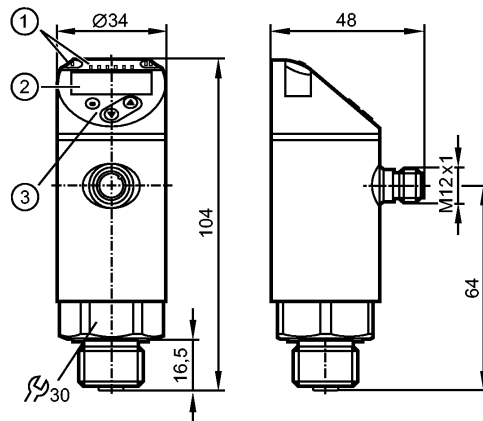


**TR7439**

TR-000KDBM12-QFPKG/US/

Evaluation systems



- 1: LEDs (display unit / switching status)
- 2: 4-digit alphanumeric display / alternating indication of red and green
- 3: Programming buttons



**Product characteristics**

Evaluation unit for temperature sensors
Process connection: G ½ A
for Pt100 and Pt1000 measuring elements
2 switching outputs
4-digit alphanumeric display
Measuring range: -100...600 °C / -148...1112 °F

**Electrical data**

Electrical design	DC PNP/NPN	
Operating voltage [V]	18...32 DC; "supply class 2" to cULus.	
Current consumption [mA]	< 50	
Protection class	III	
Reverse polarity protection	yes	

**Outputs**

Output	2 switching outputs	
Output function	2 x normally open / closed programmable	
Current rating [mA]	250	
Voltage drop [V]	< 2.5	
Short-circuit protection	pulsed	
Overload protection	yes	

**Measuring / setting range**

Measuring range	-100...600 °C	-148...1112 °F
Setting range		
Set point, SP	-99.8...600 °C	-147.6...1112 °F
Reset point, rP	-100...599.8 °C	-148...1111.6 °F
in steps of	0.1 °C	0.1 °F
Resolution		
Switching output [K]	0.1	
Display [K]	0.1	

**Accuracy / deviations**

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Switch point accuracy	[K]	± 0.3 + (± 0.1 % MS)
Display	[K]	± 0.3 + (± 0.1 % MS)
Temperature drift ( / 10 K)		0.1 % MS

Reaction times		
Power-on delay time	[s]	1
Response time Switching output	[ms]	390
Integrated watchdog		yes

Software / programming	
Programming options	hysteresis / window function; NO / NC; output polarity; on delay, off delay; damping; display unit

Interfaces	
IO-Link device	
Transfer type	COM2 (38.4 Kbaud)
IO-Link revision	1.1

Environment	
Ambient temperature	[°C] -25...80
Storage temperature	[°C] -40...100
Protection	IP 67

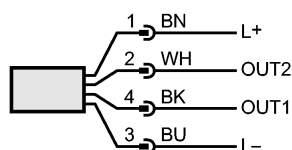
Tests / approvals	
EMC	DIN EN 61000-6-3 DIN EN 61000-6-2
Shock resistance	DIN IEC 68-2-27: 50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6 20 g (10...2000 Hz)
MTTF	[Years] 252
UL approval number	K012

Mechanical data	
Process connection	G ½ A
Housing materials	304 / 1.4301 (V2A); EPDM/X; PC; PBT; FPM
Weight	[kg] 0.198

Displays / operating elements	
Display	Display unit 2 x LED green Switching status 2 x LED yellow 4-digit alphanumeric display / alternating indication Measured values of red and green

Electrical connection	
Connection	M12 connector; Gold-plated contacts

### Wiring



OUT1: switching output or IO-Link  
OUT2: switching output  
Colours to DIN EN 60947-5-2

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**Evaluation systems****Remarks**

Remarks	MS = set measuring span cULus - Class 2 source required
Pack quantity [piece]	1