

# MECHAN CONTROLS

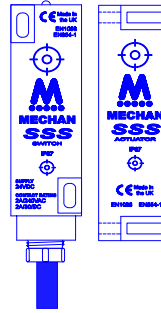
## SSS

### Standalone Safety Switch

## INSTALLATION GUIDE

### STANDALONE SAFETY SWITCH

Type: SSS



#### 1) PART NUMBERS:

SSS-20-03M  
SSS-11-03M  
SSS-20-QD  
SSS-11-QD

(For a longer cable length, change the last 3 places in the part of the part number. I.e. 05m for 5 metre cable)



This information is designed to help suitably qualified personnel install and operate Mechan Safety Switch equipment. Before using this product, read this guide thoroughly along with any relevant European and/or National standards (e.g. Machinery Directive 89/392/EEC and it's amendments, Provision and Use of Work Equipment Regulations. Further information can be obtained from Mechan Controls Limited

\*\*\*\*\* KEEP THIS GUIDE FOR FUTURE REFERENCE \*\*\*\*\*

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## 2) DESCRIPTION

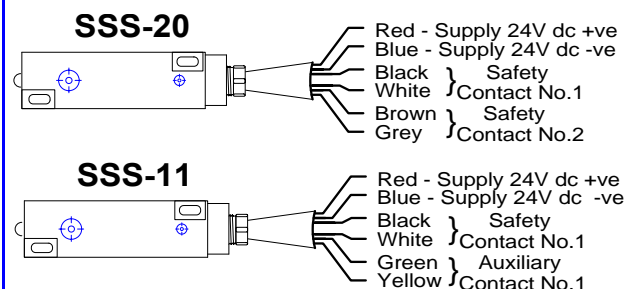
The SSS safety switch is an electronic tamper-resistant non-contact safety switch for use in machine guarding applications. With correct fitting, it complies with the guidelines given in EN1088.

When fitted to a machine guard as shown below (5) the normally open safety contact(s) will be closed when the guard door is closed and will open when the guard door is opened NOTE: The normally closed auxiliary contact will close when the guard door opens.

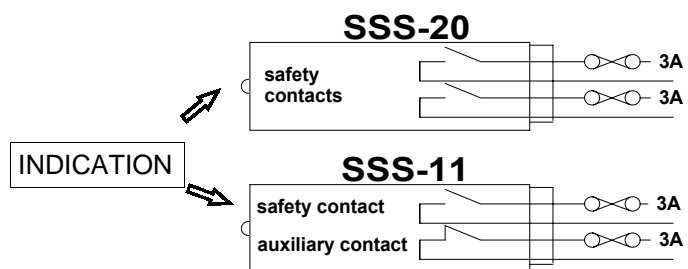
Mechan Controls also manufacture a range of tamper-resistant and tamper-proof safety systems which may be more suitable for some applications. For more information ask for details on the **ISIS** ; **F-SERIES** and **CODEX** safety systems.

## 3) CONNECTIONS

Note: See section 7 for the Quick Disconnect option



## 4) CONTACTS & FUSES



## 5) Fixing Instructions

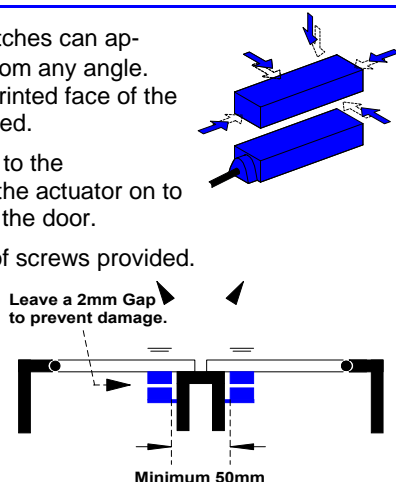
The **SSS** safety switches can approach each other from any angle. The targets on the printed face of the switch must be aligned.

Mount the switch on to the machine frame and the actuator on to the opening edge of the door.

Use the tamper proof screws provided.

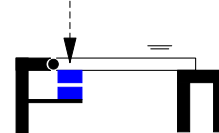
Do not use the safety switch as a door stop.

Leave a minimum of 50 mm between any adjacent switch.



Always try to mount the switch on non-ferrous material. Ferrous material will reduce the switching distance.

**WRONG!**

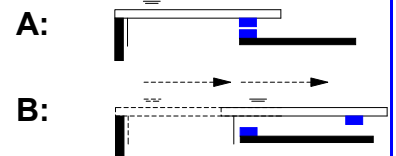


Do not mount the switch on to the hinge side of the door.

### SLIDING DOORS

EN 1088 provides some mounting suggestions, like below.

When fixing the switches to a sliding door (A), ensure that when the door is opened (B) the switch is not easily accessible, helping prevent the system being overridden.



# Mechan Controls Limited

## Electronic Safety Switches

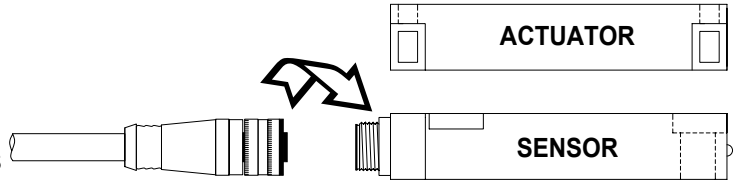
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## TECHNICAL SPECIFICATIONS

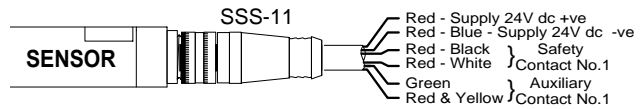
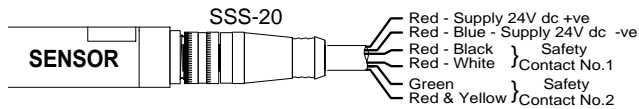
### 6) QUICK DISCONNECT OPTION

The SSS safety switch is also available with a 'Brad Harrison' M12 / 6 PIN IP76 connector (Mechan Stock No. 380.004).

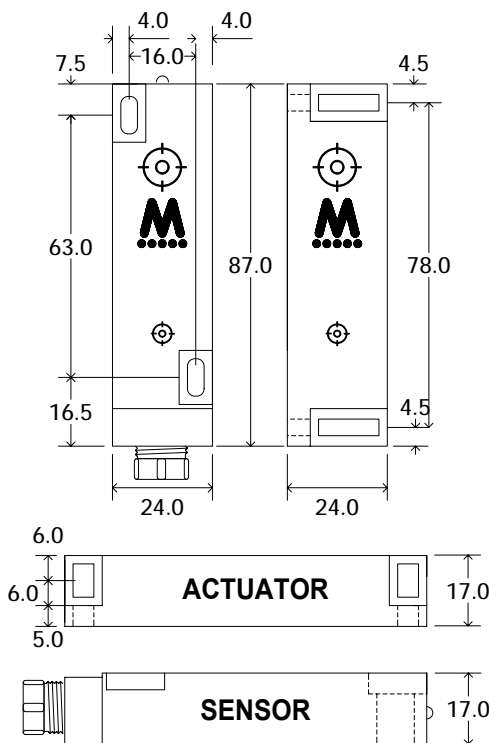
NOTE : As the same connector cable is used for both the SSS-20-QD and the SSS-11-QD please note that the Green & Yellow conductors have a different use depending on which SSS you have chosen. See Below.



#### Connections for SSS Quick Disconnect



### 7) DIMENSIONS



### 8) TECHNICAL SPECIFICATIONS

SSS - STANDALONE SAFETY SWITCH	
Power Supply	24V dc
Power Consumption	2VA
Safety Contacts	1 or 2 x N/O
Safety Contact Rating	2A/230V ac; 2A/30V dc
Auxiliary Contact	up to 1 x N/C
Auxiliary Contact Rating	2A/230V ac; 2A/30V dc
Operating Temperature	-10C to +55C
Storage Temperature	-20C to +60C
Housing	ABS case, BLUE Resin Filled
Environmental Protection	IP67
Mounting	M4 Security Screws supplied
Vibration / Shock	50-100Hz / 10g
Dimensions	87 x 24 x 17mm
Optimum Gap	2mm
Switching Distance	6-9mm ON, 10-12mm OFF
Cable Length Max.	100 metres
Indication	Output LED Green

NOTE :  
All dimensions  
are in mm

### 8) ORDERING INFORMATION

SYSTEM	DESCRIPTION	PART NUMBER	STOCK NUMBER
SSS	Safety Switch, 24Vdc, 2 x N/O, 3metre cable	SSS-20-03M	360.000
SSS	Safety switch, 24Vdc, 1 x N/O & 1 x N/C, 3 metre cable (Change last part of part number for longer cable)	SSS-11-03M	360.001
SSS	Safety Switch, 24Vdc, 2 x N/O, M12 6-Pin Quick Disconnect	SSS-20-QD	360.002
SSS	Safety switch, 24Vdc, 1 x N/O & 1 x N/C, M12 6-Pin Quick Disconnect	SSS-11-QD	360.003
SSS	SSS-QD Cable, M12 6-PIN 5 Metres	SSS-QD-05M	360.004
SSS	Safety Switch, Actuator only	SSS-ACT	360.099



The SSS Safety system complies with all relevant Essential Health and Safety Requirements of the Machinery Directive (89/392/EEC & amendments 91/368/EEC, 94/44/EEC).

Copies of the Certificate of Conformity can be obtained from Mechan Controls Limited