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Mechanical Data

Housing:
Mounting thread:
Sealing:
Fitting material:
Connector:
Probe coating:
Marking:

rust-proof, not magnetical
M18x1,5 torque max. 30Nm
18x22 DIN7603 - Cu (not included)
CuZn38Pb2; EN12164, CW608N
ML connector D3899/20 KB05PN, Fa. Filcon
TEFZEL ETFE

Mounting position:
Switch point:

function, type no.;
data: year/week, MTU-no., operating voltage
optional
horizontally mounted 2,5 mm ± 2 mm [Ⓒ]
vertically mounted 28 mm ± 6 mm [Ⓒ]

Switch point hysteresis:
Weight:
Ambient temperature:
Storage temperature:
Medium temperature:
Vibration resistance sinus:
(peak)

approx. 2 mm
approx. 200g
-30°C to + 125°C (-22°F to +257°F)
-55°C to + 125°C (-67°F to +257°F)
-30°C to + 125°C (-22°F to +257°F)
2 - 62,3 Hz 1.6 mm
62,3 - 420 Hz 25g
2000 - 3000 Hz 50g
3000 - 5000 Hz 25g
20 - 3000 Hz 25g rms
to 100%

Vibration resistance noise:
rel. air humidity:

Environmental conditions

Shock resistance (peak):
EMC
EMC to VG 95373:
Interference-free:
Pressure resistance of probe:
Environmental protection:

semi-sinusoidal shock 50g / 11ms
IEC 61000-4-2 6 KL3
only with external filter
according EN 55 0222
max. 10 bar (145.04 psi)
IP 68 according EC 529: 2 m: 1 hour / 69K
with mounted connector

Measuring Medium:
Coolant additives:

water, coolant, saltwater
max. 50% antifreeze fluid
max. 5% anti-corrosion fluid
the function is not impaired by small deposits
at the probe.

Operational safty:

Approval:

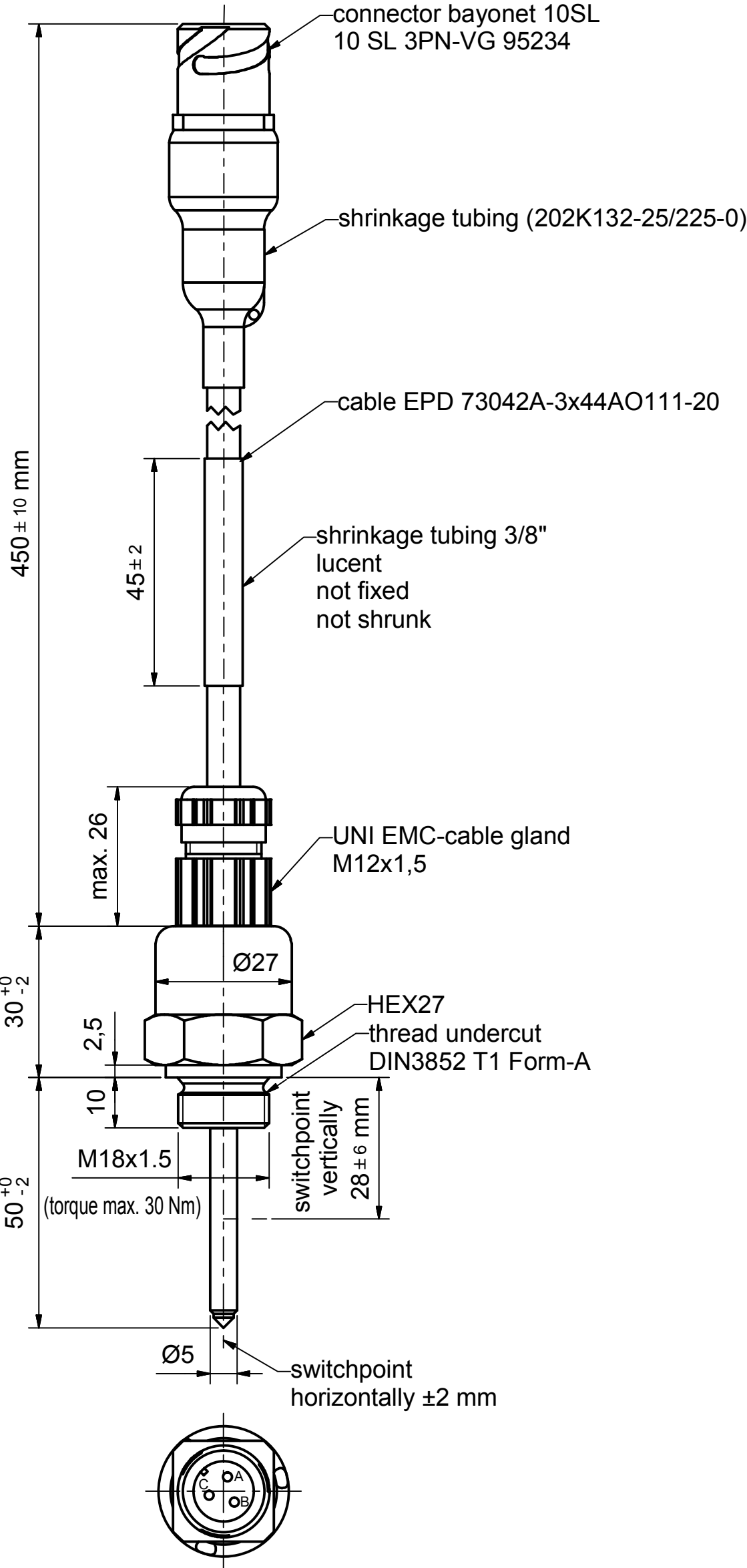
Electrical Data

Operating voltage:
Output:
Stand by current:
Current consumption:
Signal output switching current:
Load:
Inductance of the load:
Short-circuit proof
Reverse polarity protection:
Voltage spikes:
Switch point hysteresis:
Function control:
Fault indication delay:
Recovery time
Pin Assignment:
Housing potential:
Proof voltage
Dielectric strength:

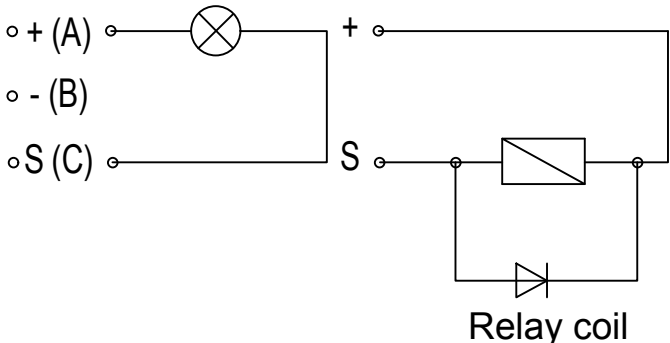
12V and 24V (9-36V)
open collector, low side switch, minimum
<10 mA
stand by current + switching current
max. 1A over the whole operating voltage range
resistive and inductive
500 m H
Pin C against Pin A(+) and Pin B(-)
in built, between plus and minus terminal
70V dropping to Un in 270 ns
max. ± 5 mm
typ. 1 sec. (0,5s ... 1,5s)
typ. 3 sec. (1s ... 4s)
≤2 sec.
A = +, B = -, C = Signal
potential free from +U_B and -U_B
according VDE 0 100.500 VDC, 1min.
according VDE 0160,500 VAC/ 50 Hz, 1min.
isolations resistance > 10 M Ohm
<0,5V

Dielectric properties:

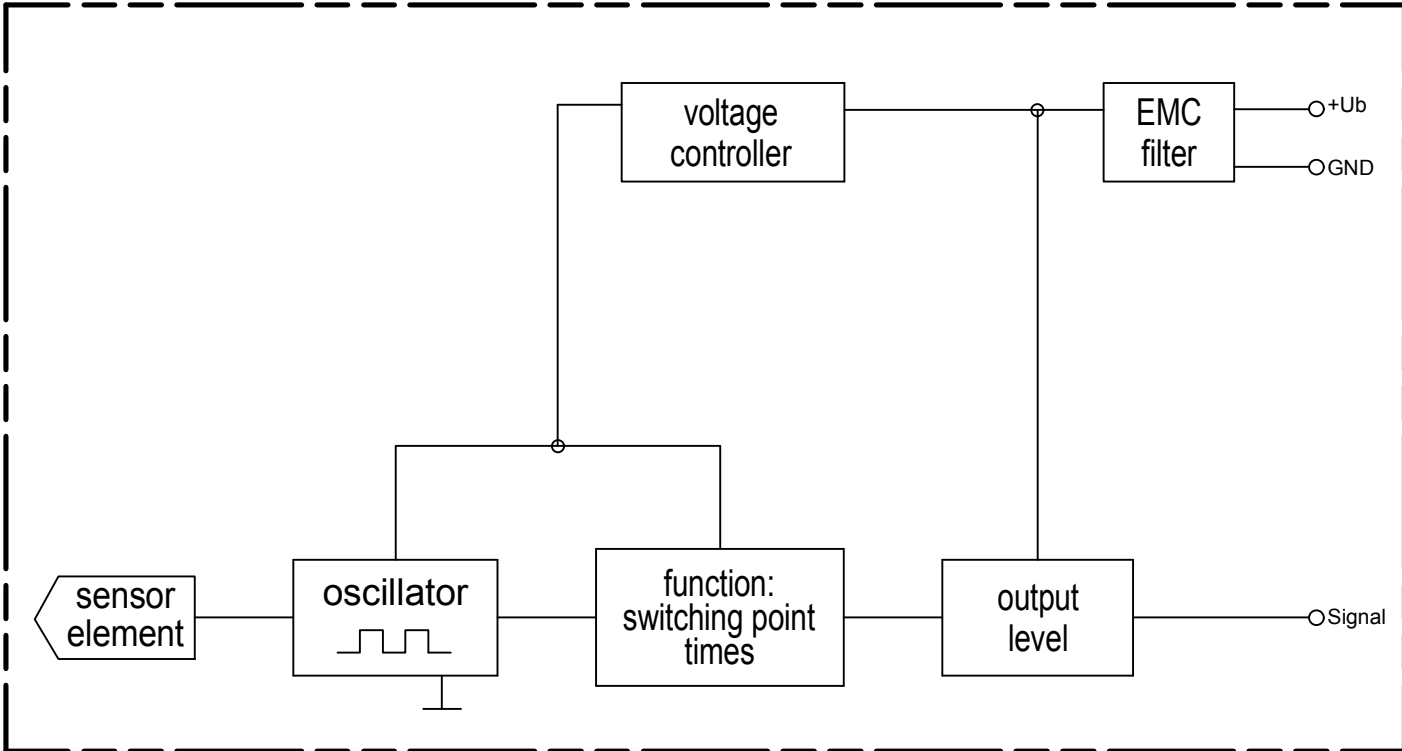
Negative switching probes: Do not
connect negative potential to the signal
terminal and positive potential to the
negative terminal,
as otherwise the probes may be
destroyed.



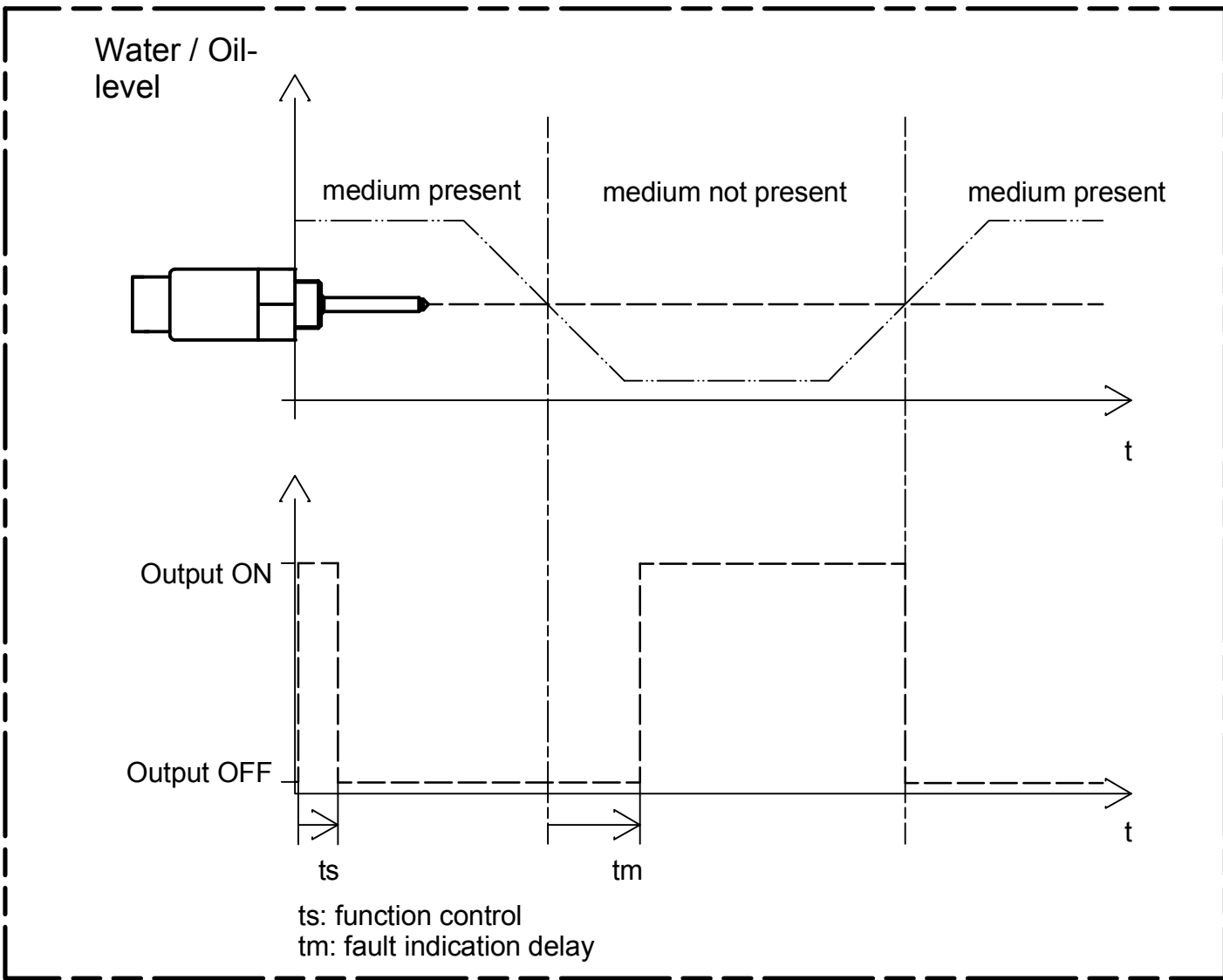
A = positive (+)
B = negative (-)
C = signal (s)



Block diagram



Functional diagram for MINIMUM Probes



				Zul. Abweichung / admissible tolerance	Oberfläche / surface	Maßstab / scale	1:1	Sprache / language	ENU	Blatt / sheet	1 / 1
				ISO2768-VK	-	-	-	-	-	-	-
				Datum / date	Name / name	Benennung / description					
				Erstellt / created by	04.02.2010	MoeMi	CLS-30 water level sensor low side switch - operating current with cable and connector bayonet 10SL				
				Geprüft / checked by	07.02.2010	StaRo					
				Format / Size	A2	Maßeinheit / dimension unit in [mm]	BEDIA®				Zng. Art/ drw.type
c	see data	08.01.15	KerSe/SasCh								DRW
b	see connector	17.08.11	MoeMi/StaRo				Zeichnungsnummer / drawing number				
a	see drawing	17.05.11	MoeMi/StaRo								
Zust./ rev.	Aenderung/modification	Datum/date	Name/Geprüft/ checked by				321960				