

QUALIFIED TO SPECIFICATION EI 1592 1ST EDITION

Electronic sensor to distinguish between aviation fuel and water. The SLUGGUARD® enables continuous detection of water in sumps of filter/water separators or in drain points of filter vessels. The high-precision switch is also suitable for small filter housings (FBO) in the general aviation area.

A blue LED light indicates operating or alarm switching states. An alarm condition is being activated in response to a bulk quantity of free water in the line.



APPLICATION AREA

- Electronic bulk water sensor according to EI 1592 1st Edition
- Fit for purpose in/below water sumps of filter/water separators

TECHNICAL DATA

Environmental conditions

- Operating temperature range: -40°C (-40°F) to 85°C (185°F)
- Storage temperature range: -40°C (-40°F) to 85°C (185°F)
- Ambient humidity: <98 % RH, condensing
- Protection glass: IP67, IP69K (with appropriate cable)
- Oscillations (sinusoidal): 1.6 mm p-p (2...25 Hz), 4 g (25...100 Hz) (EN 60068-2-6) 1 octave / min.

Power supply

- Voltage supply range: 12...30 V DC
- Reverse polarity protection: Yes
- Current consumption (without load): 25 mA typ., 50 mA max.
- Power-up time < 2 s

Features

- Repeatability: ± 1 mm
- Hysteresis: ± 1 mm
- Response time: 0.1 s
- Damping: 0.0...10.0 s (configurable)

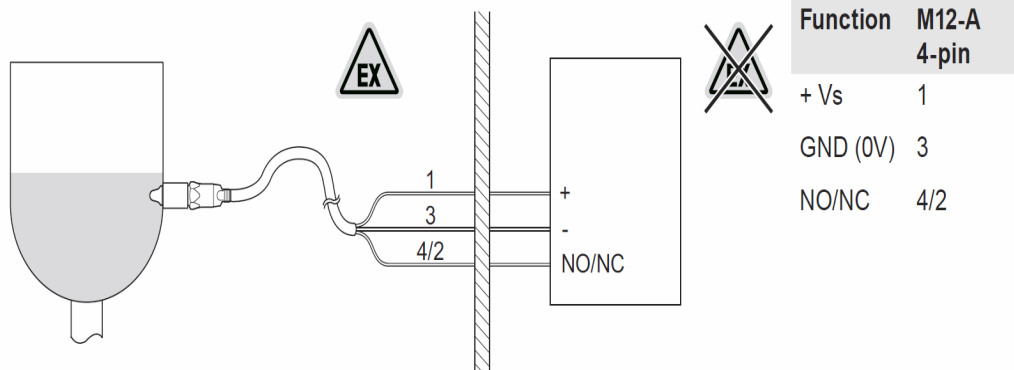
Output signal

- Output type: PNP NPN
- Current load: 20 mA max.
- Short circuit protection: Yes
- Voltage drop: PNP (+Vs -1.5 V) ± 0.5 V, Rload = 10 k Ω , NPN(+1.5 V) ± 0.5 V, Rload = 10 k Ω
- Leakage current: ± 100 μ A max.
- Switching logic: Normally open (NO), active low Normally closed (NC), high enabled

DATA FOR APPLICATION IN CONNECTION WITH HAZARDOUS AREAS

ATEX II 1G Ex ia IIC T4/T5

- Highest values for selection of barriers:
 - U_i : 30 V DC
 - I_i : 100 mA
 - P_i : 0.75 W
 - Internal capacitance: C_i : 43 nF
 - Internal inductance: L_i : 10 μ H
 - Temperature class
- Standard version: T4: $-40 < T_{amb} < 85^\circ\text{C}$ (185 $^\circ\text{F}$), T5: $-40 < T_{amb} < 74^\circ\text{C}$ (165 $^\circ\text{F}$)



SLUGGUARD® uses a 4-wire cable. IN PNP connection – only black, brown and blue cables are in use – white is only needed for programming. For further information on hazardous area requirements, please refer to the manual.

STANDARD DESIGN

- Material: Stainless steel
- Seal thread: Teflon® (PTFE)
- Process connection: G $1/2$ inch