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**Technical data**

Medium	water, coolant
Function	minimum - quiescent current (rc)
Operating voltage	12 / 24 V (-25% / +50%) (9 - 36 VDC)
Current consumption	< 8 mA
Output	low side switch ≤ 1 A over the whole temperature range short-circuit and overload protected over the ambient temperature range. At inductive loads freewheeling diode e.g. 1N4007, has to be mounted at the load.
Mounting thread	M14x1,5
Function control	0 seconds ± 5%
Fault indication delay	7 seconds ± 5% <sup>(a)</sup>
Connection	connector ISO 15170-A1-3.1-Sn/K1 (former DIN72585)
Housing material	CuZn38Pb2 EN12164; CW608N capacitive connected to ground
Probe coating	Tefzel® ETFE <sup>(a)</sup>
Probe protection	IP 69K to DIN40050 with mounted mating connector
Weight	approx. 85 g
Marking	manufacturer; type; manufacturer no.; SN; year / week; approval
Switch point hysteresis	< 3 mm
Medium temperature	-40 °C to +125 °C (-40 °F to +257 °F)
Ambient temperature	-40 °C to +125 °C (-40 °F to +257 °F)
Storage temperature	-50 °C to +125 °C (-58 °F to +257 °F)
Mounting position	optional
Reverse polarity protection	inbuilt between positive and negative terminal

**Caution!!**

Do not connect negative potential to signal terminal of the sensor and positive potential to negative terminal of the sensor.

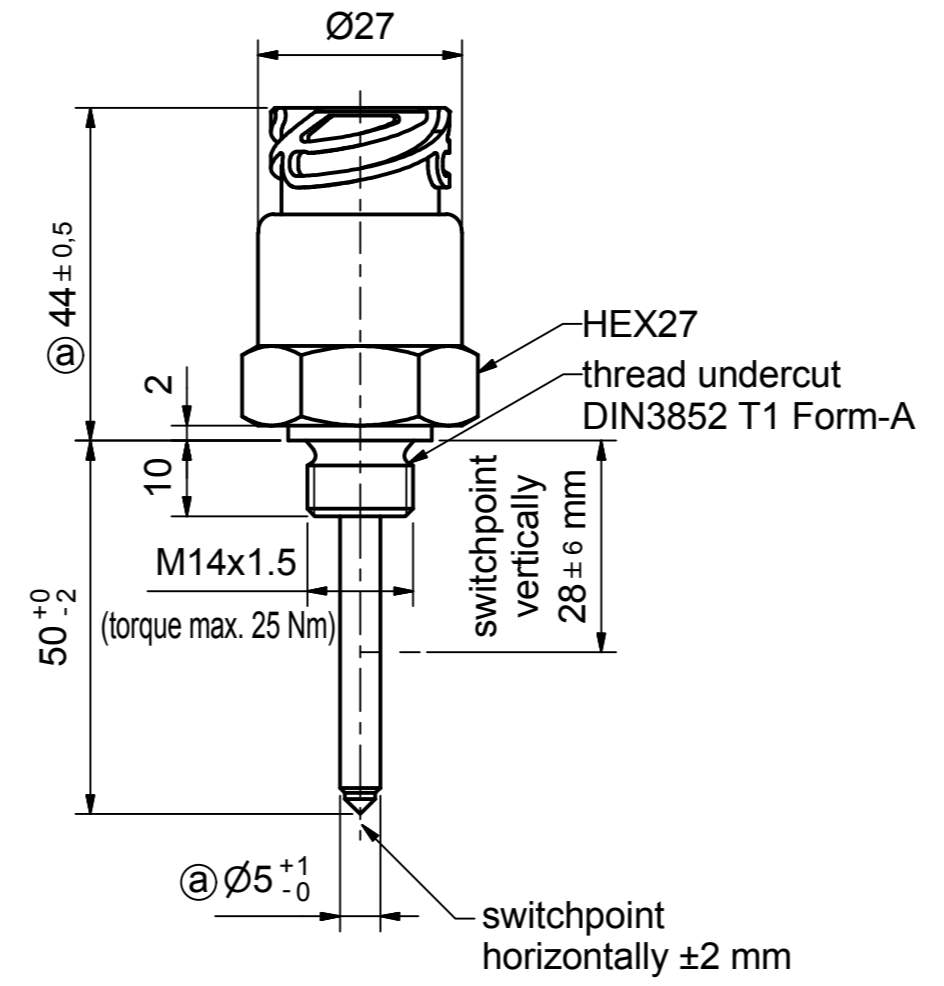
Approval	<span style="border: 1px solid black; padding: 2px;">e1</span>
	035459
Customs tariff number	90261029

**Environmental simulations**

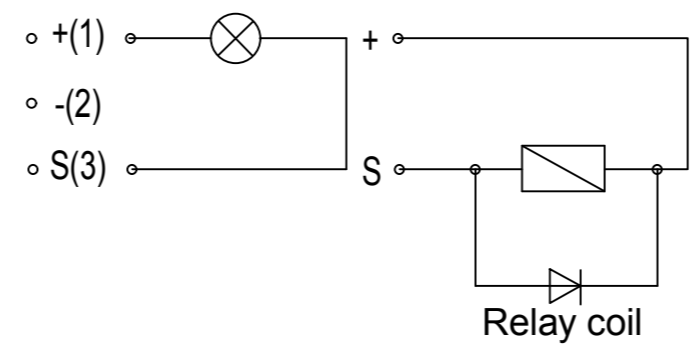
Vibration	ISO 16750-3:2007	10 Hz - 2000 Hz 20 g
Free Fall	IEC 16750	
Mechanical Shock	DIN EN 60068-2-27:1995;	100 g / 11ms
Dry Cold	DIN EN 60068-2-1:2006;	-40 °C / 24 h (-40 °F / 24 h)
Dry Heat	DIN EN 60068-2-2:2008;	+125 °C / 96 h (+257 °F / 96 h)
Temperature cycling	DIN EN 60068-2-14:2000	
Damp Heat	DIN EN 60068-2-78:2002	
Damp Heat, steady state	DIN EN 60068-2-30:2006	
Salt spray	DIN EN 60068-2-52:1996	
Pressure resistance	2,5 MPa (25 bar / 362,6 psi)	(25 °C / 77 °F / 1 h)

**EMC**

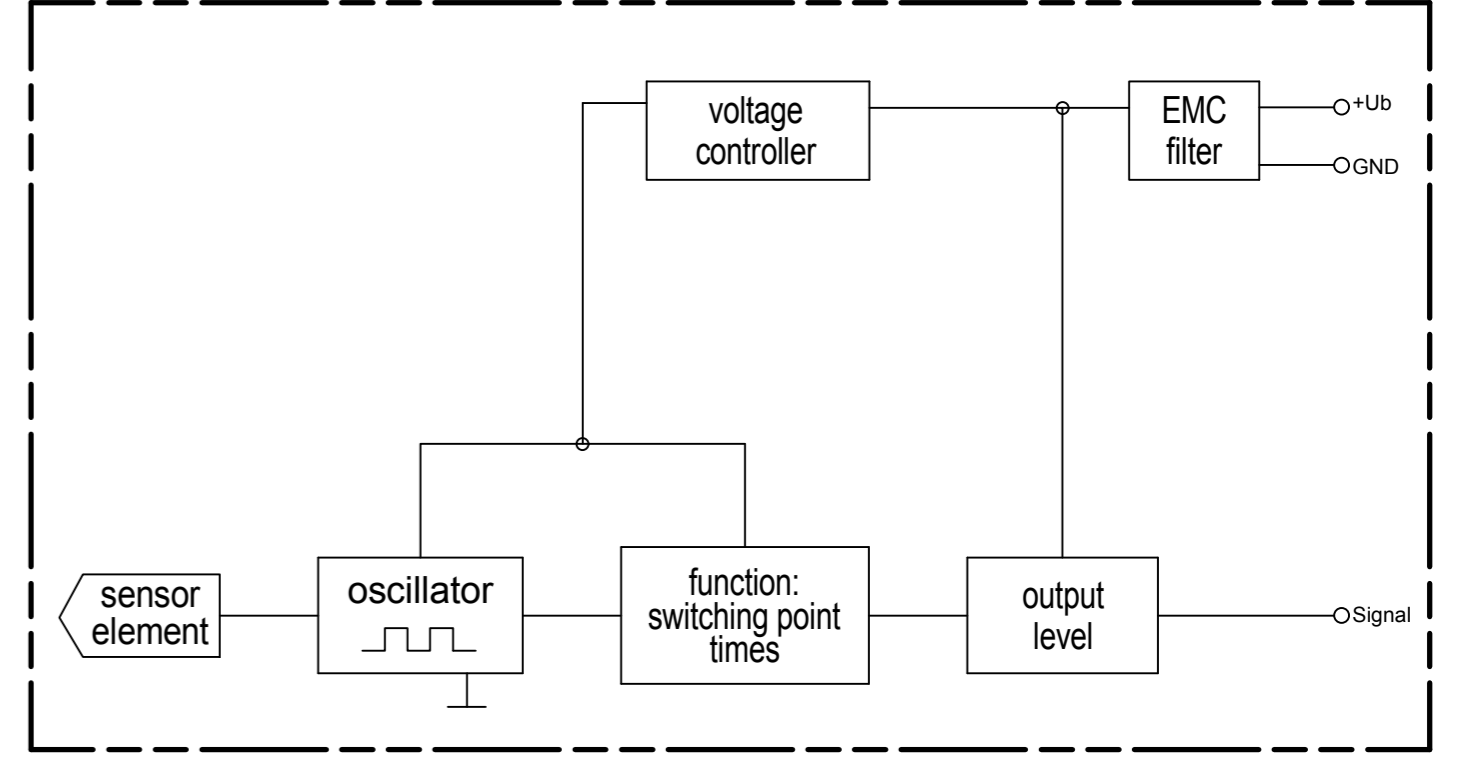
Radiated emission	2004/104/EG	30 MHz - 1 GHz; 1 m
Conducted transient emission	ISO 7637-2:2004	
Immunity to RF electromagnetic fields	ISO 11452-1/-2	1000 MHz - 2000 MHz; 150 V / m (rms)
Immunity to RF electromagnetic fields in the stripline	ISO 11452-1/-5	20 MHz - 1000 MHz; 150 V / m (rms)
Transient immunity test on power lines	ISO 7637-2/2004	Impulse 1, 2a, 2b, 3a, 3b, 4



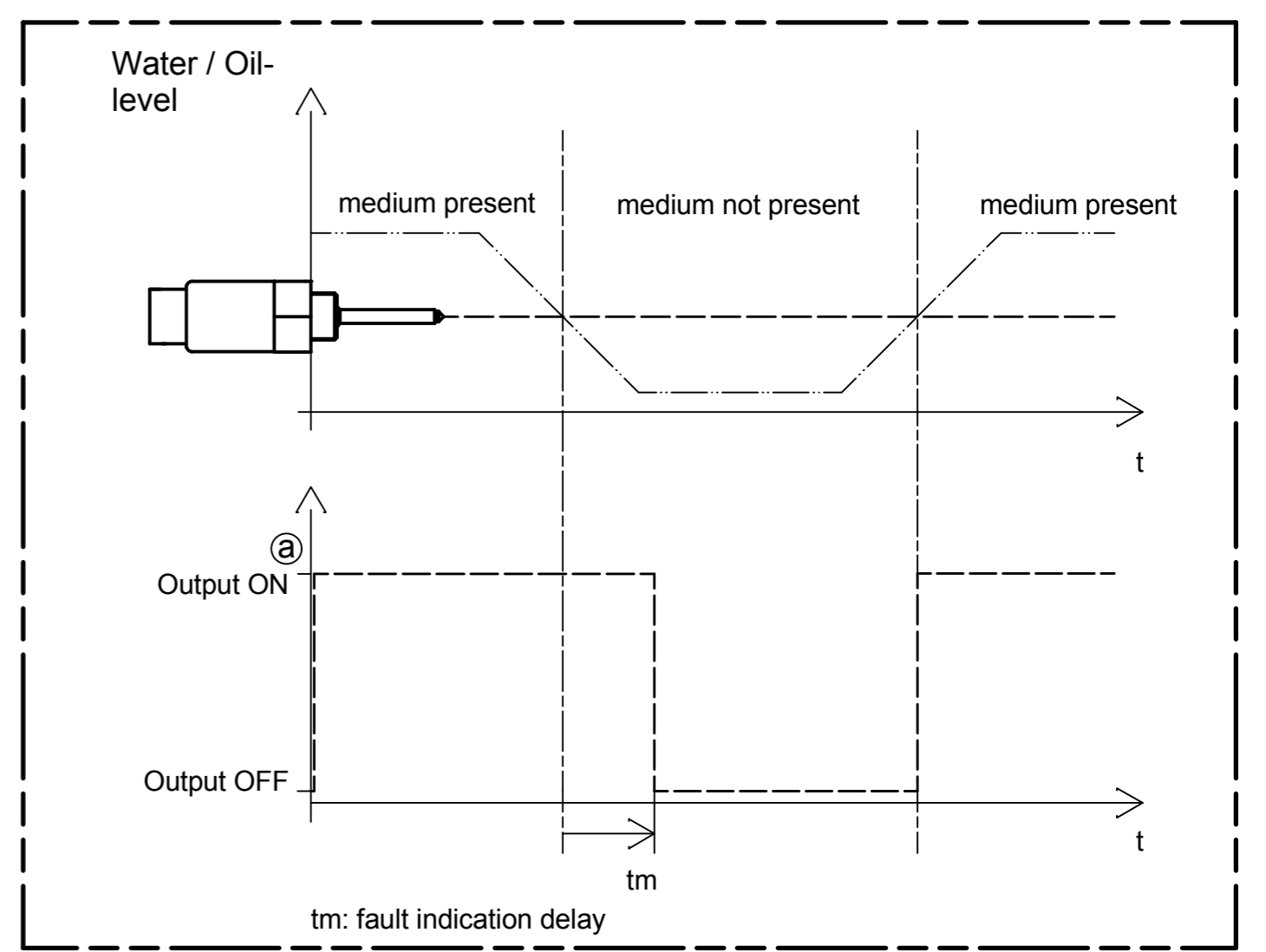
1 = positive (+)  
2 = negative (-)  
3 = signal (s)



**Block diagram**



**Functional diagram for MINIMUM Probes**



field of application	admissible tolerance	surface	scale 1:1	position -	amount -
	ISO2768-mK				
	date	name	description		
	created by 26.05.2009	SchAl	CLS40 water level sensor low side switch - quiescent current with connector ISO 15170-A1-3.1-Sn/K1		
	checked by 21.10.2009	SasCh			
			drawing number		sheet
			320402		1/1
a see drawing	23.03.12	MoeMi/StaRo	drawing path: I:\CAD\320\320402\US.idw		
rev. modification	date	name/checked by			