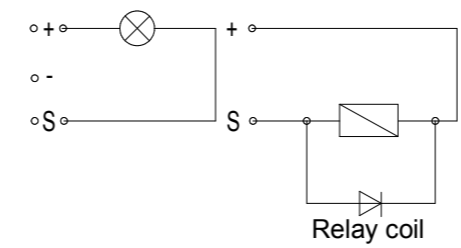
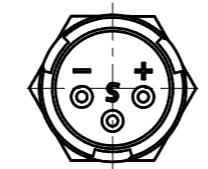
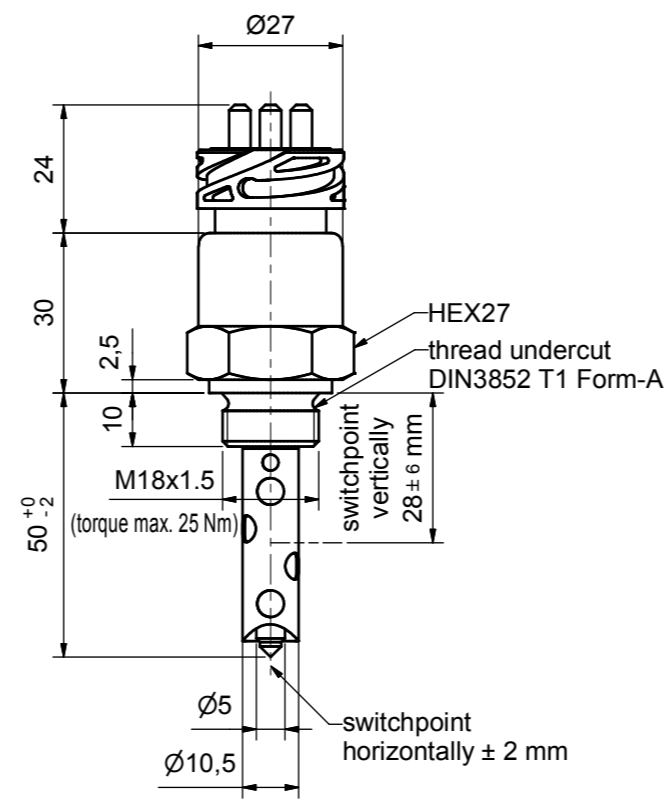


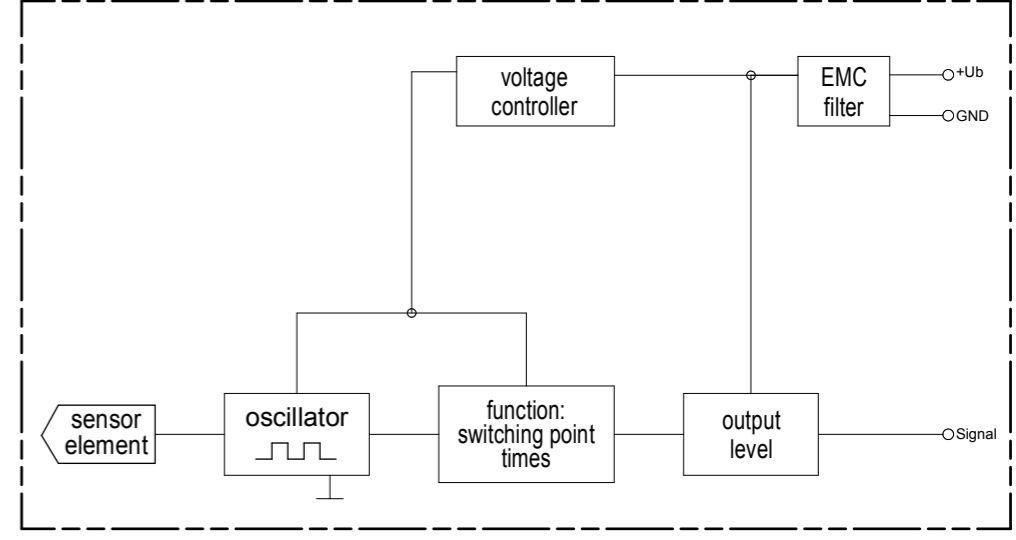
The copyright to this drawing belongs to us. No duplication or transfer to, providing access to or communicating to any third parties is allowed of its contents or excerpts thereof. This drawing may not be used without our approval for any purpose other than that for which it has been entrusted to the recipient.

BEDIA Motorentechnik GmbH & Co.KG, Altdorf bei Nürnberg

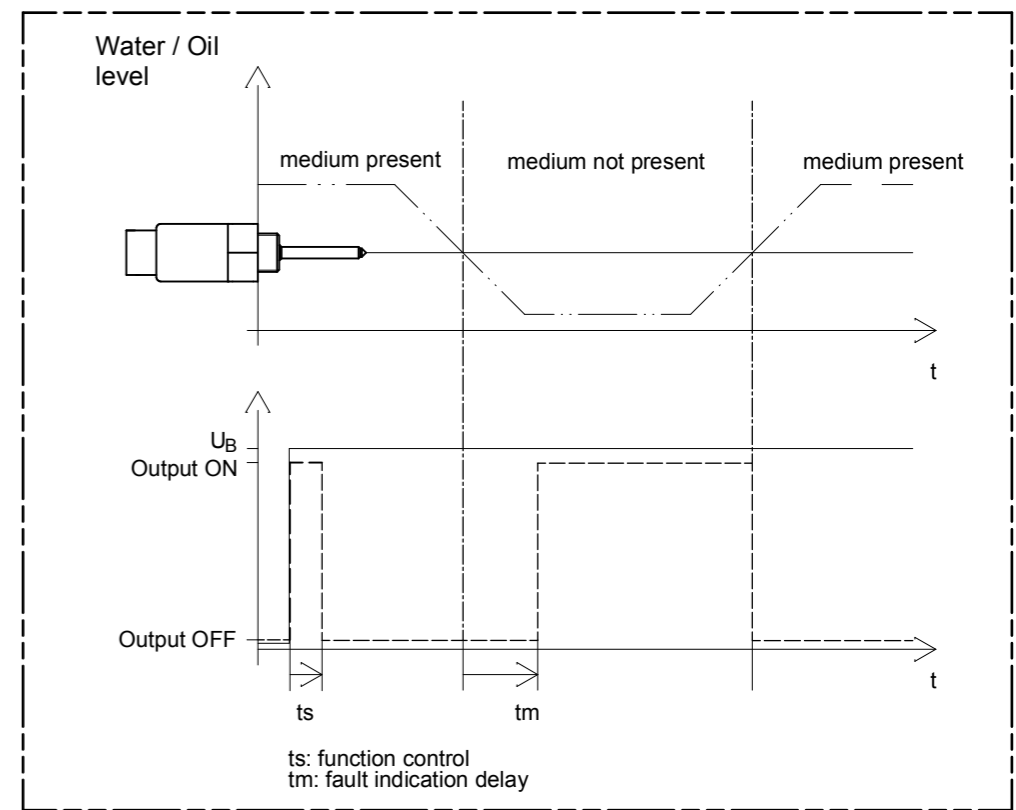
	11	10	9	8	7	6	5	4	3	2	1	
<b>Technical data</b>												
Medium	oil											
Function	Minimum - operating current (oc)											
Operating voltage	12 / 24 V (-25% / +50%) (9 - 36 VDC)											
Current consumption	typ. < 8 mA											
Output	low side switch											
	≤ 1 A over the whole temperature 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	M18x1,5											
Function control	2 second ± 5%											
Fault indication delay	7 seconds ± 5%											
Connection	connector bayonet 16S											
Housing material	CuZn38Pb2											
	EN12164; CW608N											
	capacitive connected to ground											
Probe coating	Tefzel® ETFE											
Probe protection	IP 67 to DIN40050											
Weight	approx. 105 g											
Marking	manufacturer; type; manufacturer no.; SN; year / week; approval											
Switch point hysteresis	typ. < 3 mm											
Reference medium	paraffin oil, ε <sub>r</sub> = 2,0..2,4, for switchpoint adjustment											
Medium temperature	-40 °C to +150 °C (-40 °F to +302 °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											
<b>Caution!!</b>	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											
<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											



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 22.10.2009	MoeMi	CLS-40 oil level sensor low side switch - operating current with connector bayonet 16S		
	checked by 14.12.2009	SasCh			
			drawing number	sheet	
			321572	1/1	
rev.	modification	date	name/checked by	drawing path: I:\CAD\321572\321572.dwg	