

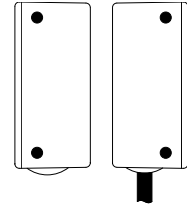
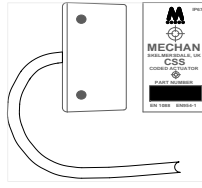
# MECHAN CONTROLS

## CSS Coded Standalone Safety Switch INSTALLATION GUIDE

### 1) PART NUMBERS:

CSS-20-03M / CSS-11-03M  
CSS-10-03M

CSS-L-10-02M



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

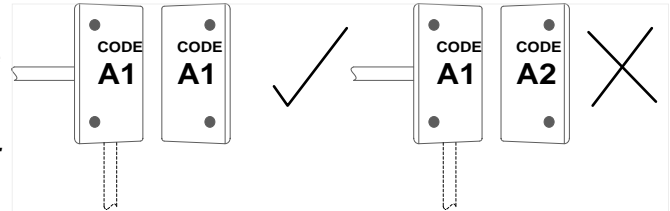
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### 2) DESCRIPTION

The CSS safety switch is an electronic tamper-proof non-contact safety switch for use in machine guarding applications with the option of **unique coding**. With correct fitting, it complies with the guidelines given in EN1088.

When fitted to a machine guard as shown in section 4 below, 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.



**The CSS safety switches are designed with a UNIQUE CODING system between the Actuator and the Switch.**

**The switch can only be operated by the correct actuator .**

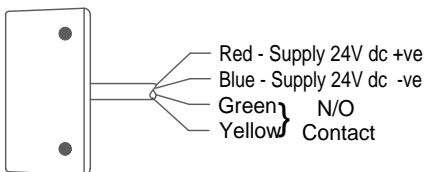
**Check that the CODES printed on the side of the actuator and the switch are the same.**

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.

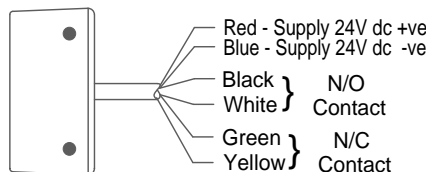
### 3) CONNECTIONS, CONTACTS & FUSING

#### CONNECTIONS FOR SUPPLY & FUSING

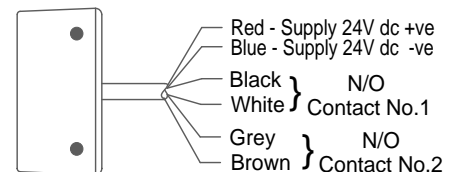
##### CSS-10 & CSS-L-10



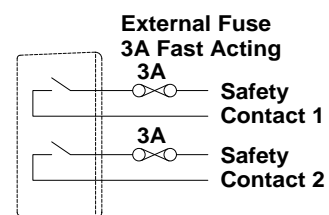
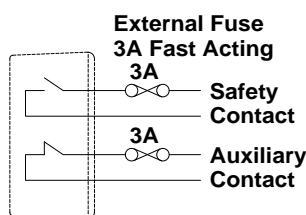
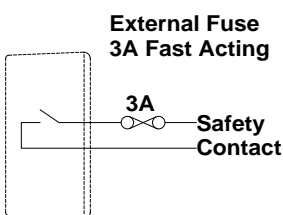
##### CSS-11



##### CSS-20



#### EXTERNAL FUSING

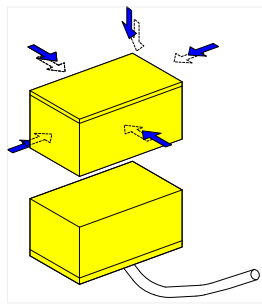


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Electronic Safety Switches

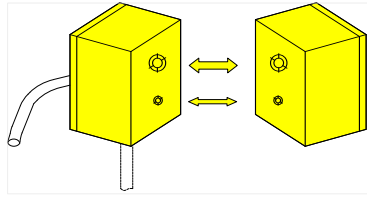
## TECHNICAL SPECIFICATIONS

### 4) Fixing Instructions



The CSS safety switches can approach each other from any angle.

The targets on the printed face of the switch must be aligned.

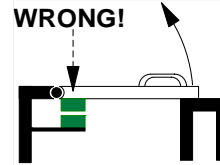


Always try to mount the switch on non-ferrous material. Ferrous material will reduce the switching distance.

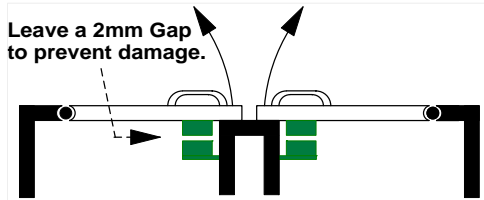
#### SLIDING DOORS

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.

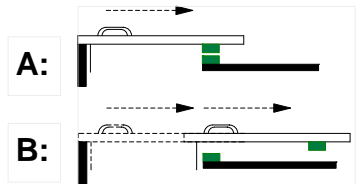


Do not mount the switch on to the hinge side of the door.



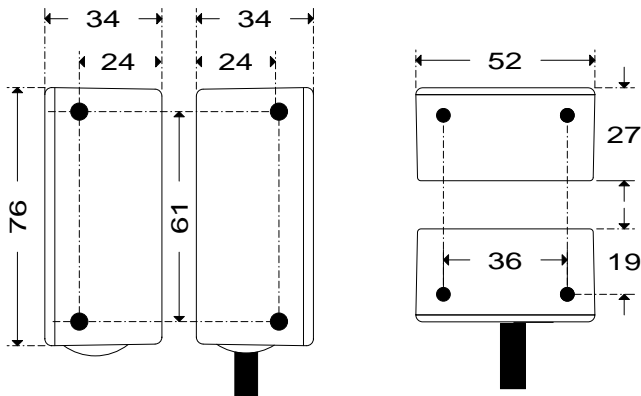
Mount the switch on to the machine frame and the actuator on to the opening edge of the door.

Do not use the safety switch



### 5) DIMENSIONS

### 6) TECHNICAL SPECIFICATIONS



Coded Standalone Safety Switch	
Power Supply	24VDC
Power Consumption	2VA
Safety Contacts	1 or 2 x N/O
Safety Contact Rating	2A/230VAC; 2A/30VDC
Auxiliary Contact	Up to 1 x N/C
Auxiliary Contact Rating	2A/230VAC; 2A/30VDC
Operating Temperature	-10 to +55C
Storage Temperature	-20 to +60C
Housing	ABS case, Green Resin Filled
Environmental Protection	IP67
Mounting	CSS = M4 / CSS-L = M5
Vibration / Shock	50—100Hz / 10g
Dimensions : CSS	52 x 27 x 28mm
: CSS-L	76 x 34 x 32mm
Optimum Gap	2 mm
Switching Distance	6-9mm ON; 10-12mm OFF
Cable Length Max	100 Metres

### 7) ORDERING INFORMATION

System	Description	Part Number	Stock Code
CSS	Safety Switch, 24Vdc, 2 x N/O, 3 Metre Cable	CSS-20-03M	361.000
CSS	Safety Switch, 24Vdc, 1 x N/O + 1 x N/C, 3 Metre Cable	CSS-11-03M	361.001
CSS	Safety Switch, 24Vdc, 1 x N/O, 3 Metre Cable	CSS-10-03M	360.002
CSS-L	Safety Switch, 24Vdc, 1 x N/O, 2 Metre Cable	CSS-L-10-02M	361.006



The CSS 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 PLC