



## 1 ABOUT

**GuardMagic JBB-01** is a two channel safety barrier (hereinafter referred to as “Safety Barrier”) and it is designed for power and signal transmitting (EIA-485) to fuel level sensor GuardMagic DLLE series (or the same sensors) located in hazardous area (Zone 0).

**GuardMagic JBB-01** can support up to two fuel level sensors GuardMagic DLLE series (or the same).

**GuardMagic JBB-01** has an IP 65 anti vandal die cast aluminum housing.

**GuardMagic JBB-01** has to be located outside hazardous area.

**GuardMagic JBB-01** is designed with the EX equipments requirements (ATEX rules).

**GuardMagic JBB-01** is intended for fuel monitoring system as: road fuel tanker monitoring, stationary fuel storage monitoring, refueling station monitoring and so on.

**GuardMagic JBB-01** can be installed on mobile and stationary objects (road fuel tankers, fuel distribution trucks, bowser, fuel storage, fueling station etc.).



The safety barrier **GuardMagic JBB-01** has an anti vandal die cast aluminum housing with cover. On the housing there are cable entries for power supply, signal circuits and two output intrinsically safe circuits to hazard area. The housing contains a printed circuit board with electronic elements and two safe barriers in compound.



## 2 TECHNICAL DATA

TECHNICAL SPECIFICATION	
<b>General:</b>	
Input power voltage (DC):	<ul style="list-style-type: none"> <li>• 11 ...36 V</li> </ul>
Pick input power voltage	<ul style="list-style-type: none"> <li>• 40 V</li> </ul>
Signal communication interface	<ul style="list-style-type: none"> <li>• EIA-485</li> </ul>
Nominal output current	<ul style="list-style-type: none"> <li>• 0,07 A</li> </ul>
Qty. of outputs to hazardous area	<ul style="list-style-type: none"> <li>• 2</li> </ul>
Enclosure material	<ul style="list-style-type: none"> <li>• Die-cast aluminum</li> </ul>
Diameter of main communication cable*	<ul style="list-style-type: none"> <li>• 5mm .. 7mm</li> </ul>
Diameter of sensor communication cable*	<ul style="list-style-type: none"> <li>• Version 01: 5mm .. 7mm</li> <li>• Version 02: 7mm ..9mm</li> </ul>
<b>Output intrinsically parameters:</b>	
Open-circuit voltage, U0	<ul style="list-style-type: none"> <li>• 10V</li> </ul>
Short-circuit current, I0	<ul style="list-style-type: none"> <li>• 0,6 A</li> </ul>
Maximum external capacitance, C0	<ul style="list-style-type: none"> <li>• 15,0 uF</li> </ul>
Maximum external inductance, L0	<ul style="list-style-type: none"> <li>• 1,0 mH</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Operation condition:</b>	
Operation area	<ul style="list-style-type: none"> <li>• Non-hazardous</li> </ul>
Operation pressure	<ul style="list-style-type: none"> <li>• atmospheric</li> </ul>
Operation and storage temperature	<ul style="list-style-type: none"> <li>• -40 ... +80 Celsius</li> </ul>
IP protection	<ul style="list-style-type: none"> <li>• IP65</li> </ul>
Mechanical protection (housing)	<ul style="list-style-type: none"> <li>• IK10</li> </ul>
Dimension (without glands)	<ul style="list-style-type: none"> <li>• 125x80x58 mm</li> </ul>
Dimension (with glands and without cable)	<ul style="list-style-type: none"> <li>• 178x103x58mm</li> </ul>
Weight (without cables)	<ul style="list-style-type: none"> <li>• 570 gram</li> </ul>

\* - recommend cable: "Olflex Robust 210 4x0,5mm" (LAPKABEL)