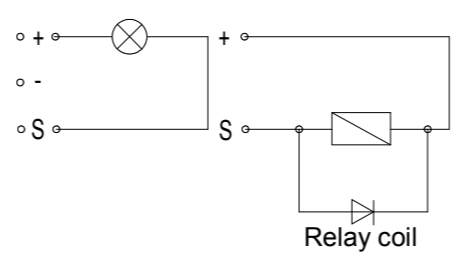
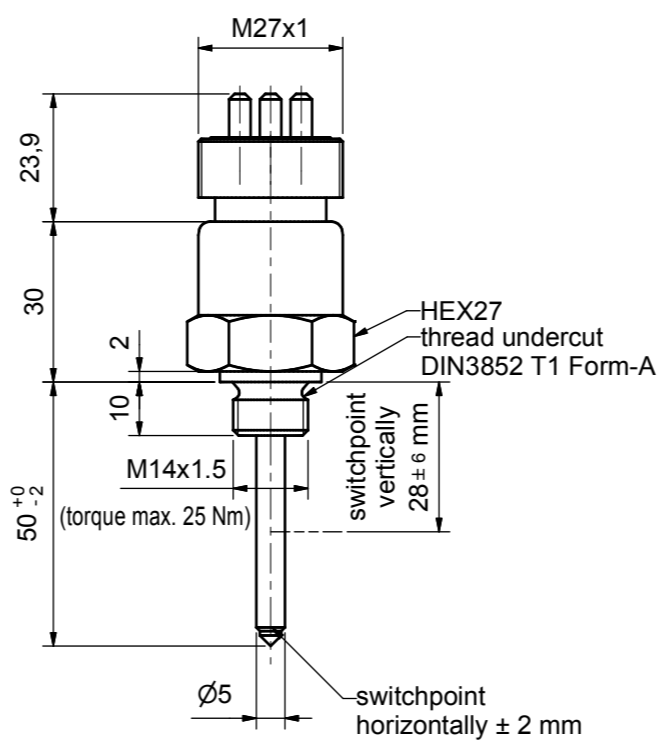


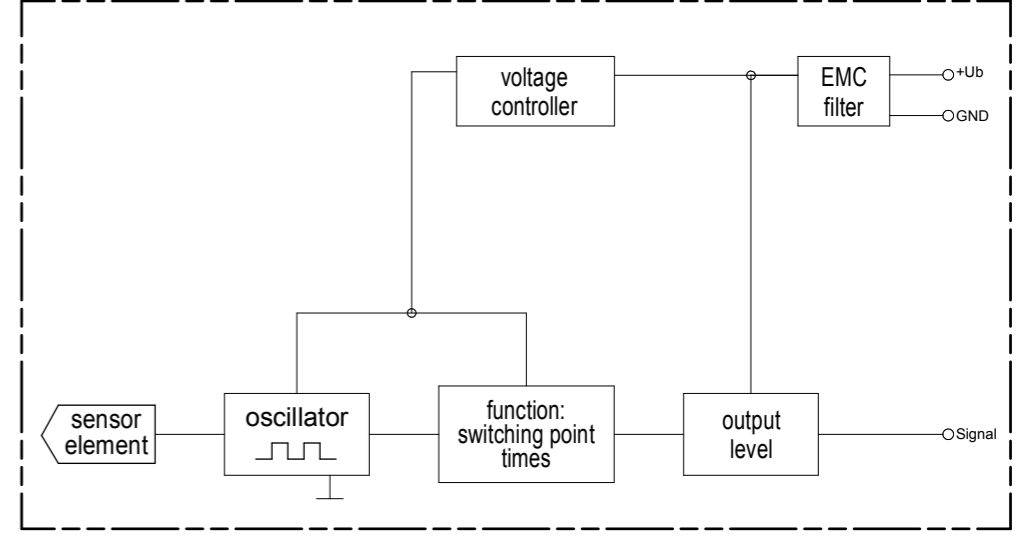
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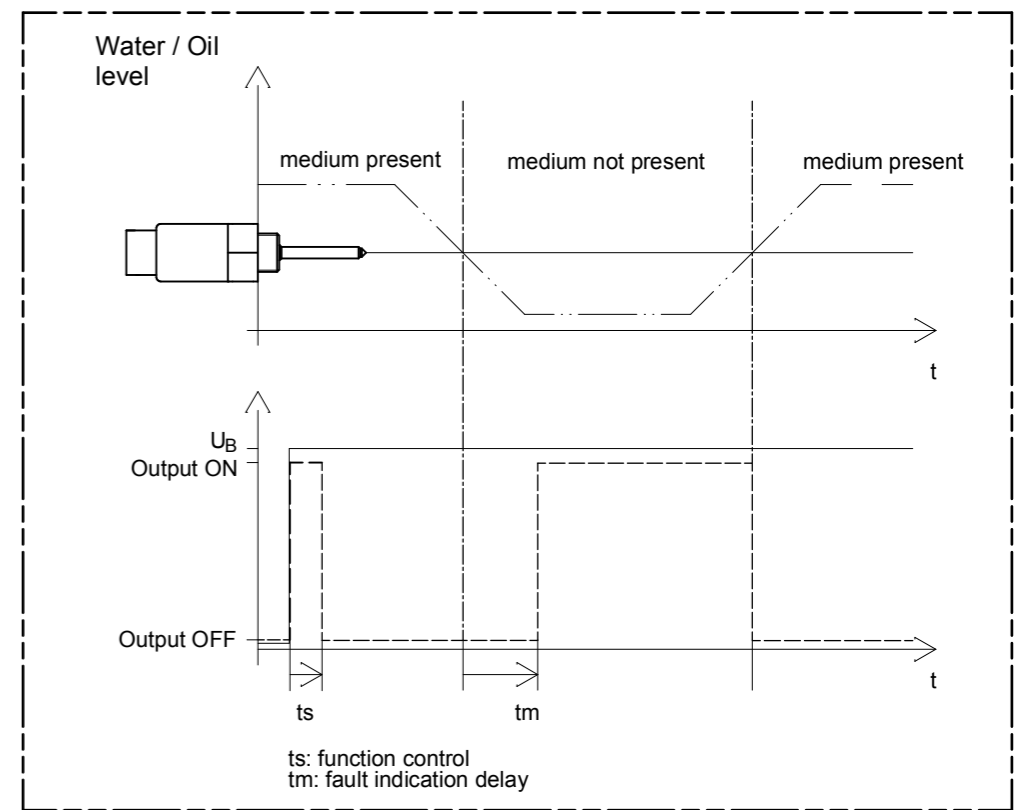
	11	10	9	8	7	6	5	4	3	2	1	
Technical data												
Medium	water, coolant											
Function	Minimum - operating current (oc)											
Operating voltage	12 / 24 V (-25% / +50%) (9 - 36 VDC)											
Current consumption	typ. < 8 mA											
Output	low side switch											
	≤ 1 A over the whole 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	20 seconds ± 5%											
Connection	connector fine thread M27x1											
Housing material	CuZn38Pb2											
	EN12164; CW608N											
	capacitive connected to ground											
Probe coating	Tefzel ® ETFE											
Probe protection	IP 67 to DIN40050											
Weight	approx. 95 g											
Marking	manufacturer; type; manufacturer no.; SN; year / week; approval											
Switch point hysteresis	typ. < 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	in-built, 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	<table border="1" style="display: inline-table;"> <tr><td>e1</td></tr> </table>											e1
e1												
Customs tariff number	035459 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											



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 27.01.2010	Moderer	CLS-40 water level sensor low side switch - operating current with connector fine thread M27x1		
	checked by 28.01.2010	Stark			
			drawing number	sheet	
			321617	1/1	
rev.	modification	date	name/checked by	drawing path: I:\CAD\321617\US.sdw	

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	11	10	9	8	7	6	5	4	3	2	1
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