

## Interlock Switches

# Guard Locking Switches

## Centurion



### Description

The Centurion is a positive mode, thumbwheel operated machine guard locking interlock switch that locks the guard closed until the operator manually rotates the thumbwheel, retracting the shaft from the guard door. The action of retracting the shaft initiates two functions; it isolates the power to the machine while the guard is open and, due to the operating principle, gives up to 20 seconds delay before the guard can be opened.

Alternative styles with longer shafts can increase the time delay by as much as 50%. The Centurion is ideal for use on simple machines with short, constant run down times. It is important that correct installation and operation of the unit are followed to ensure that the retractable shaft cannot be extended when the guard is open. For machines with long or variable run down times or where frequent access is required, solenoid locking switches such as the TLS-GD2 and Atlas 5 should be considered.

The Centurion has 2 safety (N.C.) contacts, 1 auxiliary (N.O.) contact and 1 conduit entry (either M20 or quick disconnect).

EX and Pneumatic styles of the Centurion are also available; see the **Explosion Proof** section on page 16-1 for more information.

**Note:** Additional safety measures (i.e., a shroud) should be used to ensure the thumbwheel can only be accessed by fingertips.

### Features

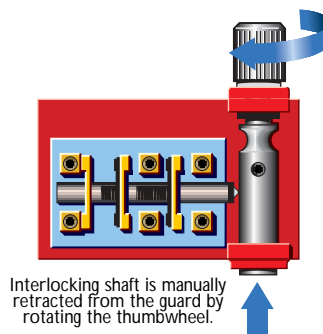
- Manually operated time delay, allows for machine run down
- Simple operation & installation
- Robust die cast housing, ideal for heavy duty applications
- Contacts, 2 N.C. & 1 N.O. (sealed to IP66)

### Specifications

Standards	EN954-1, ISO13849-1, IEC/EN60204-1, NFPA79, EN1088, ISO14119, IEC/EN60947-5-1, ANSI B11.19, AS4024.1
Category	Cat. 1 Device per EN954-1 Dual channel interlocks suitable for Cat. 3 or 4 systems
Approvals	CE marked for all applicable directives, cULus, BG, and SUVA
Safety Contact	2 N.C. direct opening action
Designation/Utilization Cat.	AC15 500V 250V 100V 1A 2A 5A DC 250V 0.5A 24V 2A
Max Switched Current/Volt/Load	500V/500VA
Thermal Current (Ith)	10A
Min Current	5V 5mA
Safety Contact Gap	>2mm (0.078in)
Rtd. Insulation Voltage (Ui)	500V
Rtd. Impulse withstand Volt (Uimp)	2500V
Auxiliary Contacts	1 N.C.
Shaft Movement to Achieve Contact Operation	2mm (0.078in)
Case Material	Heavy duty die cast alloy
Locking shaft	Stainless Steel
Protection	IP66
Conduit Entry	1 x M20 or quick disconnect
Operating Temperature	-25°C to +80°C (-10°F to +176°F)
Mounting	2 x M4
Mechanical Life	1,000,000 operations
Electrical Life	1,000,000 operations
Weight	500g (1.20lbs)
Colour	Red


**Note:** The safety contacts of the Guardmaster switches are described as normally closed (N.C.) i.e., with the guard closed, actuator in place (where relevant) and the machine able to be started.

### Centurion Thumbwheel Operation



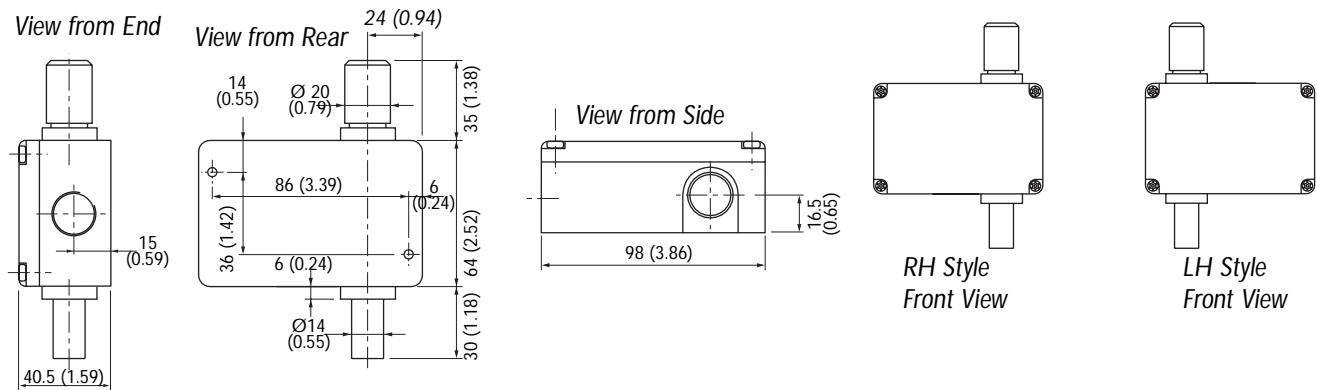
Interlocking shaft is manually retracted from the guard by rotating the thumbwheel.

**Product Selection**

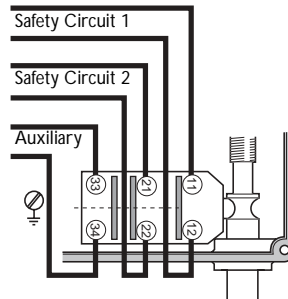
Safety Contacts	Auxiliary Contacts	BBM/MBB	Type	Catalogue Number	
				M20 Conduit	Quick Disconnect
2 N.C.	1 N.O.	BBM	Right Hand	440K-B04025	440K-B04046
			Left Hand	440K-B04026	440K-B04047
			Right Hand Extended Bolt	440K-B04039	440K-B04048
			Left Hand Extended Bolt	440K-B04040	440K-B04049
		Recommended mating cable, 2m (6.5ft). See page 15-10 for details and additional lengths.			889D-F8AB-2


**Approximate Dimensions—mm (inches)**

*Dimensions are not intended to be used for installation purposes.*



**Typical Wiring Diagrams**



Connector Pinout	2 N.C. + 1 N.O.		Contact Action
	Terminal	Contact	
	1	11	N.C.
	7	12	
	6	21	N.C.
	5	22	
	4	33	N.O.
	3	34	
8	Ground		

**Contact Action**

Contact Open  Contact Closed

Actuator withdrawal distance from full insertion

2 N.C. + 1 N.O. (BBM)

11/12	21/22	33/34	0mm

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