IP65, IP67 (probe, moisture sealed rolled)
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	Probe: -50...+180°C, Electronic: -20...+70°C
Storage temperature	-20...+70°C
Installation	screw fastening
Approvals	CE, EAC, RoHS

Variants

Article Number			
MR temp. preset	Output temperature	Cable	Version
KSM/E-I			
0...+100°C	4-20 mA	2 m silicone (2x0,22 mm²)	without display
KSM/E-I2R			
0...+100°C	4-20 mA, 2 changer	2 m silicone (2x0,22 mm²)	without display
KSM/E-I2RD			
0...+100°C	4-20 mA, 2 changer	2 m silicone (2x0,22 mm²)	with display
KSM/E-ID			
0...+100°C	4-20 mA	2 m silicone (2x0,22 mm²)	with display
KSM/E-U			
0...+100°C	0-10 V	2 m silicone (2x0,22 mm²)	without display
KSM/E-U2R			
0...+100°C	0-10 V, 2 changer	2 m silicone (2x0,22 mm²)	without display
KSM/E-U2RD			
0...+100°C	0-10 V, 2 changer	2 m silicone (2x0,22 mm²)	with display
KSM/E-UD			
0...+100°C	0-10 V	2 m silicone (2x0,22 mm²)	with display

Accessories

KV/E

Compression Clamp

SZ/E

Accessories

ZT/E

Immersion sleeve

Dimensional Drawing