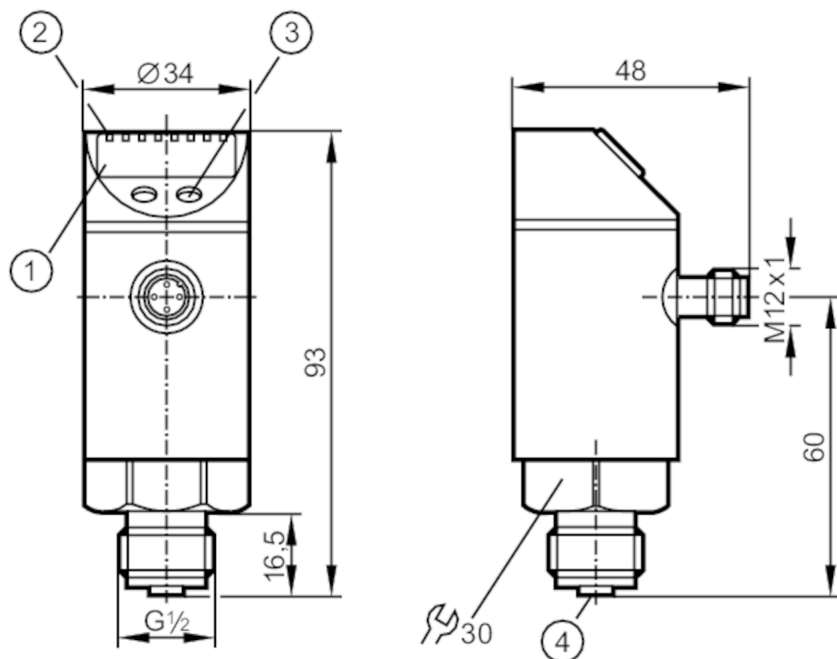




Evaluation unit with display for PT100/PT1000 temperature sensors

TR-...KDBR12-QFRKG/US/...../V



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button
- 4 connector for temperature sensor M12 x 1



Application

Application for Pt100 and Pt1000 measuring elements

Electrical data

Operating voltage [V]	18...32 DC; ("supply class 2" to cULus)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Integrated watchdog	yes

Outputs

Total number of outputs	2
Output signal	switching signal; IO-Link; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	2
Output function	normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes



Evaluation unit with display for PT100/PT1000

temperature sensors

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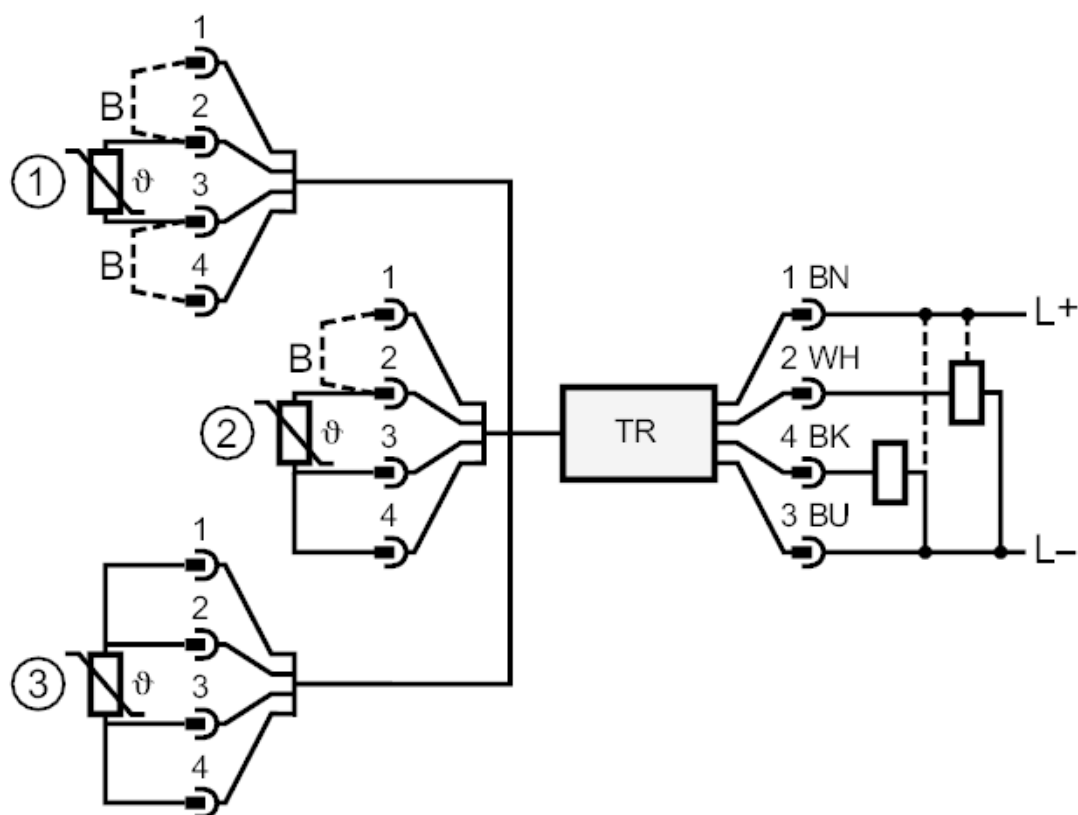
Measuring/setting range		
Measuring range	-40...300 °C	-40...572 °F
Set point SP	-39.8...300 °C	-39.6...572 °F
Reset point rP	-40...299.8 °C	-40...571.6 °F
In steps of	0.1 °C	0.1 °F
Resolution		
Resolution of switching output	[K]	0.1
Resolution of display	[K]	0.1
Accuracy / deviations		
Switch point accuracy	[K]	± 0,3
Display accuracy	[K]	± 0,3
Temperature drift per 10 K	[K]	0.1
Interfaces		
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.0	
Operating conditions		
Ambient temperature	[°C]	-25...70
Storage temperature	[°C]	-40...85
Protection	IP 67	
Tests / approvals		
EMC	DIN EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	DIN EN 61000-4-4 Burst	2 kV
	DIN 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]	240
Mechanical data		
Weight	[g]	232.6
Materials	stainless steel (1.4301 / 304); stainless steel (1.4305 / 303); EPDM/X; PC; PBT; FKM	
Process connection	threaded connection G 1/2 external thread	
Displays / operating elements		
Display	Display unit	2 x LED, green
	switching status	2 x LED, yellow
	measured values	alphanumeric display, 4-digit
	programming	alphanumeric display, 4-digit
Remarks		
Notes	discontinued article	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

Evaluation unit with display for PT100/PT1000 temperature sensors

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Connection



- 1: two-wire sensor
- 2: three-wire sensor
- 3: four-wire sensor
- B: link