









AmLok 4: Solenoid Controlled InterLock

Special Features

-  Heavy duty tongue & head unit (can rotate in 90° increments)
-  Handle allows for high degree of misalignment
-  Key operated auxiliary release (in the event of power failure)
-  L.E.D Status indicators
-  Suitable for both sliding doors and hinged doors
-  Handle can be turned through 360° in 45° increments
-  Codeable tamperproof locking mechanism
-  Fitted with a shear pin to protect both machinery and personnel

Designed for

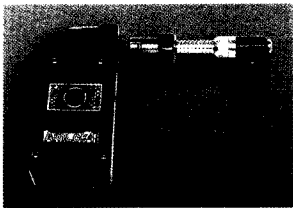
- Machines with run down cycles
- Holding door/guard shut

Typical Applications

- Robot Cells
- Tool Change
- Load/Unload Stations
- Process Lines

Operating Method

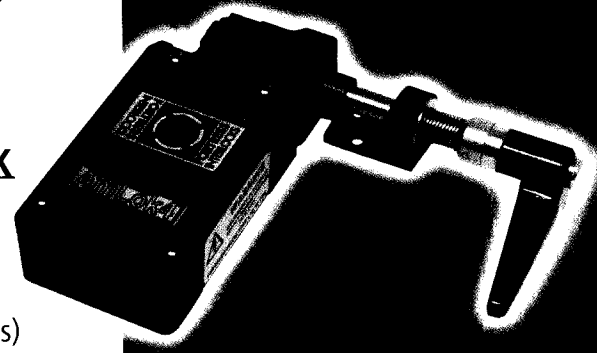
When machinery is in operation within the guarded area, the handle is trapped in the **AmLok 4** unit and cannot be removed. The access door to the guarded area is locked closed. A solenoid controlled mechanism prevents the handle from being turned and released. To open the door, the operator must first select 'stop' on the machine control panel. Only when the machine has completed its run down cycle will the AmLok solenoid be energised. At this point, a yellow light on the unit indicates that the handle can be released. When removed, a red light illuminates indicating that access has been granted.



Available Options

- **Safety Key Adaptor** Locates between the head and body of the unit providing a true safety key and also an interface with standard trapped key products
- **Option Pod** Available in three formats - Key Switch, Push Button and Indicator Lamps providing greater system flexibility, e.g request to stop facility
- **Lockout device** Once inserted into the head and padlocked in position it blocks the handle entry therefore preventing the door from closing and the machine from running
- **Override Key Switch** Enabling a 'safe' solenoid override facility in case of a power failure

Please refer to options data sheet 1.6 for further information



AmLok 4 Options



Lockout Clip



Override Key Switch



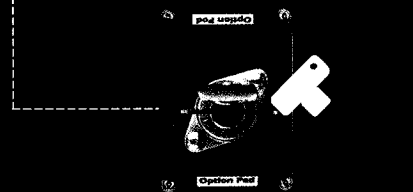
Safety Key Adaptor



Key

Pushbutton and Emergency Stop

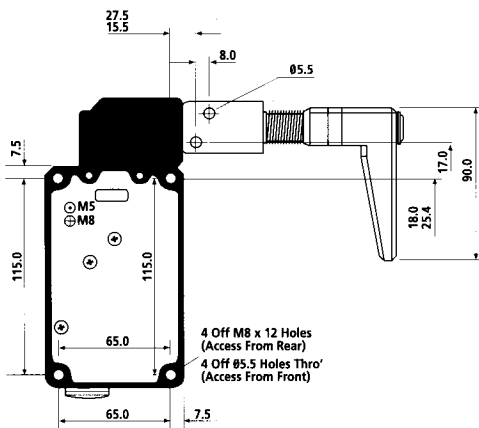
Indicators



Teach or Programming Switch

AmLok 4

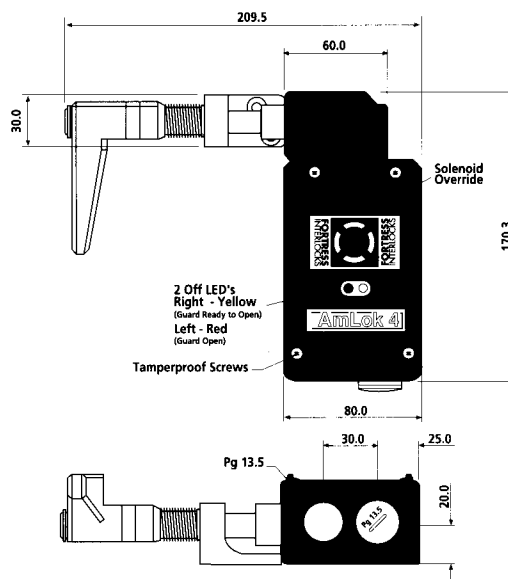
Technical Data



Plan View



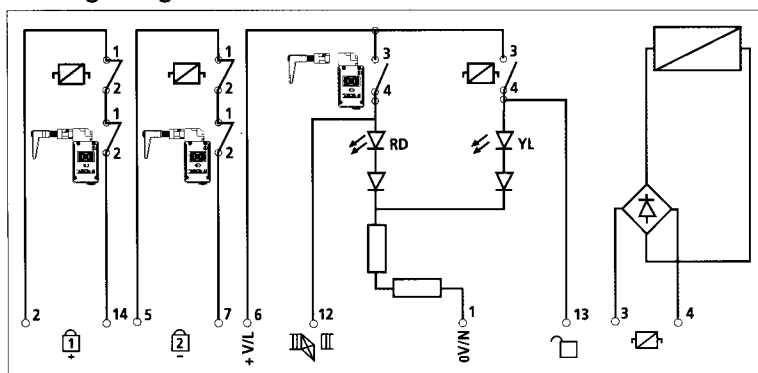
Key not shown for clarity



Technical Features

FEATURE	SPECIFICATION
Housing Materials	Zinc Alloy to BS1004A, Stainless Steel to BS3146
Paint Finishes	Gloss Polyester Powder Coat on Passivated Base Material
Colour	Red & Stainless Steel
Ingress Protection	IP67 (DIN 400050)
Operating Force	5Nm
Retention Force Locked	2500N
Maximum Approach Speed	20m/minute
Mechanical Life	> 1,000,000 Switching Cycles
Maximum Frequency of Operations	7,200 per Hour
Ambient Temperature	-5°C to +40°C (Mean Over 24 Hours = +35°C)
Maximum Wire Cross-section to fit Connector	2.50mm ²
Connector Type	Spring Activated Vibration Proof Block
Switches Conformance	DIN VDE 0660 Part 206 & IEC 947-5-1
Switching Contact Element	4NC and 2NO
Switching Principal	Positive Break
Switch Control	10A
Switching Voltage	230V AC Max.
Isolating Distance	2 x 2mm Per Switch Element
Contact Material	90% Silver and 10% Nickel
Utilization Category	AC 15 or DC 13
Control Voltages	24V AC/DC, 48V AC/DC, 110V AC, 220V AC or 230V AC
Insulating Resistance	20M Ohm
Insulation Voltage	2,500V AC
Solenoid Power Rating	12W
(Solenoid current at Nominal 24V DC Supply Voltage)	(500mA)
Solenoid Rating (Duty Cycle)	100%
Solenoid Voltages	24V AC/DC, 48V AC/DC, 110V AC, 220V AC or 230V AC
Solenoid Voltage Tolerance	.85% to 110% of nominal

Wiring Diagram



Ordering Details

When ordering please indicate the voltage requirements for both the solenoid and control circuits.

Installation Instructions

The guard of the machine must be drilled to suit front or rear fixing, the main unit is normally attached to the static portion of the guard and the handle actuator is fixed to the access door. This unit may be installed in any orientation, to either hinged or sliding doors. Full installation instructions are provided with each unit and are also available on request.

Options

Please contact us should you require full technical details on the following modular arrangements:

- AmLok 4 complete with Safety Key
- AmLok 4 complete with Option Pod
- AmLok 4 complete with Safety Key & Option Pod



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