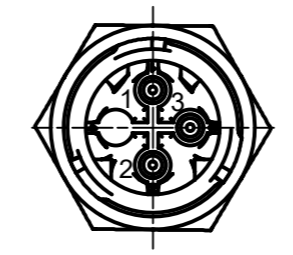
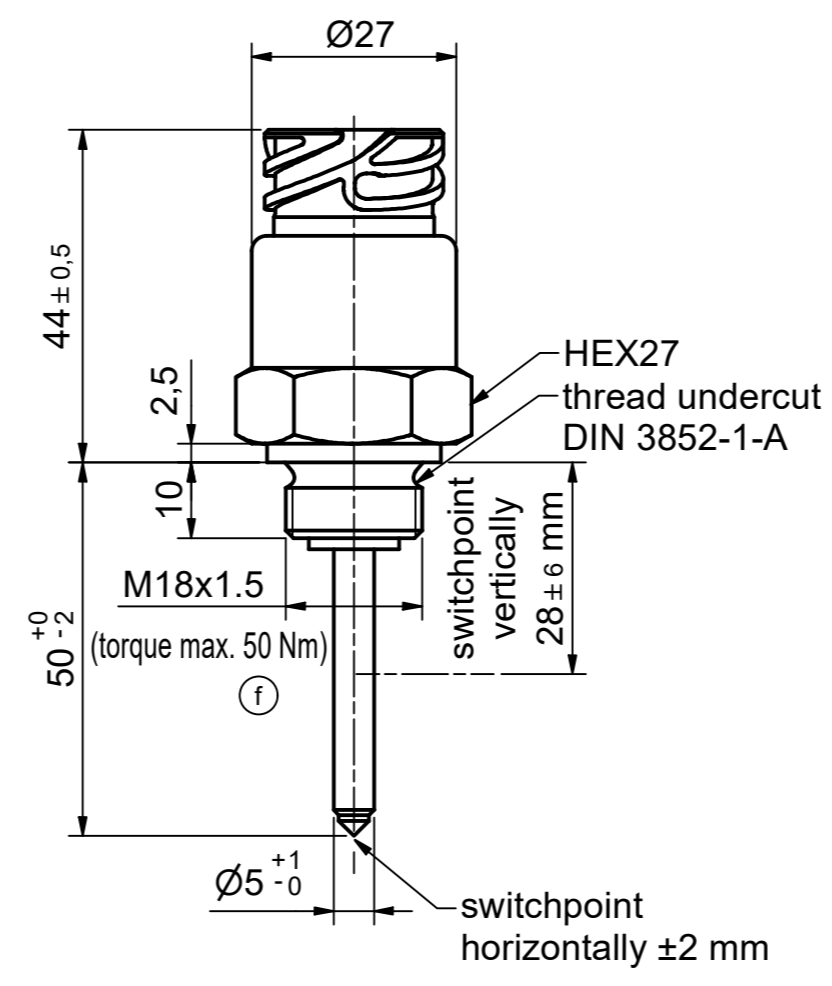


The copyright to this drawing belongs to us. No duplication or transfer to, providing access to or communicating to any third parties is allowed of its contents or excerpts thereof. This drawing may not be used without our approval for any purpose other than that for which it has been entrusted to the recipient. Any non-compliance shall obligate the violator to compensate for damages. In case any patent is issued or a utility model is registered, or in case of any other industrial property rights, all such rights must be reserved for us.

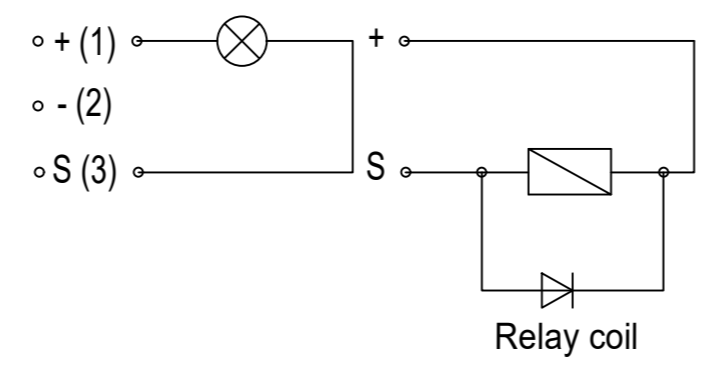
BEDIA Motorentechnik GmbH & Co.KG,
Altdorf bei Nürnberg

Das Urheberrecht an dieser Zeichnung gehört uns. Vervielfältigung, Überlassung, Zugänglichkeit oder Mitteilung des Inhalts, auch auszugsweise, an Dritte ist nicht gestattet. Die Zeichnung darf ohne unsere Zustimmung, zu einem anderen Zweck als sie dem Empfänger anvertraut wird, nicht benutzt werden. Zuwiderhandlung verpflichtet zu Schadensersatz. Alle Rechte, für den Fall einer Patenterteilung, Gebrauchsmusterteilung oder anderer Schutzrechte, sind uns vorbehalten.

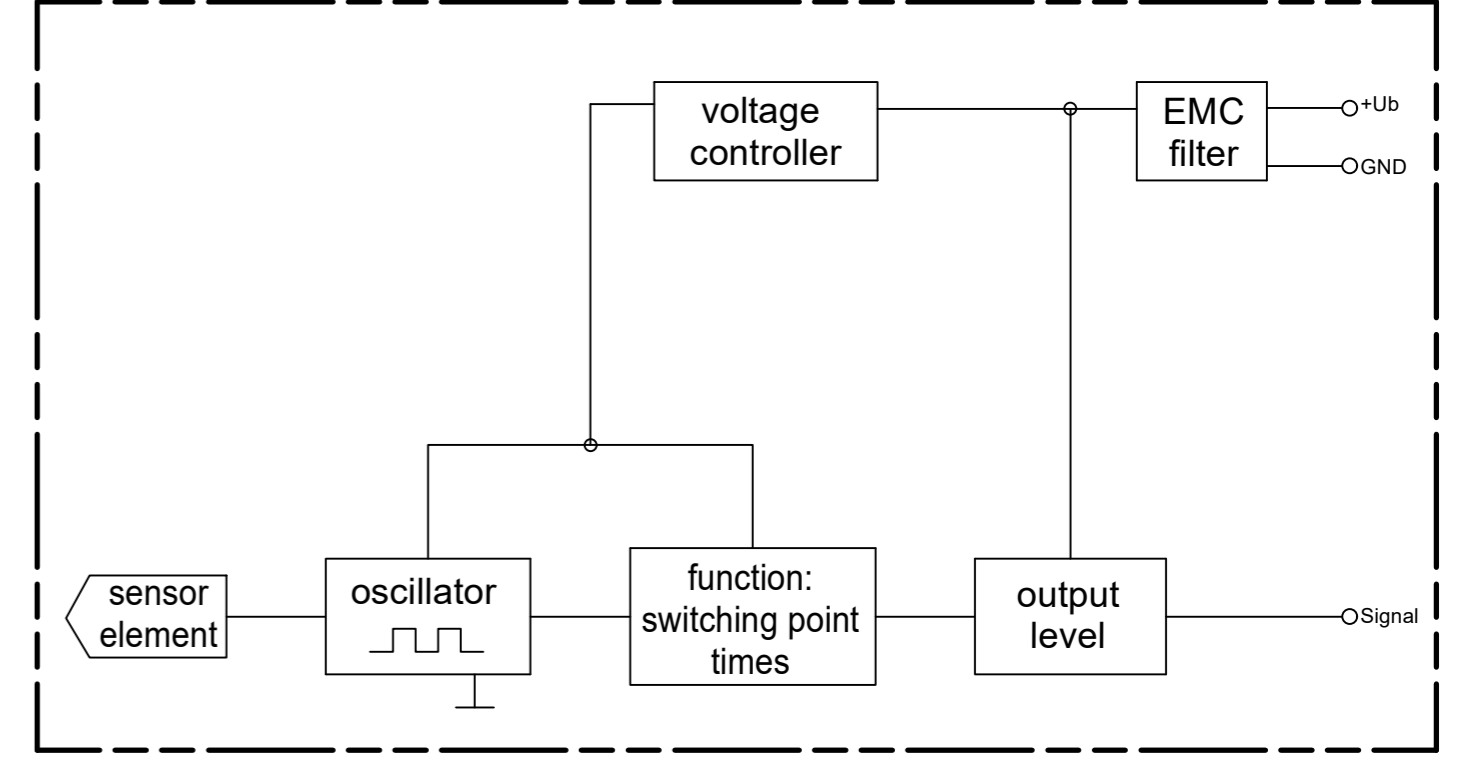
	1	2	3	4	5	6	7	8	9	10	11
A	Technical data										
B	Medium	water, coolant									
	Function	minimum - operating current (oc)									
	Operating voltage	12 / 24 V (-25% / +50%) (9 - 36 VDC)									
	Current consumption	< 8 mA									
	Output	low side switch ≤ 1 A over the whole temperature range 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.									
C	Mounting thread	M18x1,5									
	Function control	2 seconds ±5%									
	Fault indication delay	7 seconds ±5%									
	Connection	connector ISO 15170-A1-3.1-Sn/K1 (former DIN 72585)									
	Housing material	X5CrNi18-10 EN 10088-3:1.4301									
	Probe coating	capacitive connected to ground									
	Probe protection	Tefzel® ETFE									
	Weight	approx. 85 g									
	Marking	IP6K9K according to ISO 20653 with mounted mating connector approx. 85 g manufacturer; type; manufacturer no.; customer-part-no.; SN; year / week; approvals									
D	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	any									
	Reverse polarity protection	inbuilt between positive and negative terminal									
E	Caution !!										
	Do not connect negative potential to signal terminal of the sensor and positive potential to negative terminal of the sensor.										
F	Approvals	ABS, BV, CCS, DNV, KR, LR, NKK, RINA, RMRS									
	Customs tariff number	90261029 (f)									
G	Environmental simulations										
	Vibration	ISO 16750-3 10 Hz - 2000 Hz 20 g									
	Free Fall	IEC 16750									
	Mechanical Shock	DIN EN 60068-2-27; 100 g / 11 ms									
	Dry Cold	DIN EN 60068-2-1; -40°C / 24 h (-40°F / 24 h)									
	Dry Heat	DIN EN 60068-2-2; +125°C / 96 h (+257°F / 96 h)									
	Temperature cycling	DIN EN 60068-2-14									
	Damp Heat	DIN EN 60068-2-78									
	Damp Heat, cyclic	DIN EN 60068-2-30									
	Salt spray	DIN EN 60068-2-52									
	Flame retardant	DIN 75 200									
	Pressure resistance	2,5 MPa (25 bar / 362,6 psi) (25°C / 77°F / 1 h)									
H	EMC										
	Conducted emission from the power port	CISPR 16 10 kHz - 30 MHz									
	Electric field radiated emissions	CISPR 16 150 kHz - 6 GHz (f)									
	RF electromagnetic fields	EN 61000-4-3 1 MHz - 6 GHz; 100 V / m (f)									
	Conducted interference	EN 61000-4-6 150 kHz - 80 MHz; 10 V									
	Conducted interference	IEC 60533 50 Hz - 10 kHz; 3 V / 0,5 V									
	ESD	EN 61000-4-2 ±8 kV Contact / Air discharge									
	Burst	EN 61000-4-4 ±2 kV DC power port / signal lines									
	Surge	EN 61000-4-5 ±1 kV line <-> ground ±0,5 kV line <-> line									
	High voltage	IEC 60092-504 550 V									
	Power supply variations and interruptions	EN 61000-4-11 Ub +50% / -25%									



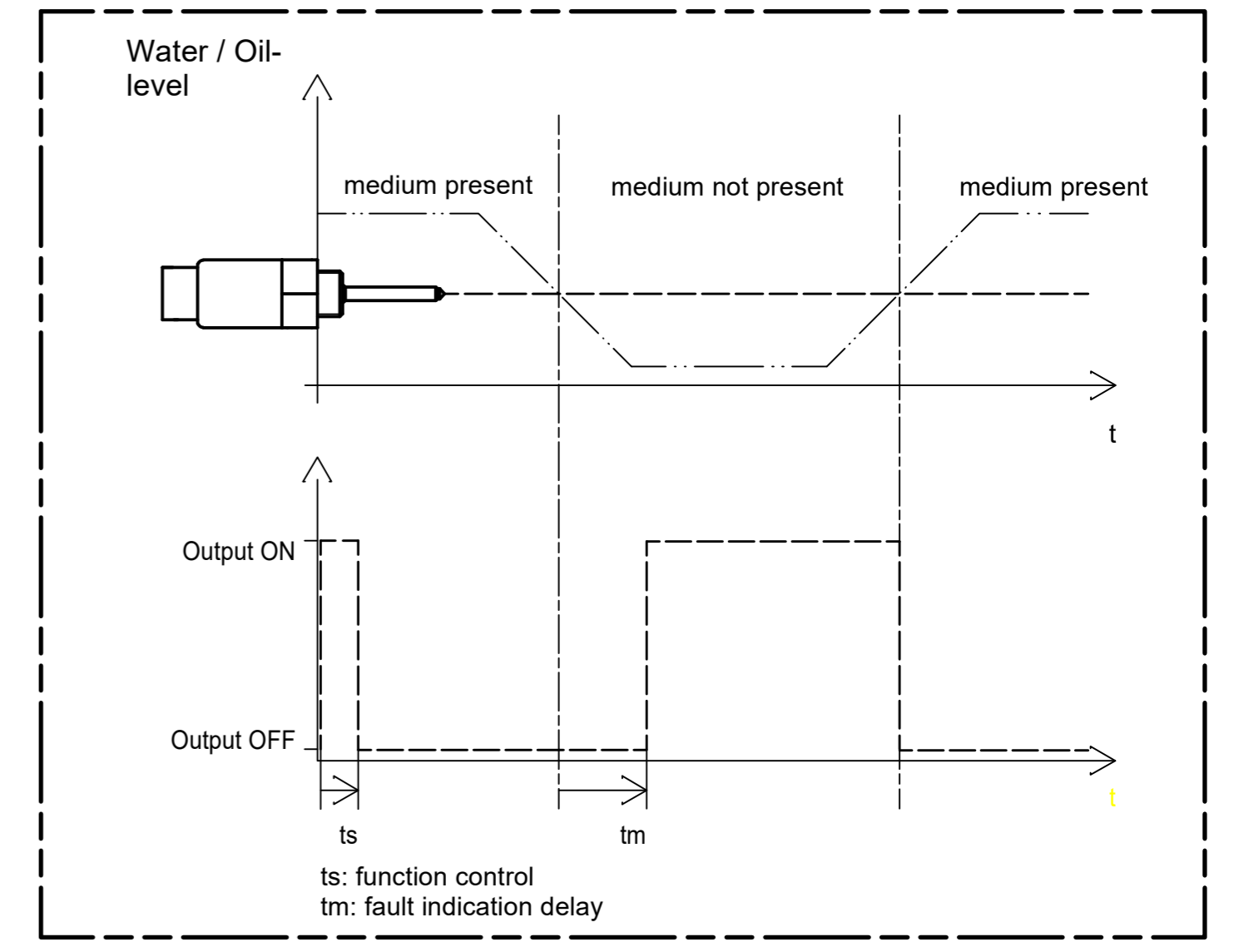
1 = positive (+)
2 = negative (-)
3 = signal (S)



Block diagram



Functional diagram for MINIMUM Probes



		Zul. Abweichung / admissible tolerance	Oberfläche / surface	Maßstab / scale	1 : 1	Sprache / language	ENU	Blatt sheet	1 / 1
		ISO 2768-mK	-	-	-	-	-	-	-
		Datum / date		Name / name		Benennung / description			
	f	26.01.23	MoeMi/KoeLa	05.03.2008	MoeMi	CLS-50 water level sensor low side switch - operating current with connector ISO 15170-A1-3.1-Sn/K1			
	e	29.03.12	MoeMi/SasCh	04.03.2008	SasCh				
	d	09.02.11	MoeMi/Staro						
	c	09.09.10	MoeMi/Staro						
	b	18.01.10	MoeMi/SasCh						
	a	15.01.09	MoeMi/SasCh			Zeichnungsnummer / drawing number		Zng. Art/ drw type	
	Zust./ rev.	Änderung/modification		Datum/date		Name/Gepprüft checked by		DRC	



500015