

Gas-actuated temperature switch

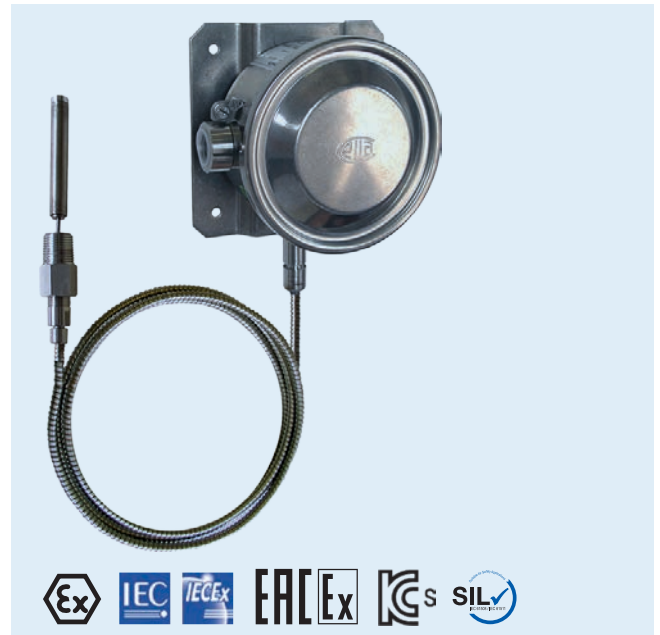
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Applications

- Temperature monitoring and direct switching of electrical loads
- General process instrumentation in the chemical and petrochemical industries, oil and gas industries, power generation, water/wastewater industries, mining

Special features

- No power supply needed for switching of electrical loads
- Setting ranges from -30 ... +70 to 0 ... 600 °C
- Ex ia version available
- 1 or 2 independent set points, SPDT or DPDT, high switching power up to AC 250 V, 20 A
- Direct mounting or remote mounting with capillary ≤ 10 m



Order numbers

Sensor	remote mounting with capillary	
Stem diameter	stem diameter 12 mm	
Capillary length	2 m	
Process connection	1/2 NPT male	
Electrical connection	1/2 -14 NPT-F	
Electric contacts	UN - 1 x SPDT silver contact	DN - 2 x SPDT or 1 x DPDT silver contact
Setting range		
-30 ... +70 °C	14159447	14159455
0 ... +100 °C	14159457	14159458
0 ... +160 °C	14159459	14159460
0 ... +250 °C	14159461	14159462
0 ... +400 °C	14159464	14159466
0 ... +600 °C	14159467	14159468

Legend: available from stock in Germany available after production ---- not available

Quick order code (for further details see data sheet TV 31.60)

Field no.	Code	Version
Sensor		
①	B	direct mounting
	C	remote mounting with capillary
Electric contacts		
②	UN	1 x SPDT silver contact
	US	1 x SPDT silver contact, hermetically sealed, argon gas filling
	UO	1 x SPDT gold-plated contact, hermetically sealed, argon gas filling
	UG	1 x SPDT gold-plated contact
	UR	1 x SPDT silver contact, adjustable dead band
	DN	2 x SPDT or 1 x DPDT silver contact
	DS	2 x SPDT or 1 x DPDT silver contact, hermetically sealed, argon gas filling
	DO	2 x SPDT or 1 x DPDT gold-plated contact, hermetically sealed, argon gas filling
	DG	2 x SPDT or 1 x DPDT gold-plated contact
Stem diameter and Insertion length for direct mounting (ONLY for direct mounting)		
③	1	stem diameter D=12mm, insertion length Y=145mm, active length X=85mm
	2	stem diameter D=9,5mm, insertion length Y=195mm, active length X=135mm
	Z	without (only for remote mounting)
Capillary length (ONLY for remote mounting)		
④	02	2m, stem diameter 12 mm (Standard)
	04	4m, stem diameter 12 mm (Standard)
	06	6m, stem diameter 12 mm (Standard)
	08	8m, stem diameter 12 mm (Standard)
	10	10m, stem diameter 12 mm (Standard)
	C2	2m, stem diameter 9,5 mm
	C4	4m, stem diameter 9,5 mm
	C6	6m, stem diameter 9,5 mm
	C8	8m, stem diameter 9,5 mm
	C1	10m, stem diameter 9,5 mm
	ZZ	without (only for direct mounting)
Setting range		
⑤	CBA	-30 ... +70 °C, working range -40 ... +70°C, proof temperature +120°C
	CBB	0 ... +100 °C, working range -40 ... +100°C, proof temperature +120°C
	CBC	0 ... +160 °C, working range -40 ... +160°C, proof temperature +190°C
	CBD	0 ... +250 °C, working range -40 ... +250°C, proof temperature +300°C
	CBE	0 ... +400 °C, working range -40 ... +400°C, proof temperature +500°C
	CBF	0 ... +600 °C, working range -40 ... +600°C, proof temperature +600°C
Process connection		
⑥	E	1/2 NPT male
	F	3/4 NPT male
	G	G 1/2 A male
	H	G 3/4 A male
Special design features		
⑦	H	helical bulb
	N	NACE
	Z	without
Ambient condition / application condition		
⑧	D1	suitable for ambient temperature up to -60°C
	O1	Offshore
	ZZ	without

Order code: TWG - - B AM ZZZZ

Please specify approvals and certificates via free text.

C1 Intrinsic safety Ex ia IECEx-ATEX
C4 SIL 2 for functional safety

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