

HAZARDOUS AREA UNIVERSAL DEADMAN SYSTEM

- ◆ FOR USE IN ZONE 1 OR ZONE 2 HAZARDOUS AREAS.
- ◆ SUITABLE FOR TRUCK LOADING/OFFLOADING.
- ◆ DEADMAN TIMER INCLUDED.
- ◆ WARNING LAMP OUTPUT.
- ◆ SOUNDER OUTPUT.
- ◆ SYSTEM REMOTE OVERRIDE.
- ◆ SYSTEM EMERGENCY STOP.



Introduction.

The Aljac Hazardous Area Universal Deadman System is based on our well established and proven Deadman System which has been successfully fitted to many aviation refuelling vehicles worldwide. However, this explosion proof version has the control circuitry enclosed in a flameproof box and the Deadman Handswitch circuit is protected by a current limiting ATEX approved barrier. It can therefore be located inside the hazardous area and is suitable for use in truck loading and offloading applications or in the hazardous areas on refuelling vehicles. The system is also truly universal, because it is suitable for use when either a 11V to 27V DC **OR** a 100 to 120V 50/60Hz. AC **OR** a 200 to 240V 50/60Hz. AC power supply is available.

Features.

Full Operational Control. Remote control of the refuelling operation with a Deadman Handswitch and coiled Suzie Cable.

Time Out. Warning every 1.1/2 minutes, times out and closes down the Deadman System unless the Deadman Handswitch is released and immediately reactivated within 30 seconds. This prevents system abuse by jamming the Deadman Handswitch closed.

Deadman Warning Lamp Output. Lamp 'On' when the Deadman System is activated, flashes during the Time Out period when system reactivation is required.

Sounder Output. Constant output during the Time Out period to warn the operator of impending system shut down, unless the reactivation sequence

is performed.

Remote Override. Automatically overrides the Deadman System when the Remote Override Switch is activated.

Remote System Emergency Stop. Full system shut down when activated (subject to exact installation details).

How To Order.

Part number: 0100302358C.

Accessories.

Deadman Handswitch. **Part number 0100400010.**

Coiled Suzie Cable, 5 metres extended. **Part number 0100400103.**

Coiled Suzie Cable, 14 metres extended. **Part number 0100400100.**

Coiled Suzie Cable, 22 metres extended. **Part number 0100400102.**

Niphan 2 Pin Plug with strain relief cable gland. **Part number 0100400311.**

Niphan Flanged 2 Pin Socket. **Part number 0100400320.**

Deadman Warning Lamp, 24 Volt DC, green, ATEX approved. **Part number 5040000030.**

Key operated override switch. **Part number 0100400610.**

Deadman Solenoid Valve, 24V DC, ATEX approved. **Part Number 0100400602.**

Sounder. Intermittent tone, 24V DC, ATEX approved, weatherproof to IP66.

Schematic Diagram.

Deadman Switch and Suzie Cable



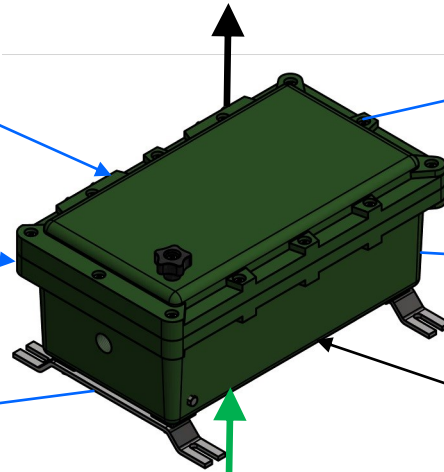
Remote Override



ATEX Sounder



System
Emergency
Stop Output



POWER IN

ATEX Deadman Solenoid Valve



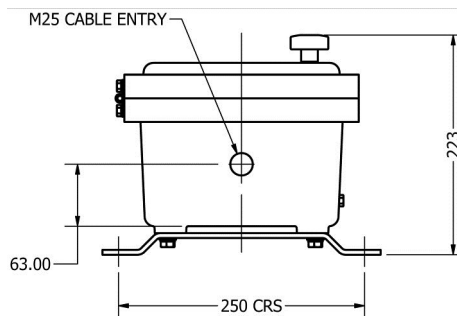
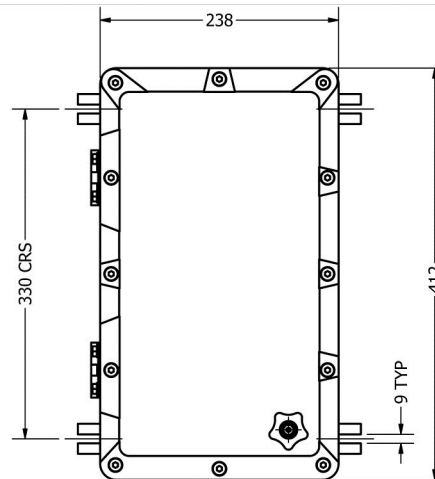
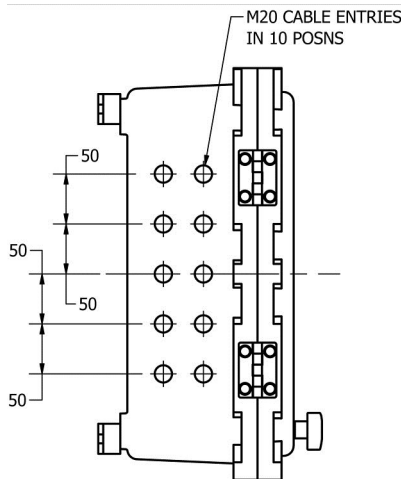
ATEX Deadman Warning Lamp (Green)



ATEX
Emergency
Stop Switch



Dimensions.



ALL DIMENSIONS IN MILLIMETRES

Specification.

Power supply: 11V to 27V DC **OR** 100 to 120V 50/60Hz. AC **OR** 200 to 240V 50/60Hz. AC.

Output voltage: Same as supply voltage if supply Voltage is DC. 24V DC if supply Voltage is AC.

Maximum output current: 3.5A per terminal.

Maximum total load: 5A.

Maximum potential between minus pole and ground: 50V DC/AC peak.

Deadman and DP Switch Supply: 5V DC, current limited to 0.5mA.

Time Out: Warning starts at 1.1/2 minutes, system shut down in 30 seconds if not reactivated.

Enclosure Material: Marine grade Aluminium Alloy. Polyurethane finish painted Green.

Enclosure Dimensions: 412x238x177mm.

Nett Weight: 16.4 Kg.

Mounting Points: 4 off M8 slotted holes.

Enclosure Approval: Exd IIC T4-T6. II 2 GD.

ATEX and IECEx approved for Zone 1 and Zone 2 hazardous areas.

Ingress Protection: Weatherproof to IP66.

Barrier Approvals: ATEX: II (1) G [Ex ia Ga] IIC. II (1) D [Ex ia Da] IIIC. IECEx: [Ex ia Ga] IIC. [Ex ia Da] IIIC. Ex nA nC IIC T4 Gc.