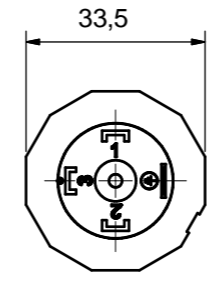
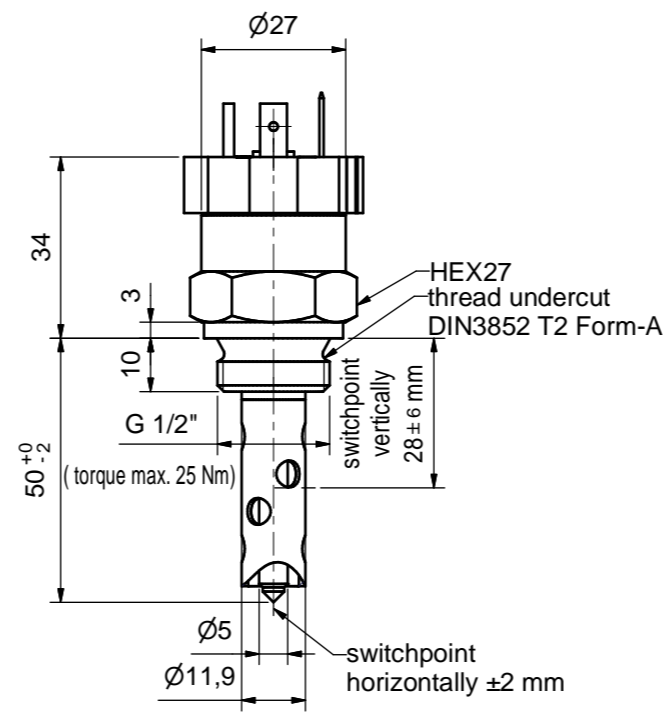


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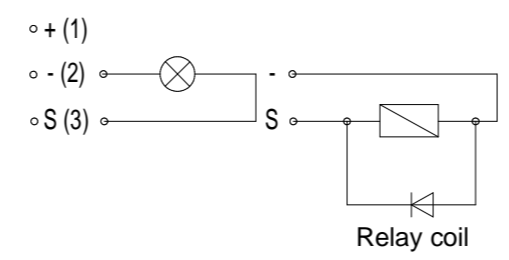
BEDIA Motorteknik GmbH & Co.KG, Altdorf bei Nürnberg

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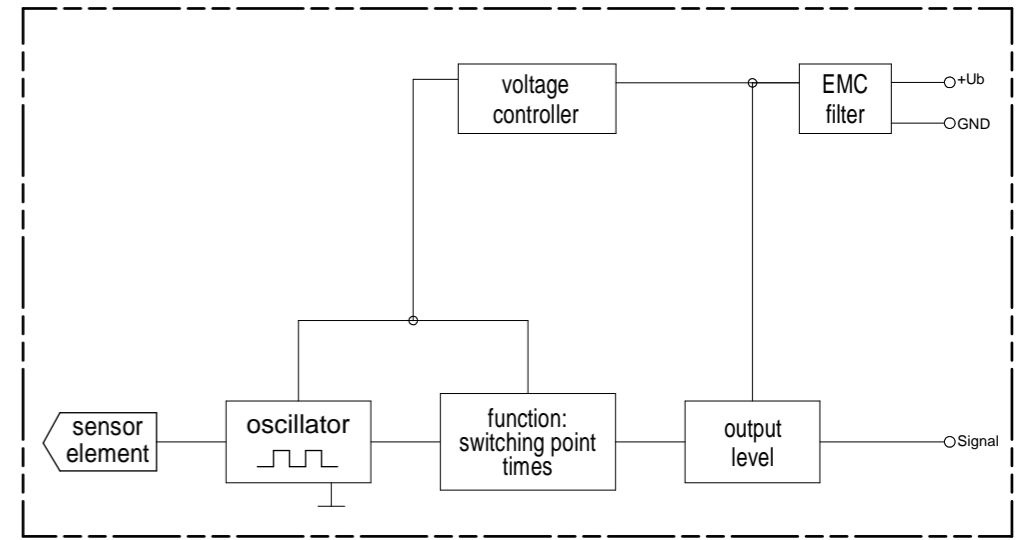
| | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|--|----|---|---|---|---|---|---|---|---|---|
| Technical data | | | | | | | | | | | |
| Medium | oil | | | | | | | | | | |
| Function | minimum - operating current (oc) | | | | | | | | | | |
| Operating voltage | 12 / 24 V (-25% / +50%) (9 - 36 VDC) | | | | | | | | | | |
| 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 | G 1/2" | | | | | | | | | | |
| Function control | 0 seconds ± 5% | | | | | | | | | | |
| Fault indication delay | 0 seconds ± 5% | | | | | | | | | | |
| Connection | connector according to DIN EN 175 301-803-A | | | | | | | | | | |
| Housing material | X5CrNi18 10 EN 10088-3:1.4301 | | | | | | | | | | |
| Probe coating | capacitive connected to ground Tefzel® ETFE | | | | | | | | | | |
| Probe protection | IP 65 to DIN40050 | | | | | | | | | | |
| Weight | approx. 100 g | | | | | | | | | | |
| Marking | manufacturer; type; manufacturer no.; SN; year / week; approvals | | | | | | | | | | |
| Switch point hysteresis | typ. < 3 mm | | | | | | | | | | |
| Reference medium | paraffin oil, εr = 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. | | | | | | | | | | |
| Approvals | ABS, BV, CCS, DNV, GL, KR, LR, NKK, RINA, RMRS | | | | | | | | | | |
| 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 | | | | | | | | | | |
| Flame retardant | DIN 75 200 | | | | | | | | | | |
| Pressure resistance | 2,5 MPa (25 bar / 362,6 psi) (25°C / 77°F / 1 h) | | | | | | | | | | |
| EMC | | | | | | | | | | | |
| Conducted emission from the power port | CISPR 16 10 kHz - 30 MHz | | | | | | | | | | |
| Electric field radiated emissions | CISPR 16 150 kHz - 2 GHz | | | | | | | | | | |
| RF electromagnetic fields | EN 61000-4-3 1 MHz - 2 GHz; 100 V / m | | | | | | | | | | |
| 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% | | | | | | | | | | |



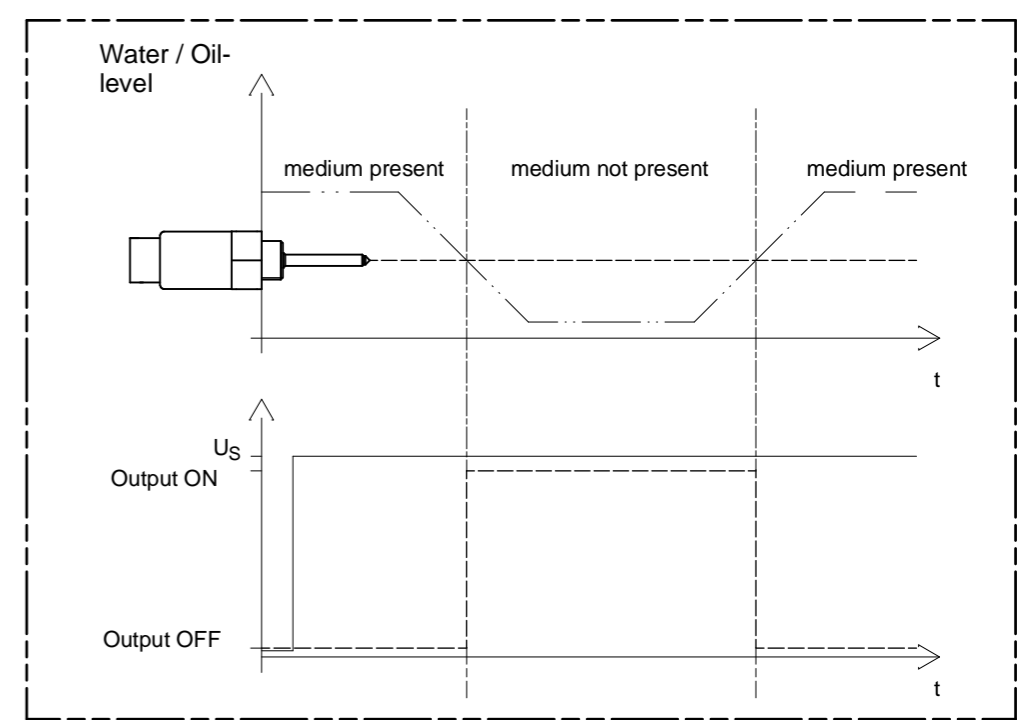
1 = positive (+)
2 = negative (-)
3 = signal (S)



Block diagram



Functional diagram for MINIMUM Probes



| | | | | | |
|----------------------|-----------------------|-------------|---|------------|----------|
| field of application | admissible tolerance | surface | scale 1:1 | position - | amount - |
| | ISO2768-vK | | | | |
| | date | name | description | | |
| | created by 29.03.2010 | Möderer | CLS-50 oil level sensor | | |
| | checked by 01.04.2010 | Saß | high side switch - operating current with connector according to DIN EN 175 301-803-A | | |
| | | | drawing number | sheet | |
| | | | 500092 | 1/1 | |
| a DIN-No. | 31.05.10 | Schet/Stark | drawing path: \\CAD\500500092\USI.dwg | | |
| rev. | modification | date | name/checked by | | |

