

Metal Switch, Latching Action, Switching Voltage up to 125 VDC / 250 VAC



Metal Switch with ceramic actuator
 Surface backlighting
 white



Metal Switch with ceramic actuator
 Surface backlighting
 red



Newly available with bright illumination

See below:

Approvals and Compliances

Description

- Switch available in version: Standard (ST), with Lettering (LE), with area illumination (AI)
- Available with bright illumination
- Available with 12 A and 16 A switching current Assembly by mounting with nut and subsequent clipping of the switching element
- Equipped with flat-pin plugs to permit fast connection

Characteristics

- Housing material: high-quality stainless steel, actuator material: highly durable ceramic
- with or without surface backlighting in different colours
- Switching voltage up to 125 VDC respectively 250 VAC, switching current up to 16 A
- available with single-pole and double-pole switching system, switching status is easy to discern by looking at or feeling the resting position of the actuator
- For use in harsh environments (see technical data)

References

- Alternative: Standard version [MSM 16](#)
- Alternative: double-pole switch: [MSM DP 19](#); [MSM DP 22](#); [MSM DP 30](#)
- Alternative: Other diameter [MSM LA CS 22](#)
- Alternative: switch with latching function:

Weblinks

- [pdf data sheet](#), [html datasheet](#), [General Product Information](#), [CAD-Drawings](#), [Product News](#), [Detailed request for product](#), [Video](#)

Technical Data

Electrical Data

| | |
|---------------------------------|---|
| Switching Function | latching |
| Number of Poles | SPST, DPST |
| Supply Voltage | 24 VDC Surface backlighting |
| Impulse Withstand Voltage (ESD) | 4 kV MSM LA CS ST |
| Switching Voltage | max. 250 VAC, 30 VDC (125 VDC at 0.5 A) |
| Switching Current | 12 A AC / 16 A AC |
| Rated Switching Capacity | 3000 W |
| Lifetime | 0.05 million actuations (250 VAC / 8 A), 0.1 million actuations (125 VDC / 0,5 A), 0.02 million actuations (250 VAC / 16 A) |
| Contact Resistance | < 100mΩ (12 VDC / 1 A) |
| Insulation Resistance | > 100 MΩ 500 VDC |

Mechanical Data

| | |
|---|------------------------|
| Actuating Force | 10 N |
| Actuating Travel | 5.2 mm, |
| Lifetime | 0.1 million actuations |
| Contact Gap | 3 mm |
| Shock Protection | IK 07 |
| Mounting screw torque Plastic Nut | max. 4.5 Nm |
| Mounting screw torque Stainless Steel Nut | max. 12 Nm |

Climatical Data

| | |
|--|-----------------------------------|
| Operating Temperature | -20 to 85 °C |
| Storage Temperature | -20 to 85 °C |
| Protection Class | IP64 |
| Switching Unit | IP40 |
| Salt Spray Test (acc. to DIN 50021-SS) | 24 h / 48 h / 96 h Residence Time |

Material

| | |
|----------------------------------|--------------------------------------|
| Housings | Stainless Steel |
| Actuator (disc, outside housing) | Ceramics |
| Seal Ring | NBR70 |
| Switcher Collet | PA66 (UL94-V0 related to d ≥ 1.6 mm) |
| Intermediate Connector | PA66 (UL94-V0 related to d ≥ 1.6 mm) |
| Contact Pin Adapter | PA66 (UL94-V0 related to d ≥ 1.6 mm) |

Approvals and Compliances

Switching Element single-pole with Push Button Holder



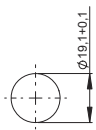
Legend

- A = Illumination Area
- C = Width Across Flats
- D = Knurled Nut
- E = Lettering
- F = Anti-Rotation
- H = Switching Element

Dimension

MSM 19 LA CS (without torsion protection)

MSM 19 LA CS (with torsion protection)



Drilling diagram

Drilling diagram

Assembly Instructions



- I Housing
- II Flat Pin Terminal (Illumination)
- III Gasket
- IV Nut (Nut type see Dimensions)
- V Module Switching Contact

Installation Instruction:

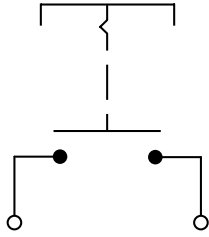
- 1.) Place the gasket accurately on the actuator housing. Then mount the actuator housing assembly into the panel.
- 2.) Tighten the screw nut according to the torque instructions.
- 3.) Clasp the module switching contact into the actuator housing.

Installation information:

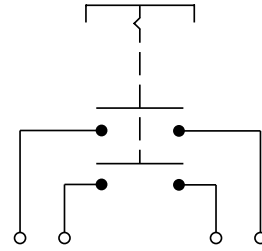
- 1.) The power supply and the configuration of the flat pin terminals have to be installed correctly for the illumination and micro switch function.
- 2.) Insulate the terminals as required. Fully insulated plug-in sleeves are recommended.
- 3.) Installation instructions according to VDE-standard DIN VDE 0100-100 or alternatively IEC 60354 standard

Diagrams

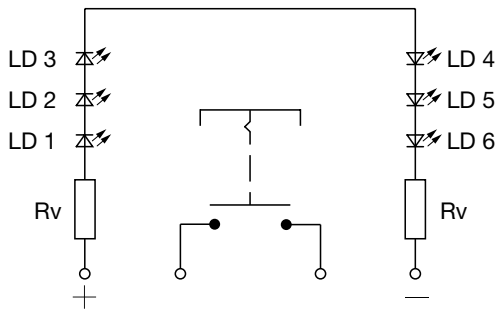
MSM LA CS ST / single-pole



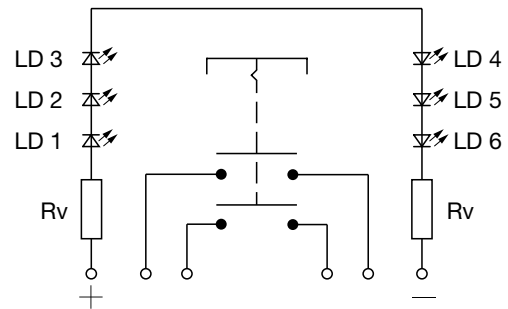
MSM LA CS ST / double-pole



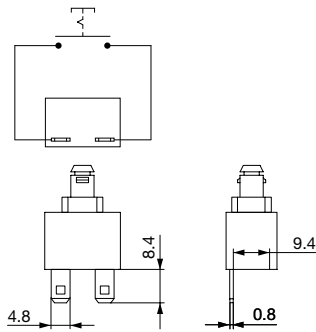
MSM LA CS AI / single-pole



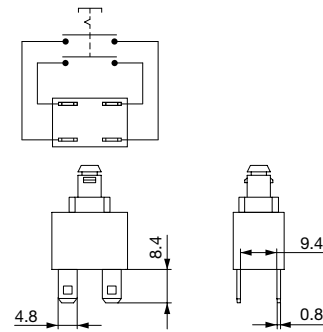
MSM LA CS AI / double-pole



Contact Layout single-pole



Contact Layout double-pole



Lettering

The last three digits in the order number define the lettering:

| | |
|---------|----------------------|
| 000 | No Lettering |
| 001-074 | Standard Lettering |
| 101- | Customized Lettering |

Lettering Colour of Laser Lettering

| Material | Lettering Colour |
|----------|----------------------|
| Ceramic | black Filled letters |

Order Index Lettering

| Laser Marking | | | |
|---------------|--------|-------------|-------------|
| 001 =A | 021 =U | 041 =÷ | 061 =EIN |
| 002 =B | 022 =V | 042 =* | 062 =AUS |
| 003 =C | 023 =W | 043 == | 063 =AUF |
| 004 =D | 024 =X | 044 =# | 064 =AB |
| 005 =E | 025 =Y | 045 =↔ | 065 =ON |
| 006 =F | 026 =Z | 046 =↑ | 066 =OFF |
| 007 =G | 027 =0 | 047 =→ | 067 =UP |
| 008 =H | 028 =1 | 048 =← | 068 =DOWN |
| 009 =I | 029 =2 | 049 =↓ | 069 =HIGH |
| 010 =J | 030 =3 | 050 =↑ | 070 =LOW |
| 011 =K | 031 =4 | 051 =% | 071 =ON/OFF |
| 012 =L | 032 =5 | 052 =√ | 072 =START |
| 013 =M | 033 =6 | 053 =CTRL | 073 =RESET |
| 014 =N | 034 =7 | 054 =RETURN | 074 =🔌 |
| 015 =O | 035 =8 | 055 =SHIFT | 075 =💡 |
| 016 =P | 036 =9 | 056 =LOCK | 076 =🔒 |
| 017 =Q | 037 =+ | 057 =STOP | 077 =Ⓜ |
| 018 =R | 038 =- | 058 =ENTER | |
| 019 =S | 039 =. | 059 =BACK | |
| 020 =T | 040 =x | 060 =LINE | |

All Variants

| Diameter | Number of Poles | Switching Current | Illumination, LED | Torsion Protection Housing/Actuator | Config. Code | Order Number |
|----------|-----------------|-------------------|-----------------------------|-------------------------------------|------------------------|-------------------|
| [mm] | | [A] | | | | |
| 19 | DPST | 12 | non-illuminated | yes / yes | MSM 19 LA CS Pcs | 1241.7221.1120000 |
| 19 | DPST | 12 | Backlighted, red, 24 VDC | yes / yes | MSM 19 LA CS Al red | 1241.8550 |
| 19 | DPST | 12 | Backlighted, green, 24 VDC | yes / yes | MSM 19 LA CS Al green | 1241.8551 |
| 19 | DPST | 12 | Backlighted, yellow, 24 VDC | yes / yes | MSM 19 LA CS Al yellow | 1241.8552 |
| 19 | DPST | 12 | Backlighted, blue, 24 VDC | yes / yes | MSM 19 LA CS Al blue | 1241.8553 |
| 19 | DPST | 12 | Backlighted, white, 24 VDC | yes / yes | MSM 19 LA CS Al white | 1241.8554 |
| 19 | DPST | 12 | Backlighted, orange, 24 VDC | yes / yes | MSM 19 LA CS Al orange | 1241.8555 |
| 19 | SPST | 12 | non-illuminated | yes / yes | MSM 19 LA CS Pcs | 1241.7221.1110000 |
| 19 | SPST | 12 | Backlighted, red, 24 VDC | yes / yes | MSM 19 LA CS Al red | 1241.8544 |
| 19 | SPST | 12 | Backlighted, green, 24 VDC | yes / yes | MSM 19 LA CS Al green | 1241.8545 |
| 19 | SPST | 12 | Backlighted, yellow, 24 VDC | yes / yes | MSM 19 LA CS Al yellow | 1241.8546 |
| 19 | SPST | 12 | Backlighted, blue, 24 VDC | yes / yes | MSM 19 LA CS Al blue | 1241.8547 |
| 19 | SPST | 12 | Backlighted, white, 24 VDC | yes / yes | MSM 19 LA CS Al white | 1241.8548 |
| 19 | SPST | 12 | Backlighted, orange, 24 VDC | yes / yes | MSM 19 LA CS Al orange | 1241.8549 |
| 19 | DPST | 16 | Backlighted, blue, 24 VDC | yes / yes | MSM 19 LA CS Al blue | 3-101-010 |
| 19 | DPST | 16 | Backlighted, white, 24 VDC | yes / yes | MSM 19 LA CS Al white | 3-101-011 |
| 19 | DPST | 16 | Backlighted, red, 24 VDC | yes / yes | MSM 19 LA CS Al red | 3-101-023 |
| 19 | DPST | 16 | Backlighted, green, 24 VDC | yes / yes | MSM 19 LA CS Al green | 3-101-024 |
| 19 | SPST | 16 | Backlighted, red, 24 VDC | yes / yes | MSM 19 LA CS Al red | 3-101-005 |
| 19 | SPST | 16 | Backlighted, green, 24 VDC | yes / yes | MSM 19 LA CS Al green | 3-101-007 |
| 19 | SPST | 16 | Backlighted, blue, 24 VDC | yes / yes | MSM 19 LA CS Al blue | 3-101-009 |
| 19 | SPST | 16 | Backlighted, white, 24 VDC | yes / yes | MSM 19 LA CS Al white | 3-101-022 |

Legend:

Type:

MSMCS = Ceramic Surface

ST = Standard: not lettered

LE = Lettering: lettered

Al = BL = Full Surface Backlighting: Lettering possible (see Lettering, last 3 digits)

| Diameter | Number of Poles | Switching Current | Illumination, LED | Torsion Protection Housing/Actuator | Config. Code | Order Number |
|----------|-----------------|-------------------|-------------------|-------------------------------------|--------------|--------------|
| [mm] | | [A] | | | | |

Customer-specific versions available on request.
 Special materials for use in salt and chlorinated environment on request.
 The MOQ for standard laser lettering on standard variants is a packing unit.

5 VDC and 12 VDC RI variants on request (MOQ 500 pieces)

The nut with gasket and micro switch are enclosed in the box.

■ Most Popular.

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Packaging unit 10 in box with insert



- Actuating elements in ESD safe packaging
- Screw nuts and sealing rings in a bag (enclosed in the box)
- Micro switches (enclosed in the box)

Accessories

Description



Power Supply
 Power Supply IP42 for LED- and Illumination applications indoor 90~264 VAC => 24 VDC 0.34 A 8 W

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

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9