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BEDIA Motorentechnik GmbH & Co.KG, Altdorf bei Nürnberg

**Technical data**

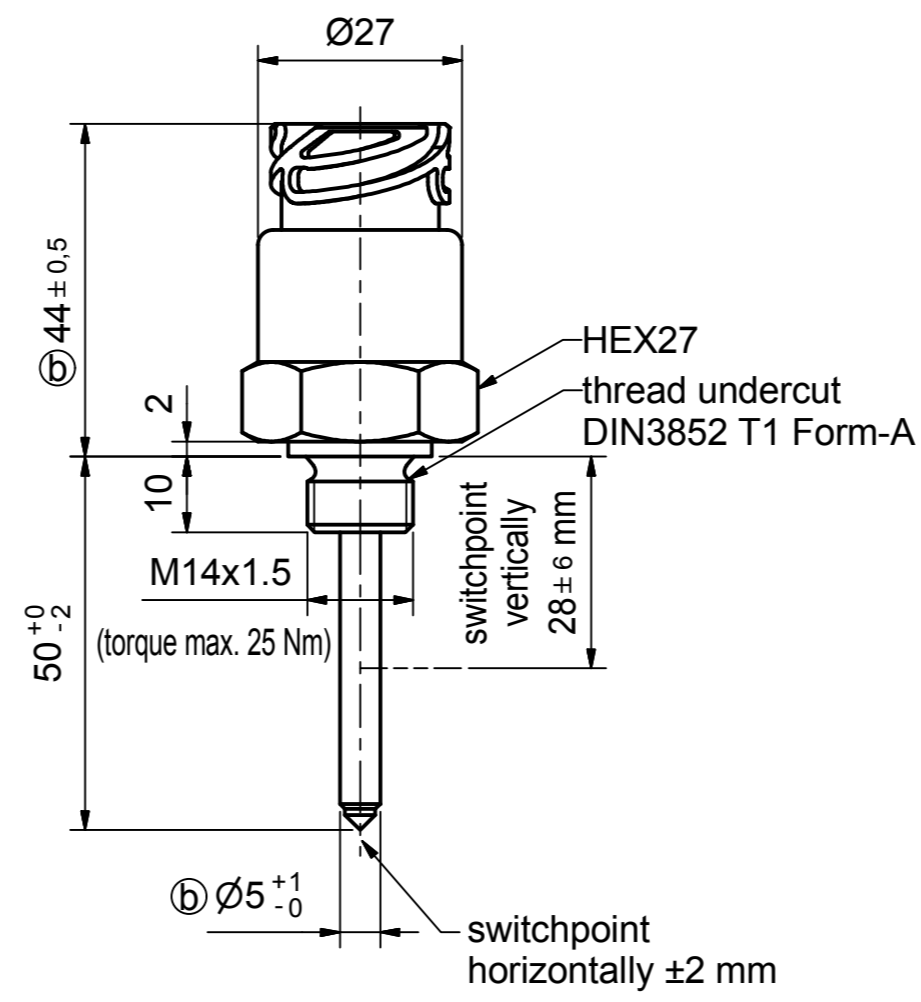
Medium	water, coolant
Function	minimum - operating current (oc)
Operating voltage	12 / 24 V (-25% / +50%) (9 - 36 VDC)
Current consumption	< 8 mA
Output	low side switch ≤ 1 A over the whole temperature range short-circuit and overload protected over the ambient temperature range. At inductive loads freewheeling diode e.g. 1N4007, has to be mounted at the load.
Mounting thread	M14x1,5
Function control	2 seconds ± 5%
Fault indication delay	7 seconds ± 5% <sup>ⓑ</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
Probe protection	IP 69K to DIN40050 with mounted mating connector <sup>ⓑ</sup>
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.

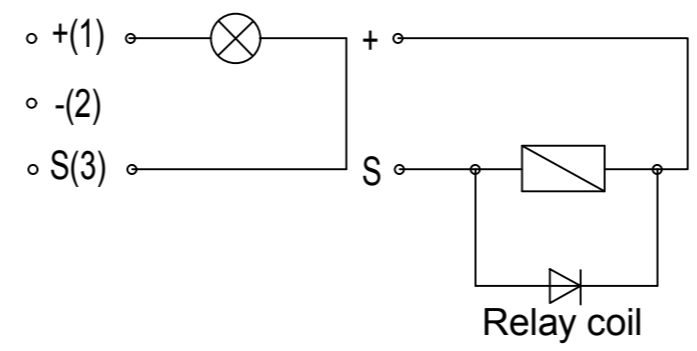
Approval	<span style="border: 1px solid black; padding: 2px;">e1</span>
	035459
Customs tariff number	90261029

<b>Environmental simulations</b>	
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)

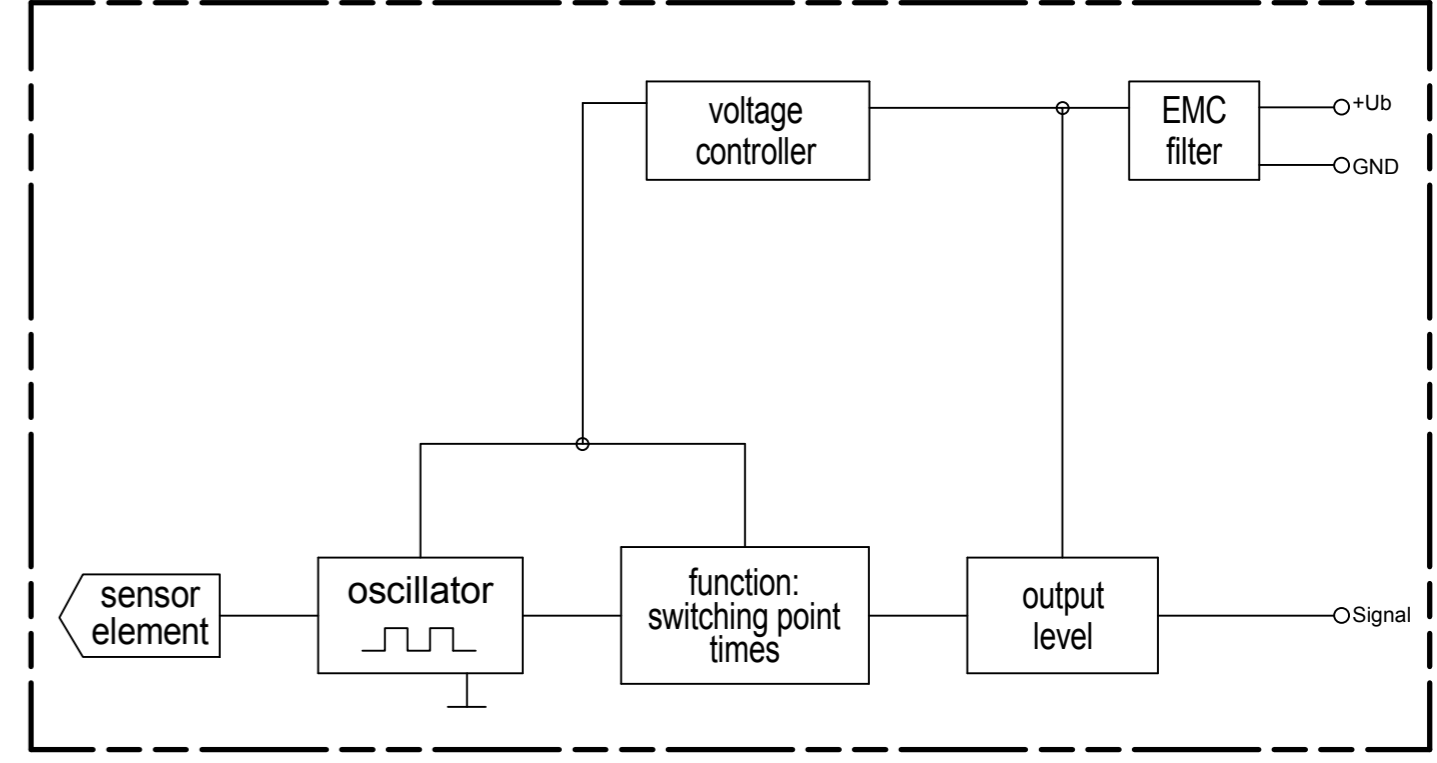
<b>EMC</b>	
Radiated emission	2004/104/EG 30 MHz - 1 GHz; 1 m
Conducted transient emission	ISO 7637-2:2004
Immunity to RF electromagnetic fields	ISO 11452-1/-2 1000 MHz - 2000 MHz; 150 V / m (rms)
Immunity to RF electromagnetic fields in the stripline	ISO 11452-1/-5 20 MHz - 1000 MHz; 150 V / m (rms)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



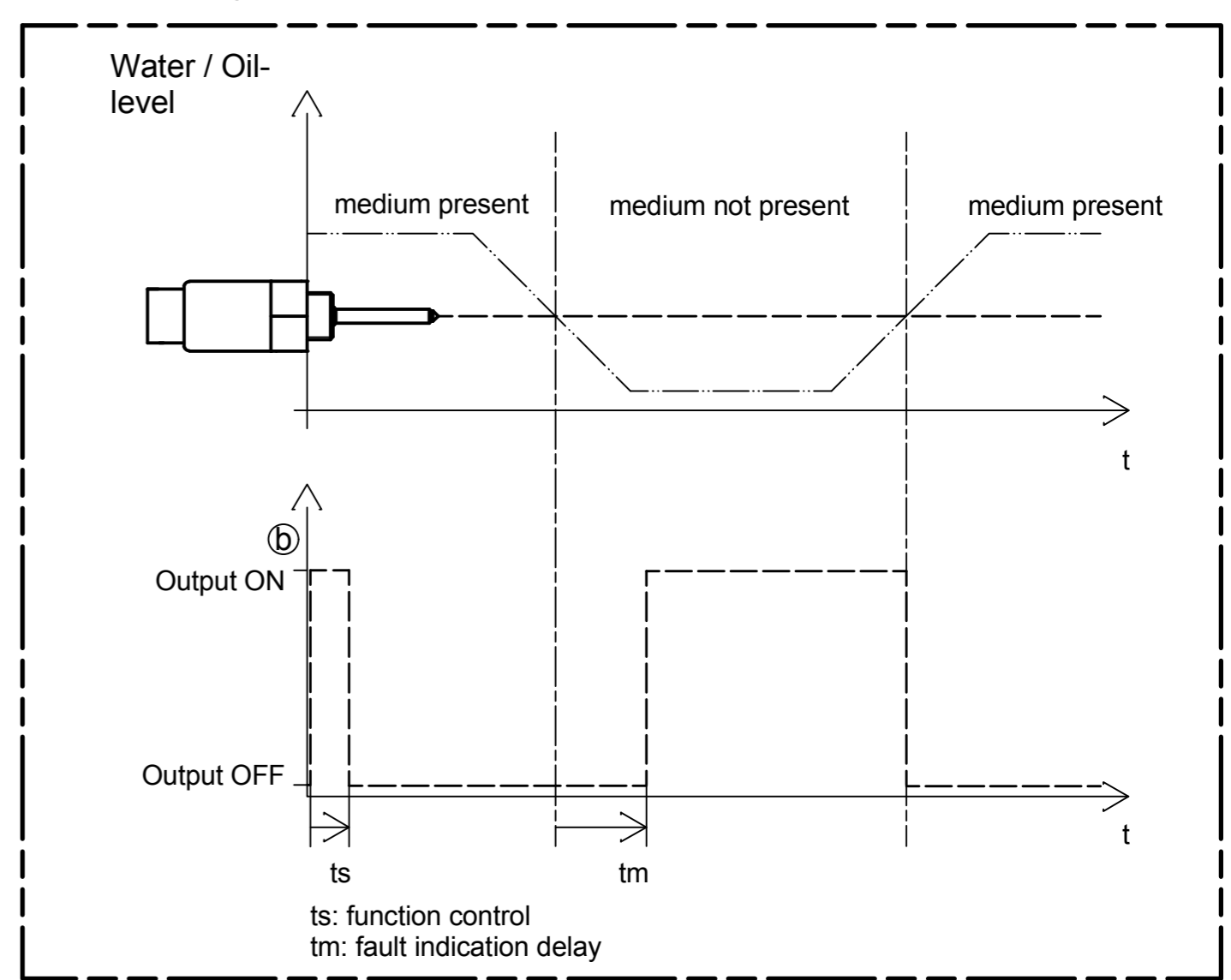
1 = positive (+)  
2 = negative (-)  
3 = signal (S)



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 25.05.2009	SchAl	CLS-40 water level sensor low side switch - operating current with connector ISO 15170-A1-3.1-Sn/K1			
	checked by 26.10.2009	SasCh				
	revised 25.04.12	MoeMi/StaRo	drawing number			
	admissible tol. 22.06.10	MoeMi/SasCh	320400			
	rev. modification	date	name/checked by	drawing path: I:\CAD\320\320400\US.dwg		

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