

TAA431



Temperature transmitter

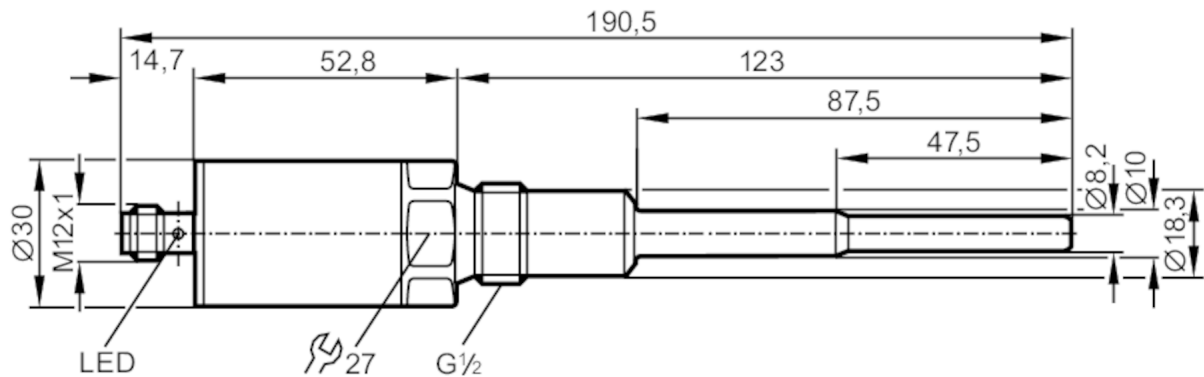
TAA123CCDR12-ASIVG/US

phase-out article

Discontinuation date: 03/31/2026

Alternative articles: TA2531 + AC5225

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



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1	
Measuring range	-10...150 °C	14...302 °F
Process connection	threaded connection G 1/2 external thread	
Installation length EL [mm]	87.5	

Application

Special feature	Gold-plated contacts	
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Medium temperature	< 150; (< 40 min) °C	< 302; (< 40 min) °F
Pressure rating	300 bar	30 MPa
Note on pressure rating	sensor	
Minimum installation depth [mm]	When mounted in adapters the specifications of the adapter data sheet apply. 15	

Electrical data

Operating voltage [V]	18...31.6 DC	
Current consumption [mA]	< 25	
Protection class	III	
Reverse polarity protection	yes	

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 1	
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Outputs

Total number of outputs	1	
Output signal	analogue signal	
Electrical design	AS-i	

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Number of analogue outputs	1	
Overload protection	yes	
Measuring/setting range		
Probe length L [mm]	87.5	
Measuring range	-10...150 °C 14...302 °F	
Resolution		
Resolution of analogue output [K]	0.05	
Accuracy / deviations		
Precision analogue output [K]	$\pm 0,1 (60^{\circ}\text{C} / 140^{\circ}\text{F}) / \pm 0,3 (0...140^{\circ}\text{C} / 32...284^{\circ}\text{F})$	
Temperature coefficient [% of the span / 10 K]	$< \pm 0,1$; (in case of deviation from the reference condition $25 \pm 5^{\circ}\text{C}$)	
Response times		
Dynamic response T05 / T09 [s]	1 / 3; (to DIN EN 60751)	
Operating conditions		
Ambient temperature [°C]	-25...70	
Storage temperature [°C]	-40...100	
Protection	IP 68; IP 69K	
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	0,5/1 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]	348	
AS-i classification		
AS-i version	2.11	
AS-i I/O configuration [hex]	7	
AS-i ID code [hex]	3.C	
Mechanical data		
Weight [g]	258.5	
Housing	cylindrical	
Dimensions [mm]	$\varnothing 30 / L = 190.5$	
Materials	stainless steel (316L/1.4404); stainless steel (304/1.4301); stainless steel (303/1.4305); PA	
Materials (wetted parts)	stainless steel (316L/1.4404)	
Tightening torque [Nm]	30...50	
Process connection	threaded connection G 1/2 external thread	
Probe diameter [mm]	10	
Installation length EL [mm]	87.5	
Displays / operating elements		
Display	operation	1 x LED, green
	failure	1 x LED, red

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Remarks

Remarks	The values for accuracy apply to flowing water. referring to UL: for use on a low voltage circuit with overcurrent protection in accordance with UL873 tab. 28.1 or $I_{max} = 100/U_b$ (U_b = voltage of the circuit)
Pack quantity	1 pcs.

Electrical connection

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



Connection

