

# MSG series

Rugged switch guards for switch series 12000 - 3500 - 600H - 6000



## DISTINCTIVE FEATURES

**Robust**

**For harsh environments**

**Modern, patented design**



## GENERAL SPECIFICATIONS

- APEM SAS patented design
- Operating temperature : -40 °C to +85 °C (-40 °F to +185 °F)
- Storage temperature : -55 °C to +85 °C (-67 °F to +185 °F)
- Salt spray : IEC 60068-2-11, test KA, 96 hours
- Mechanical life : 20,000 cycles
- Switch guards are designed to prevent accidental lever operation on switches with Ø 11.9 (.468) or Ø 12 (.472) threaded bushing and lever length 17.5 (.688) outside bushing.  
When the guard is raised, the lever can be operated freely.  
When the guard is fully depressed, the lever is reset/locked in a stable position.  
Note : For correct switch operation, the switch guard should be adjusted properly (see "Mounting" below).



## MATERIALS

- Support plate : black stainless steel
- Cap : thermoset

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.



## PANEL CUT-OUT

FOR BUSHING WITH KEYWAY

K



FOR FLATTED BUSHING

F



The company reserves the right to change specifications without notice.

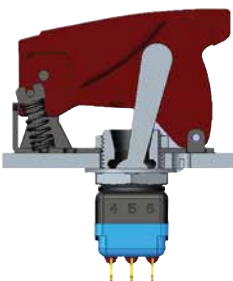


# MSG series

Rugged switch guards for switch series 12000 - 3500 - 600H - 6000



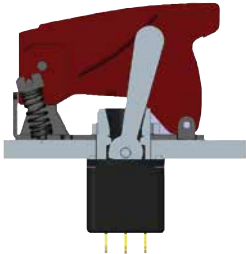
## MOUNTING



Standard



With K sealing option



With X408 sealing option



## BUILD YOUR PART NUMBER

| MSG                                                                                                                    |                                              |                            |                     |                         |                      |                      |            |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------|---------------------|-------------------------|----------------------|----------------------|------------|
| <b>SERIES</b>                                                                                                          | <b>NUMBER OF POSITIONS</b>                   |                            | <b>CUT-OUT TYPE</b> |                         | <b>MARKING</b>       |                      |            |
|                                                                                                                        | 2                                            | 2 positions                | K                   | For bushing with keyway | XX No marking        |                      |            |
|                                                                                                                        | 3                                            | 3 positions                | F                   | For flatted bushing     | Markings on request. |                      |            |
| <b>SWITCH GUARD TYPE</b>                                                                                               |                                              | <b>CUT-OUT ORIENTATION</b> |                     | <b>COLORS</b>           |                      | <b>MARKING COLOR</b> |            |
| 1                                                                                                                      | Locked in upper position                     | N                          | North               | 1                       | Blue                 | X                    | No marking |
| 2                                                                                                                      | Locked in down position                      | S                          | South               | 2                       | Black                | 1                    | Blue       |
| 3                                                                                                                      | Locked in center position (3 positions only) |                            |                     | 3                       | Green                | 2                    | Black      |
| 4                                                                                                                      | Locked in upper and down positions           |                            |                     | 4                       | Grey                 | 3                    | Green      |
| 5                                                                                                                      | Locked in either position                    |                            |                     | 5                       | Yellow               | 4                    | Grey       |
| Maximum lever width:<br>- 6 mm (.236) on "1","2","3","4" switch guard type<br>- 9.5 mm (.374) on "5" switch guard type |                                              |                            |                     | 6                       | Red                  | 5                    | Yellow     |
|                                                                                                                        |                                              |                            |                     | 7                       | White                | 6                    | Red        |
|                                                                                                                        |                                              |                            |                     | 8                       | Orange               | 7                    | White      |
|                                                                                                                        |                                              |                            |                     | 9                       | Orange               | 8                    | Orange     |



## ABOUT THIS SERIES

- On the following pages, you will find successively basic part numbers and options in the same order as in above chart.
- Notice** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.
  - Mounting accessories** : supplied with the switch or to order separately (see "Hardware" section of website).

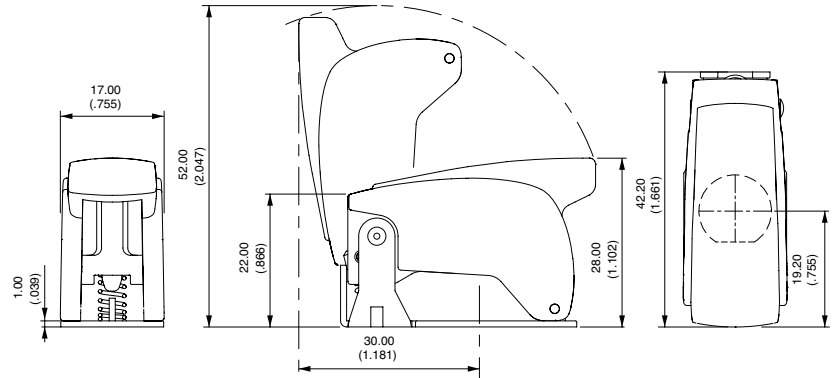
# MSG series

Rugged switch guards for switch series 12000 - 3500 - 600H - 6000

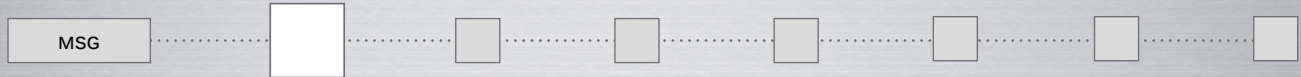
## DIMENSIONS



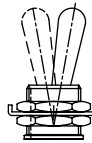
**Note :** Ø 1.80 mm holes for wiring a seal are standard on all models.



## NUMBER OF POSITIONS



- 2 2 positions
- 3 3 positions



2



3

## SWITCH GUARD TYPE



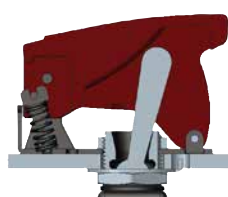
- 1 Locked in upper position
- 2 Locked in down position
- 3 Locked in center position (3 positions only)
- 4 Locked in upper and down positions
- 5 Locked in either position

Maximum lever width:

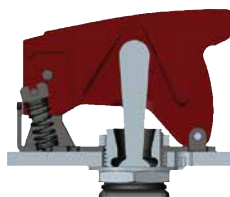
- 6 mm (.236) on "1","2","3","4" switch guard type
- 9.5 mm (.374) on "5" switch guard type



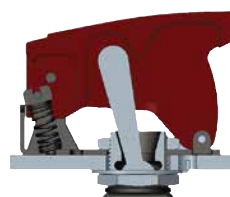
1



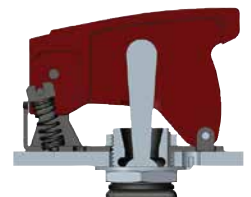
2



3



4



5

# MSG series

Rugged switch guards for switch series 12000 - 3500 - 600H - 6000

### CUT-OUT TYPE



- K For bushing with keyway
- F For flatted bushing

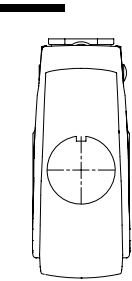
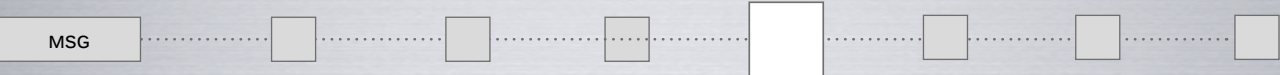


K

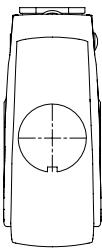


F

### CUT-OUT ORIENTATION

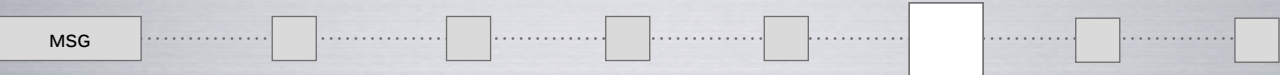


N



S

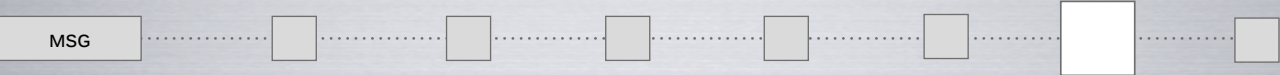
### COLORS



- 1 Blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7 White
- 9 Orange

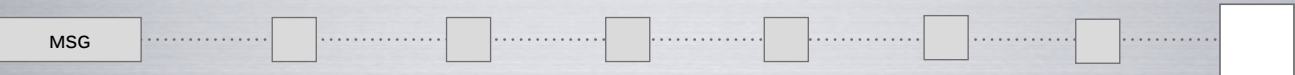


### MARKING



- XX No marking
- On request.

### MARKING COLOR



- |    |            |   |        |   |        |
|----|------------|---|--------|---|--------|
| XX | No marking | 3 | Green  | 6 | Red    |
| 1  | Blue       | 4 | Grey   | 7 | White  |
| 2  | Black      | 5 | Yellow | 9 | Orange |

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9