



# MSM 16

## Metal Line Switch with homogenous Ring- or Area Illumination



- > Extension of the MSM 16 series with illuminated variants
- > Ring Illumination (RI) and full actuator Area Illumination (AI)
- > Multiple illumination options up to 5 colors
- > Galvanic isolated and potential-free connections on the switch
- > Seal protection
- > Vandal resistant
- > Standard and customer laser markings available



- > Housing: stainless steel
- > Momentary normally open (NO) or normally closed (NC) Actuator:
  - > Stainless steel for Ring Illumination
  - > Scratch resistant ceramics for Area Illuminated versions
- > Switching voltage / current for DC applications: max. 30 VDC / max. 100 mA
- > Switching voltage / current for AC applications: max. 250 VAC / max. 10 A
- > Illumination supply voltage: 24 VDC
- > IK protection: IK07
- > IP protection: IP67
- > Terminals: flat plug-in terminals permit fast connection
- > Operating temperature: -25°C to +85°C

- > Homogenous quality illumination
- > Power supply for the illumination:
  - > MSM with Ring Illumination: 24 VDC (voltages between 12 VDC and 24 VDC can be used for this type. The lower the supply voltage, the less intensive the brightness of the illumination)
  - > MSM with full actuator Area Illumination: 24 VDC



## Strategic Positioning

- > Extension of the MSM 16 series with illuminated types fills an important gap in the SCHURTER range.

## Competitors

- > Apem
- > E-Switch
- > Schlegel
- > Onpow

## Price-Position

- > Pricing is positioned based on a vandal-proof design made of high-quality materials, where visual aesthetics combined with robust performance are required

## Applications

- > Industrial Machinery
- > Vending and ticketing machines
- > POS terminals
- > Public transport
- > Pro-sound equipment
- > Food service appliances, e.g. espresso machines
- > Medical and dental equipment

## USP (customer focus)

- > High aesthetic appeal
- > Impact-resistant, seal protection
- > High-quality materials (actuator made from scratch-resistant ceramic or stainless steel)
- > Homogeneous illumination quality with choice of 5 colors

## 😊 Strength

- > Homogeneous quality illumination
- > 5 color possibilities
- > Versions with ceramic surface are scratch-resist and hygienic, and offer a complete back-lit actuator Area Illumination
- > Degree of vandal resistance; high impact resistance
- > Customer specific variations

## 👍 Opportunities

- > SCHURTER is now offering 16 mm MSM with ring illumination
- > Increase awareness for the MSM series in general with extended range including 16 – 30 mm, various illumination options, switching and lettering, as well customer specific options

## 😞 Weakness

- > Actuator movement produces slight grinding sound, which is to be expected due to robust steel housing (more audible with ceramic version)
- > Potential issue when exposed to water at low temperatures (freezing/sticking of the actuator) – Alternative is PSE Multicolor piezo series
- > Two piece construction can be an installation disadvantage (microswitch is separate from actuator)

## 👋 Threats

- > High quality compared to the competition, but many applications are not so quality demanding

## Professional Sound Equipment



## Food Service Appliances



## Vending and Ticketing Machines



## Laboratory Equipment



## Medical Equipment











Switching Current	Switching Voltage	Illumination, LED	Housing, Torsion Protection	Actuator Material	Short text	Article Number
100 mA	30 VDC	Ring Illumination, red, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 A10 RI 0RD	3-102-618
10 A	250 VDC	Ring Illumination, red, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 10A RI 0RD	3-102-620
100 mA	30 VDC	Ring Illumination, green, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 A10 RI 0GN	3-102-621
10 A	250 VDC	Ring Illumination, green, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 10A RI 0GN	3-102-623
100 mA	30 VDC	Ring Illumination, blue, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 A10 RI 0BL	3-102-624
10 A	250 VDC	Ring Illumination, blue, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 10A RI 0BL	3-102-626
100 mA	30 VDC	Ring Illumination, yellow, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 A10 RI 0YL	3-102-627
10 A	250 VDC	Ring Illumination, yellow, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 10A RI 0YL	3-102-629
100 mA	30 VDC	Ring Illumination, white, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 A10 RI 0WT	3-102-630
10 A	250 VDC	Ring Illumination, white, 24 VDC	Stainless steel, yes	Stainless Steel	MSM16 NX 00 10A RI 0WT	3-102-632
100 mA	30 VDC	Ring Illumination, red, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS A10 AI 0RD	3-102-633
10 A	250 VDC	Ring Illumination, red, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS 10A AI 0RD	3-102-635
100 mA	30 VDC	Ring Illumination, green, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS A10 AI 0GN	3-102-636
10 A	250 VDC	Ring Illumination, green, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS 10A AI 0GN	3-102-639
100 mA	30 VDC	Ring Illumination, blue, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS A10 AI 0BL	3-102-640
10 A	250 VDC	Ring Illumination, blue, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS 10A AI 0BL	3-102-642
100 mA	30 VDC	Ring Illumination, yellow, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS A10 AI 0YL	3-102-643
10 A	250 VDC	Ring Illumination, yellow, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS 10A AI 0YL	3-102-645
100 mA	30 VDC	Ring Illumination, white, 24 VDC	Stainless steel, yes	Ceramics	MSM16 NX CS A10 AI 0WT	3-102-646
10 A	250 VDC	Ring Illumination, white, 24 VDC	Stainless steel, no	Ceramics	MSM16 NX CS 10A AI 0WT	3-102-648



# Where to find detailed information about the variants

Start at the table of variants on the main html page of the product. Detailed information which will help to differentiate the variants can be found by clicking on the three dots in the last column of the variant table next to the «Distributor Stock Check». A pop-up window will open to show the variant list with the complete information.

Short Table of Variants MSM 16

Diameter	Switching Current	Switching Voltage	Order Number	A=Most Popular	Free Sample	Distributor Stock Check	...
[mm]	[A]	[VAC/ VDC]					
16	100 ~ mA	30 ~ VDC	1241.6611.1110000	A			...
16	5 / 3 ~ A	125 / 250 ~ VAC	1241.6611.1120000	A			...
16	10 ~ A	250 ~ VAC	1241.6611.1130000				...
16	100 ~ mA	30 ~ VDC	1241.6612.1110000				...

Open complete table MSM 16

click on the "... " to open the pop-up window

## Availability

- Finished products can be ordered from stock.

## Delivery Information

- A packing unit consists of 10 MSM switches packed into an ESD safe bag. The nuts and O-rings are packed into separate bags and are delivered in the same carton.



## Additional Information

- > Data Sheet [MSM 16](#), [MSM CS 16](#)
- > Website enables quick access to sales and marketing materials
- > Click on [Partner Services](#) to download:
  - > Latest press releases
  - > Training presentations
  - > Price lists
  - > High and low resolution product photos
- > Samples can be ordered from the standard product inventory

## Technical Assistance

- > For general product questions, contact your Inside Sales Representative.
- > For technical assistance or specific design configurations, contact Nikila Kareesan at:

[nkareesan@schurterinc.com](mailto:nkareesan@schurterinc.com)

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