

Isomag 4

heavy duty tongue operated safety interlock switch

Guardmaster®
SPECIALISTS IN MACHINERY SAFETY

The Isomag 4 is a heavy duty tongue (or key) actuated safety interlock switch designed to fit at the opening edge of sliding, hinged or lift off guards. The Isomag works in any position, accepts considerable guard wear and is unaffected by vibration.

The Isomag 4 features a compact housing, only 122 x 58 x 39 mm and includes all the necessary safety related functions, such as forced guided contacts and a tamper resistant mechanism allowing machinery to be safeguarded in full compliance with the machinery directive.

The Isomag 4 has 1N/C safety contact and 1N/O auxiliary contact and has a die cast housing. The unit is sealed to IP66 and has 3 conduit entries, M20 or Pg11. The die cast case hinges open allowing authorised personnel quick and easy access to the IP66 internal switch unit in the event of the unit requiring cleaning.

Operation of the switch is achieved by the insertion of the specially profiled actuator which should be permanently fixed to the leading edge of the guard door. The Isomag 4 incorporates a unique tamper resistant barrier system ensuring only the Isomag 4's actuator can operate the switch.

Robust die cast case, ideal for heavy duty applications

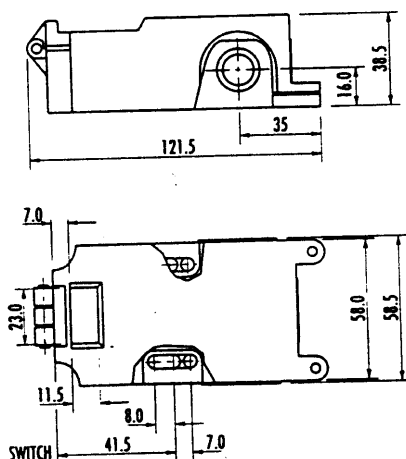
Tamper resistant design, virtually impossible to defeat

Contacts, 1N/C + 1N/O (sealed to IP66)

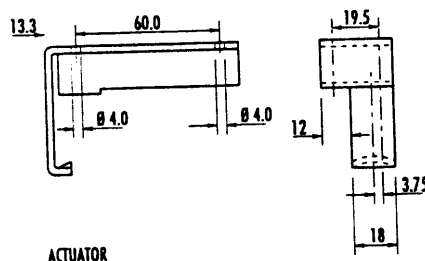
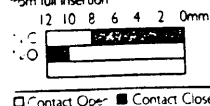
Conforms to EN 1088, EN 292,
EN 60947-5-1, EN 60204-1

features

dimension drawings



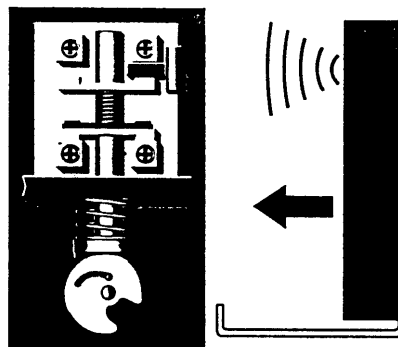
Actuator withdrawal distance
from full insertion



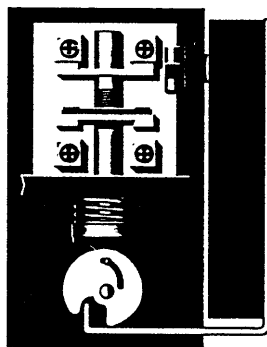
Minimum Operating Radius



Principle of operation



Positive operation, forced disconnection of the safety contacts. The safety contacts can only be made once the barrier system is operated by the actuator.

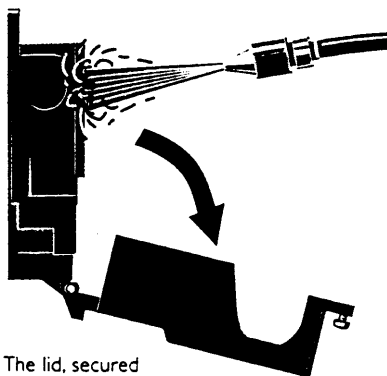


Note: these are simplified illustrations only intended to show operating principle.

Contact arrangements

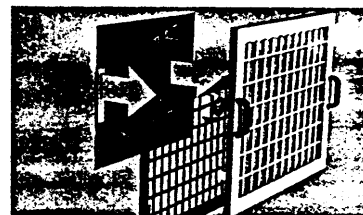
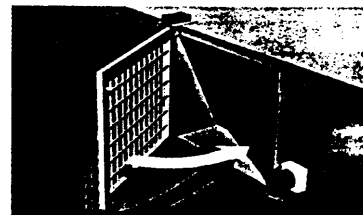
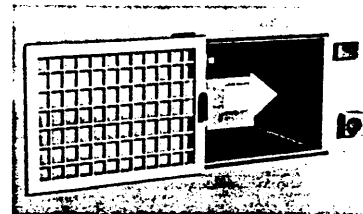


Easily cleaned



The lid, secured by two tamper resistant screws can be hinged open to give access for cleaning purposes.

application examples



Note: Lift off guards require good alignment when using tongue actuated interlock switches. If necessary a flap can be used to prevent initial lifting of the non interlocked edge.

Conforming to standards	EN60947-5-1, EN1088, EN292, EN60204-1
Safety contact arrangement	1N/C break before make positive break
Utilisation cat.	AC 15
a.c. (Ue)	500V 250V 100V
(Ie)	1A 2A 5A
d.c.	250V 0.5A, 125V 1A, 24V 2A
Max. switched load	500VA
Thermal current (It)	10A
Minimum current	5V 5mA
Safety contact gap	>2.6mm
Rtd. insulation voltage	(Ui) 500V
Rtd. impulse withstand voltage	(Uimp) 2500V
Auxiliary contact	1N/O
Pollution degree	3
Actuator travel for positive opening	8mm
Max. actuation speed	160mm per sec
Max. actuation frequency	1 Cycle per sec
Case material	Die cast alloy
Actuator material & magnet housing	Pressed steel chrome plated & moulded ABS
Protection	IP66
Conduit entry	3 x M20 or Pg 11
Operating temperature	-25°C to +80°C
Wiring	Switch 2 x M5 - Actuator 2 x M4
Mounting	Any position
Mechanical life	1 x 10 ⁶
Weight	400g
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.

Type	Contacts	Conduit	Part no.
Isomag 4	1N/C+1N/O	1xM20	01013
Isomag 4	1N/C+1N/O	1xPg 11	01014
Spare actuator			01005

ordering details