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Technical data

Medium: oil
 Function: Minimum - quiescent current (rc)
 Operating voltage: 12 / 24 V (-25% / +50%) (9 - 36 VDC)
 Current consumption: typ. < 8 mA
 Output: high 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: 0 seconds ± 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: ① approx. 105 g
 Marking: manufacturer; type; manufacturer no.; SN; year / week; approval
 Switch point hysteresis: typ. < 3 mm
 Reference medium: paraffin oil, $\epsilon_r = 2,0..2,4$, 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: inbuilt between positive and negative terminal

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

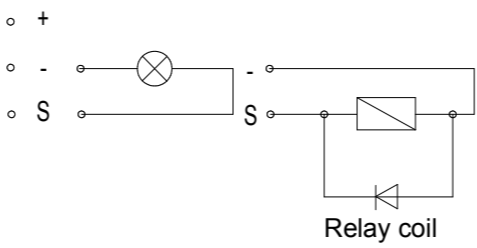
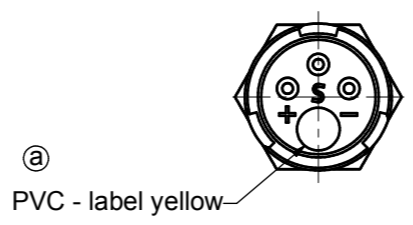
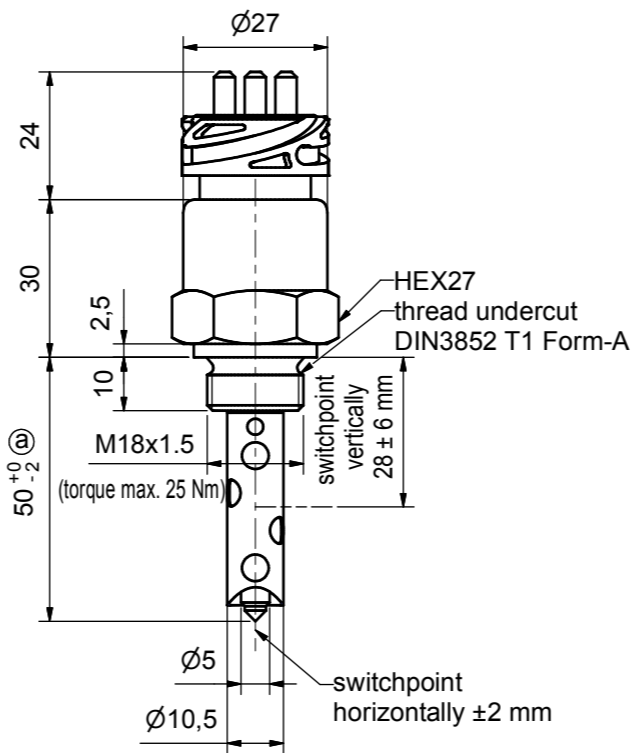
Approval: e1
 035459
 Customs tariff number: 90261029

Environmental simulations

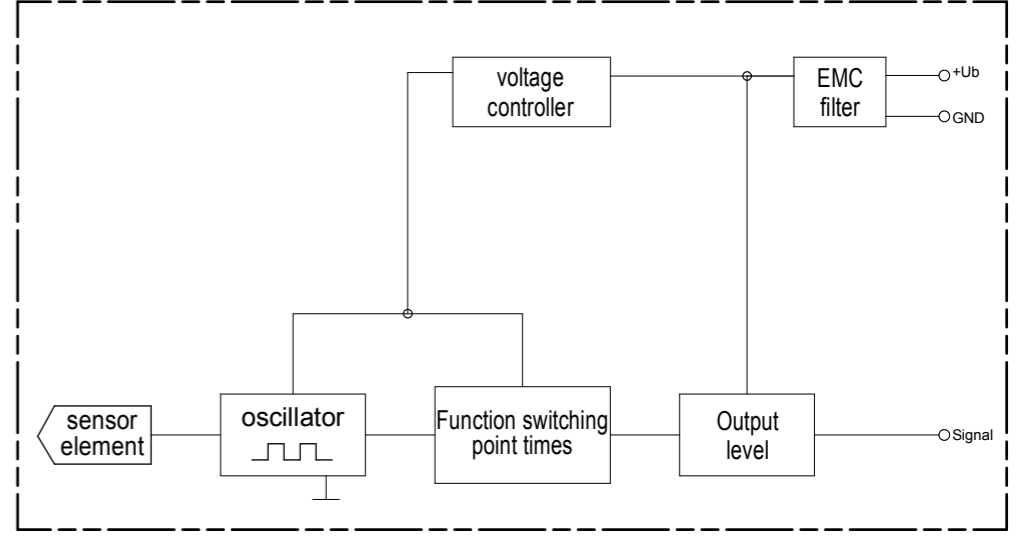
Vibration: ISO 16750-3:2007 10 Hz - 2000 Hz 20 g
 Free Fall: IEC 16750
 Mechanical Shock: DIN EN 60068-2-27:1995; 100 g / 11ms
 Dry Cold: DIN EN 60068-2-1:2006; -40 °C / 24 h (-40 °F / 24 h)
 Dry Heat: DIN EN 60068-2-2:2008; +125 °C / 96 h (+257 °F / 96 h)
 Temperature cycling: DIN EN 60068-2-14:2000
 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

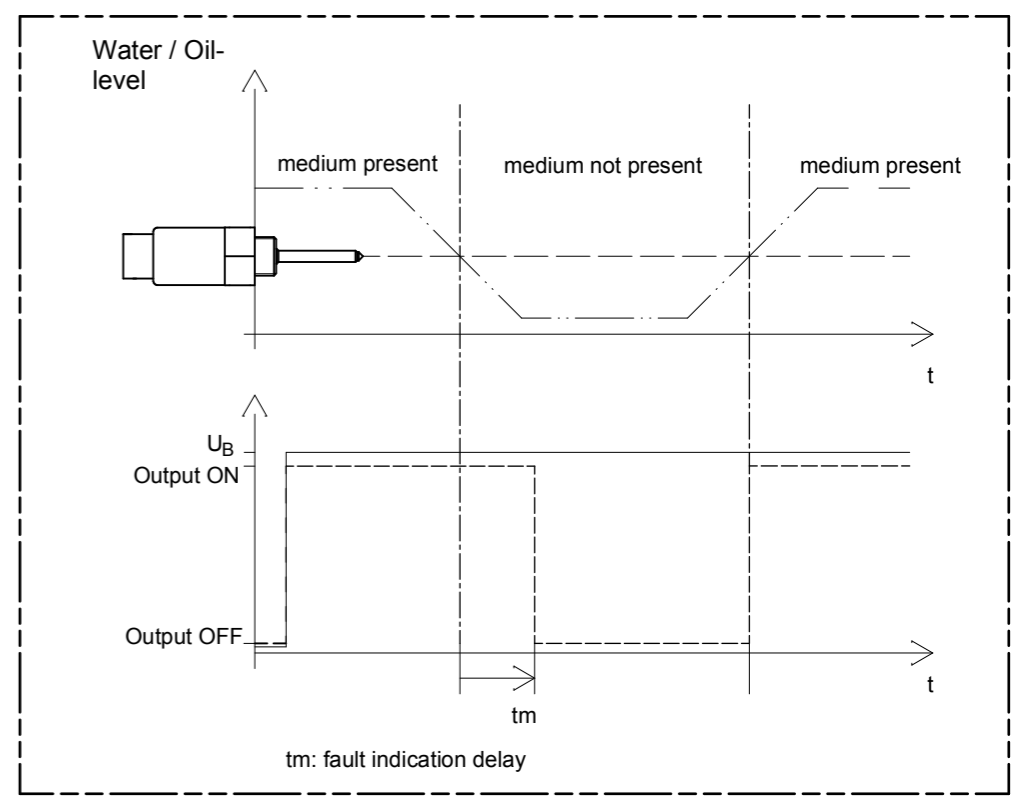
Radiated emission: 2004/104/EG 30 MHz - 1 GHz; 1 m
 Conducted transient emission: ISO 7637-2:2004
 Immunity to RF electromagnetic fields: ISO 11452-1/-2 1000 MHz - 2000 MHz; 150 V / m (rms)
 Immunity to RF electromagnetic fields: ISO 11452-1/-5 20 MHz - 1000 MHz; 150 V / m (rms)
 ① in the stripline
 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 19.08.2009	Moderer	CLS-40 oil level sensor high side switch - quiescent current with connector bayonet 16S		
	checked by 07.10.2009	Saß			
			drawing number	sheet	
			325009	1/1	
a see data	16.12.09	Moderer/Stark	drawing path: I:\CAD\325\325009US.dwg		
rev. modification	date	name/checked by			

