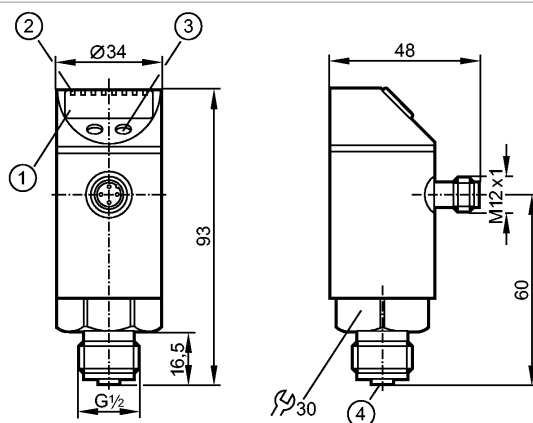


TR2432

TR-...KDBR12-MFRKG/US/...../V

Evaluation systems



- 1: 4-digit alphanumeric display
- 2: LEDs
- 3: Programming button
- 4: connector for temperature sensor (M12 x 1)



Made in USA

Product characteristics

Evaluation unit for temperature sensors

Process connection: G 1/2 A

Switching output, analogue output 4...20 mA or 0...10 V

4-digit alphanumeric display

Measuring range: -40...300 °C / -40...572 °F

Electrical data

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

Outputs

Output	Switching output, analogue output 4...20 mA or 0...10 V
Output function	1 x normally open / closed programmable + 1 x analogue (4...20 mA / 0...10 V, scalable)
Current rating [mA]	250
Voltage drop [V]	< 2
Short-circuit protection	pulsed
Overload protection	yes
Analogue output	4...20 mA / 0...10 V **)

Measuring / setting range

Measuring range [°C/°F]	-40...300 / -40...572
Analogue start point, ASP [°C/°F]	-40; 0...295; 0 / -40; 0...563; 0
Analogue end point, AEP [°C/°F]	-35.0...300.0 / -31.0...572.0
Setting range	
Set point, SP [°C/°F]	-39.8...300.0 / -39.6...572.0
Reset point, rP [°C/°F]	-40.0...299.8 / -40.0...571.6
in steps of [°C/°F]	0.1 / 0.1
Resolution	
Switching output [K]	0.1

TR2432

TR-...KDBR12-MFRKG/US/...../V

Evaluation systems

Analogue output	[K]	< 0.1
Display	[K]	0.1

Accuracy / deviations

Switch point accuracy	[K]	± 0.3
Analogue output	[K]	± 0.3
Display	[K]	± 0.3
Temperature drift (/ 10 K)		0.1

Reaction times

Power-on delay time	[s]	1
Response time Switching output [ms]		130
Integrated watchdog		yes

Interfaces

IO-Link Device		
Transfer type		COM2 (38.4 KBaud)
IO-Link revision		1.0

Environment

Ambient temperature	[°C]	-25...70
Storage temperature	[°C]	-40...85
Protection		IP 67

Tests / approvals

EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated:	10 V/m
	EN 61000-4-4 Burst:	2 kV
	EN 61000-4-5 Surge:	1 kV
	EN 61000-4-6 HF conducted:	10 V
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]	207

Mechanical data

Process connection		G ½ A
Housing materials	stainless steel (304S15); EPDM/X (Santoprene); PC (Makrolon); PBT (Pocan); FPM (Viton)	
Weight	[kg]	0.231

Displays / operating elements

Display	Display unit	2 x LED green
	Switching status	LED yellow
	Measured values	4-digit alphanumeric display
	Programming	4-digit alphanumeric display

Electrical connection

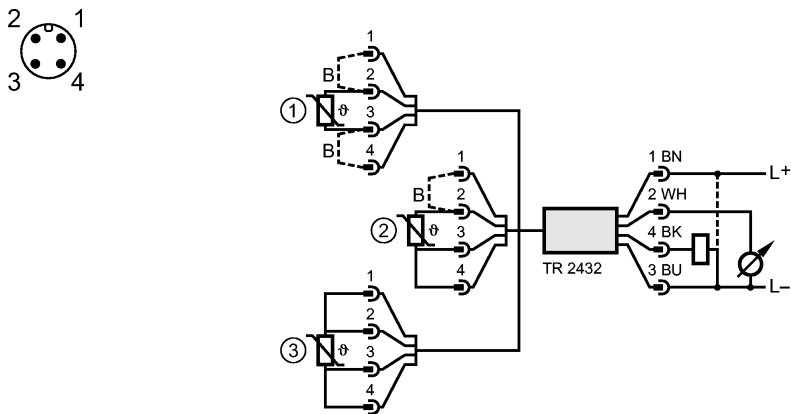
Connection	M12 connector; Gold-plated contacts
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Wiring

TR2432

TR-...KDBR12-MFRKG/US/...../V

Evaluation systems



1 = Two-wire sensor
2 = Three-wire sensor
3 = Four-wire sensor
B = link

Remarks	
Remarks	cULus - Class 2 source required **) Response time analogue output: 384 ms load for current output: Rmax [Ω]: (Ub - 10 V) x 50 / for voltage output: Rmin [Ω]: 2000
Pack quantity	1