

TAD961



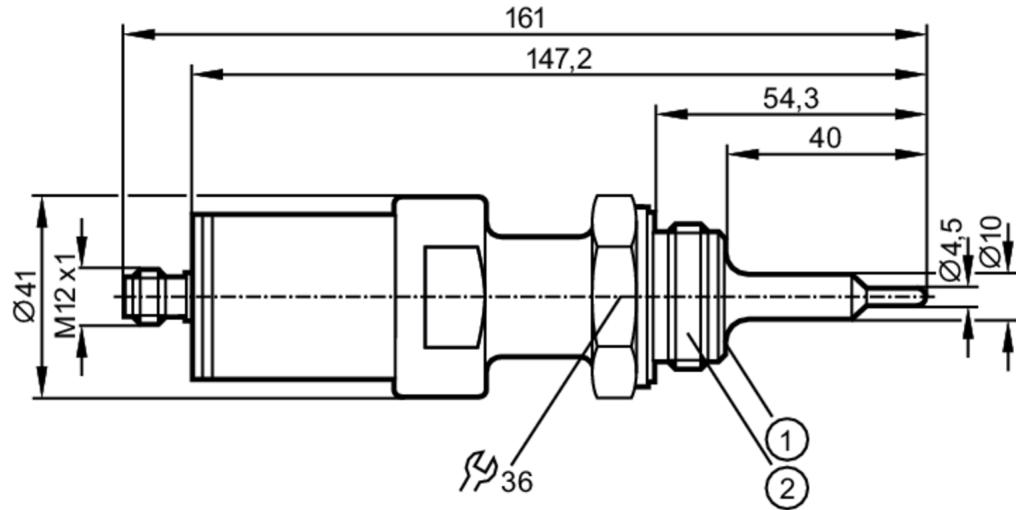
Temperature transmitter with drift detection

TAD040KLES30-A-DKG/US

Article no longer available - archive entry

Alternative articles: TAD991 + E33403

When selecting an alternative article and accessories please note that technical data may differ!



- 1 sealing area
2 Aseptoflex thread



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1	
Measuring range	-25...160 °C	-13...320 °F
Process connection	Aseptoflex	
Installation length EL [mm]	40	

Application

System	gold-plated contacts
Measuring element	1 x Pt 1000 + 1 x NTC; (thermically coupled, with backup function (temperature measuring even if one of the two sensor elements fails))
Media	liquids and gases
Pressure rating [bar]	50
Minimum installation depth [mm]	15
No dead space	yes

Electrical data

Operating voltage [V]	20...32 DC; (to SELV/PELV)
Current consumption [mA]	23; (24 V)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	4
Integrated watchdog	yes

TAD961



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Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analog outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analog signal; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		1
Output function		normally open / normally closed / diagnostic signal; (configurable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Diagnostic output		Drift monitoring; Fault monitoring
Number of analog outputs		1
Analog current output	[mA]	4...20
Max. load	[Ω]	(Ub - 10 V) × 50
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
Probe length L	[mm]	40
Measuring range		-25...160 °C -13...320 °F
Drift warning		0.2...5 °C 0.4...9 °F
Drift alarm		0.2...5 °C 0.4...9 °F
In steps of		0.05 °C 0.1 °F
Resolution		
Resolution of analog output	[K]	0.05
Accuracy / deviations		
Precision analog output	[K]	± 0,2 (-10...100°C); ± 0,3 (-25...-10/100...150°C); (probe completely inserted into the measured medium up to the sealing chamfer)
Drift monitoring	[K]	± 0,2 (-10...100°C); ± 0,3 (-25...-10/100...150°C *); (probe completely inserted into the measured medium up to the sealing chamfer)
Temperature coefficient	[% of the span / 10 K]	< ± 0,01; (In case of deviation from the reference condition 25 ± 5 °C)
Reaction times		
Dynamic response T05 / T09	[s]	6 / 13
Software / programming		
Parameter setting options		drift warning/drift alarm threshold; Fail-Safe; Display unit; scaling of the analog output; redundancy switching; performance diagnostic output; switching logic; normally open / closed; Programmable via EPS interface
Operating conditions		
Ambient temperature	[°C]	-25...70
Note on ambient temperature		electronics: -25...70 °C Process connection: -32...170 °C
Storage temperature	[°C]	-40...85

TAD961



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Protection

IP 67; IP 69K

Tests / approvals

EMC	DIN EN 61000-4-2 ESD EN 61000-4-3 HF radiated DIN EN 61000-4-4 Burst EN 61000-4-6 HF conducted	4 kV CD / 8 kV AD 10 V/m 2 kV 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)
Note on approval	Including free 5-point calibration certificate.	

Mechanical data

Weight [g]	0.456
Material	stainless steel (1.4404 / 316L); PEI; FKM
Materials (wetted parts)	stainless steel (1.4404 / 316L)
Process connection	Aseptoflex
Surface characteristics Ra/Rz of the wetted parts	Ra: < 0.6
Installation length EL [mm]	40

Remarks

Remarks	referring to UL: for use on a low voltage circuit with overcurrent protection in accordance with UL873 tab. 28.1 or $I_{max} = 100/Ub$ (Ub = voltage of the circuit) The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

