

Stainless Steel ELOK Grounding Tester

Grounding Indicator system for trucks used in corrosive explosive environments



Ex db ib [ib] IIB T4 Gb Ex ib [ib] tb IIIC T130°C Db

Quality, Health and Safety Standards (QHSE) for protecting personnel and plant assets require the implementation of counter measures for explosion hazards.

During loading and unloading of non-conductive flammable liquids and powders, electrostatic charge is generated on conductive objects such as Trucks, Railcars, Rail tankers, Barrels, Drums, Big bags, Intermediate Bulk Containers (BCIs), Skids, and Lease Automatic Custody Transfer (LACT) units.

To mitigate hazardous levels of energy for spark formation and ignition of material atmospheres, earthing and continuous monitoring is required during the complete loading and unloading process.

EGT specific features

- Extremely wide temperature range
 - -55 °C to +60 °C
- Seasonal control
 - Robustness in tolerating changes in ground conductivity such as the variation between summer and winter seasons
- Great chemical resistance



o Passivated marine-grade stainless steel 1.4404 (AISI 316L, A4)

- Ultra-wide input supply range
 - o 20 V DC to 350 V DC
 - 20 V AC to 230 V AC 47 ~ 63 Hz

Elok reserve the right to make alterations to the technical specification without notice.

System	EGT 4S
Certificate	IECEx FTZU 15.0005X
Protection	Ex db ib [ib] IIB T4 Gb
	Ex ib [ib] tb IIIC T130°C Db
Ingress Protection	IP65
Ambient Temperature	-55°C to +60°C
Voltage range DC	20 V DC ~ 350 V DC
Voltage range AC	20 V AC ~ 230 V AC
Power input	10 VA
Output circuits	2 x potential-free switching
	contacts DPDT
Bluetooth version	5.0 LE (Low Energy)
IrDA interface	USB IR 1 for IrDA
Weight	17 Kg

Accesories

IrDA interface

Calibration set for IrDA interface

Self-retracting cable Reel

Multiple language versions (EN, DE, CZ, PL, RU)

EGT basic function

- 1. Initial safe electrostatic discharge
 - a. By connecting earth to discharging point
- 2. Operators error control (earthing object detection)
 - a. By Impedance measurement and check
- 3. Continuous earthing and monitoring of correct earthing during filling process
 - a. By resistance measurement and check
- 4. Process blocking and signaling
 - a. Two DPDT (double-pole double-throw) for process control
 - b. High visibility LED for system check

Sectors of application:

- Petroleum refineries transport of crude oil, petrol, diesel
- Fuel storage depots loading of petrol, diesel, kerosene
- Onshore facilities
- Chemical and petrochemical facilities (flammable liquids, alcohol, organic solvents)
- Paint industry
- Pharmaceutical industry (Big bags, dust environment)
- Food industry (ethanol, alcohol, grain, fertilizers handling)



