FuehlerSysteme eNET International
Die Marke für Sensorik

EN **DATA SHEET**

LM2/E

Contact temperature transducer with strap

Measuring size: temperature
Output: 0-10 V, 4-20 mA, 2 Relay
Highlights: contacting block: aluminium, 1 freely programmable measurement range

MADE IN GERMANY

Description

The LM2/E contact temperature transducer registers the surface temperature on pipelines 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. Using the menu on the display version a random temperature measurement range can be defined.
Using the strap, which is included in the scope of delivery, the application block fitted to the bottom of the temperature transducer?s housing can be quickly and securely directly fastened to, for example, the cold or hot water pipes of heating systems. The robust housing allows the use of the device in harsh environments.

Technical Specifications

Measurement range temp.	-30...+110°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
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	Contacting block: aluminium
Dimensions	Housing: L 89 x W 80 x H 47 mm
Protection type	IP65
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	Probe: -30...+110°C, Electronic: -20...+70°C
Storage temperature	-20...+70°C
Installation	clamping band, band width 9 mm, chucking capacity 50-110 mm, galvanized steel (in scope of delivery)
Approvals	CE, EAC, RoHS

Variants

Article Number		
MR temp. preset	Output temperature	Version
LM2/E-I		
0...+100°C	4-20 mA	without display
LM2/E-I2R		
0...+100°C	4-20 mA, 2 changer	without display
LM2/E-I2RD		
0...+100°C	4-20 mA, 2 changer	with display
LM2/E-ID		
0...+100°C	4-20 mA	with display
LM2/E-U		
0...+100°C	0-10 V	without display
LM2/E-U2R		
0...+100°C	0-10 V, 2 changer	without display
LM2/E-U2RD		
0...+100°C	0-10 V, 2 changer	with display
LM2/E-UD		
0...+100°C	0-10 V	with display

Accessories

SZ/E

Accessories

Dimensional Drawing