

General

The STOPSWITCH is a self-contained stopped motion monitor. It consists of an inductive proximity sensor and a stopped motion circuit, all housed in an 18mm dia. moulded body.

No connection is necessary between the sensor and equipment being monitored. The proximity sensor detects a stud or bolt mounted on a shaft, or other suitable target.

Ideally, the target should be a ferrous metal, but non-ferrous metal will be detected at a shorter range. Maximum range for ferrous targets is 8mm (5/16") and for non-ferrous targets it is 6mm (1/4"), assuming a 19mm (3/4") diameter target. Smaller targets may be used but operating distances will be reduced.

The unit has a 2 wire power supply, (24 to 240V ac/dc). The load can be connected in either wire but must have the same voltage rating as supply being used.

The unit incorporates a start-up delay of 4 seconds to allow moving parts to achieve correct speed, thereafter, if a pulse is not received within 4 seconds an output stopped motion signal is indicated.

Installation

The STOPSWITCH should be wired as indicated by the connection diagram.

Note! The STOPSWITCH must be wired through a load/resistor (see diagram) and not directly to supply voltage. The supply polarity is not important and the load can be connected in either wire.

The cable on the STOPSWITCH can be extended to virtually any length in ordinary 2 wire, cable.

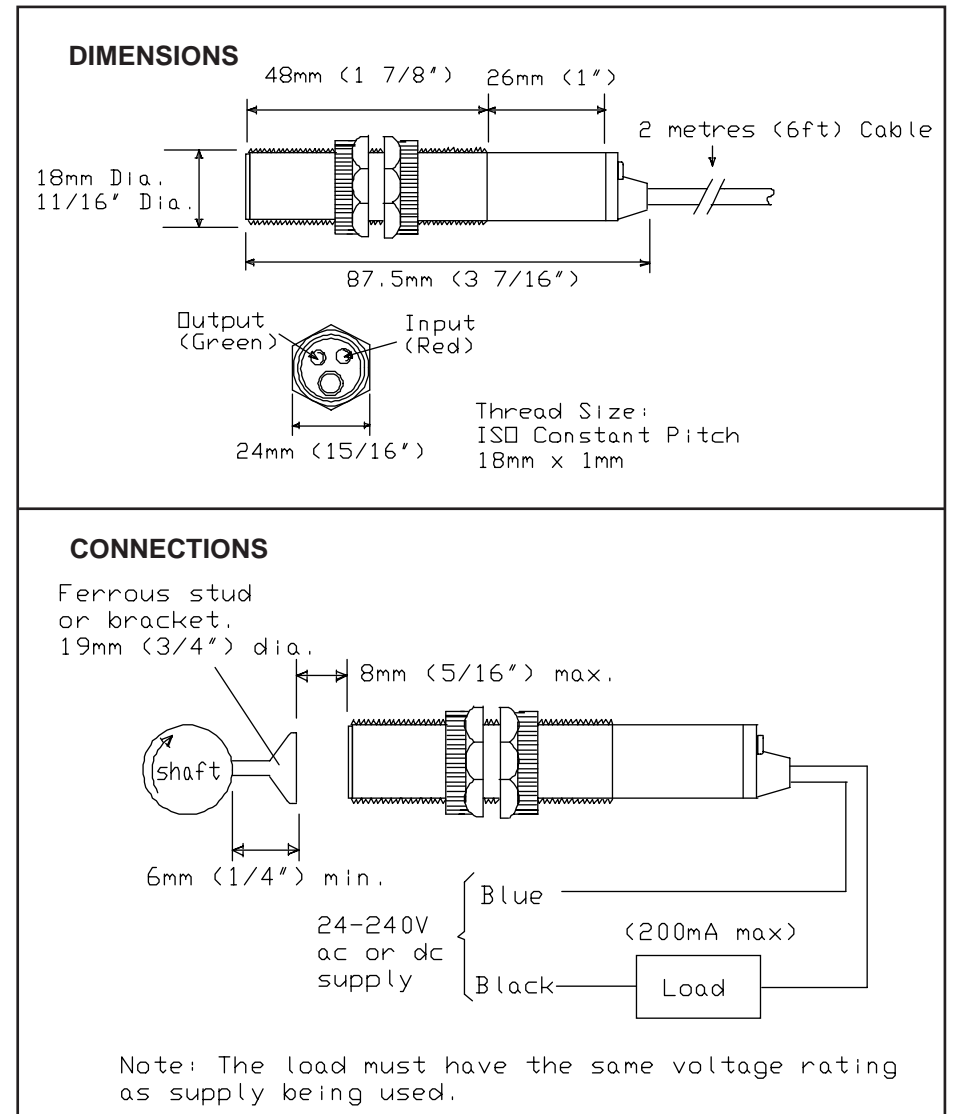
Two locknuts are provided to mount the STOPSWITCH in position. Mount securely to withstand vibration.

Ensure that the unit and target are adequately guarded.

Commissioning

1. Check that the unit is correctly installed. (See connection diagram).
2. Check that the distance between the target, stud or bolt head and sensing face of STOPSWITCH is within the minimum distance specified.
3. Start up machine.
4. The unit is now set. If the STOPSWITCH fails to receive a signal within every 4 second period, (i.e. target stops rotating or there is a power failure) the unit will switch to normally open.
5. During normal operation the 'Red' LED will flash each time an input signal is received. The closed circuit is indicated by a permanent 'Green' LED. If the unit fails to receive a signal for 4 seconds the circuit reverts to open state indicated by the 'Green' LED going out.

STOPSWITCH M100



Plastic target disc with metal inserts are available (Part No: M500TG). Maximum sensing range, when using this unit, will be reduced.

General Specification

STOPSWITCH M100 - Stopped Motion Monitor.

Features: Inductive proximity sensor with fixed speed timer
Universal 24 to 240 Volt ac/dc supplies.
No contact with moving machinery.
Self contained unit. Signals underspeed motion.
2 LED outputs monitor machine status.

Specification

Supply: 24 to 240 Volts ac/dc.
Fusing: Supply to be fused at 5A max.
Switching Capacity: 200mA max.
Saturation Voltage: 8 Volts Max.
(Output ON).
Ambient Temperature: -25°C (-13°F) to +70°C (+158°F).
Output State: Normally Closed (Volt drop 8Volts max.) above minimum input speed.
Normally Open (Leakage current 1.6mA max.) at stopped motion.
Sensing Range: 8mm (5/16") maximum on ferrous metal @ 25°C (77°F).
Input Pulse Range: 20 to 2000 ppm max.
Start-up Delay: 4 seconds.
Underspeed/Stopped Motion Trip Level: 4 seconds. The unit signals a "stopped motion" condition if no inputs are received for a period of 4 seconds or more.
Enclosure: ISO threaded 18mm by 1mm pitch, moulded polycarbonate.
Protection: IP67
Relative Humidity: 90% RH
LED Indicators: Red - "Target sensed". Green - "Closed Circuit".
Connections: 2 wire, 2 metres (6ft) long leads. This can be extended, as required, with 2 wire lead.

Guarantee

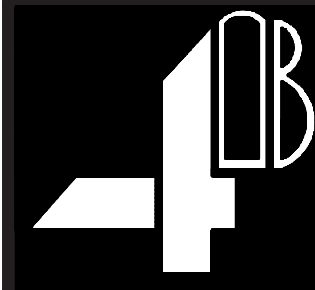
The equipment is covered by a 12 month guarantee from the date of despatch. Any faults arising due to faulty materials or workmanship within the guaranteed period will be corrected free of charge providing the equipment is returned to us freight paid.

BRAIME ELEVATOR BUCKETS LTD.

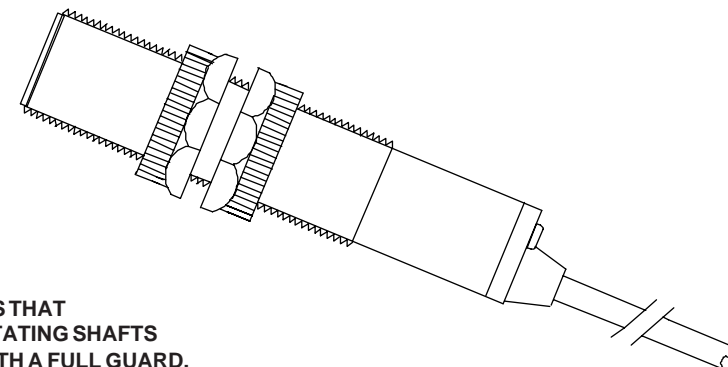
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STOPSWITCH M100 STOPPED MOTION MONITOR



WARNING!
O.S.H.A. REQUIRES THAT
ALL EXPOSED ROTATING SHAFTS
ARE PROVIDED WITH A FULL GUARD.
THEREFORE, THIS DEVICE AND IT'S TARGET MUST BE
EQUIPED WITH A GUARD.

INSTALLATION INSTRUCTIONS

TECHNICAL INFORMATION

STOPSWITCH - PART No. M1420