

**Metal Switch Short Stroke Ring Illuminated**



See below:

**Approvals and Compliances**

**Description**

- Momentary switch available in version ring illumination and Lettering Assembly by mounting with nut
- Flexible wire connection

**Unique Selling Proposition**

- Flat front design metal made
- Switching voltage 48 VDC, switching current 125 mA
- With multicolor ring illumination

**Characteristics**

- Housing material: aluminum or stainless steel, actuator material types: zinc die-cast or stainless steel
- For use in harsh environments (see technical data)

**Weblinks**

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

**Technical Data**

<b>Electrical Data</b>	
Switching Function	N.O.
Switching Voltage	min. 4 VDC , max. 48 VDC
Switching Current	max. 125 mA
Rated Switching Capacity	1.2 W
Supply Voltage	5 - 28 VDC
Current Consumption per illumination color	16.5 mA @ 5 VDC
	8.2 mA @ 12 VDC
	5.2 mA @ 24 VDC
	4.8 mA @ 28 VDC
Lifetime	1 million actuations at Rated Switching Capacity
Contact Resistance	< 50mΩ, < 150 mΩ
Insulation Resistance	> 100 MΩ
Duration of Bounce	< 5 ms

<b>Mechanical Data</b>	
Actuating Force	3.7 N
Actuating Travel	0.4 mm
Lifetime	1 million actuations
Shock Protection	IK05
<b>Climatical Data</b>	
Operating Temperature	-20 to 60 °C
Storage Temperature	-20 to 60 °C
Protection Class	IP65
Switching Unit	IP65
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time
<b>Material</b>	
Housings	Aluminium anodized
Finger Guide	Zinc Die Casting Nickel Plated
Actuator unlettered	Zinc Die Casting Nickel Plated
Actuator lettered	Stainless Steel

**Approvals and Compliances**

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.



**Application standards**

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.

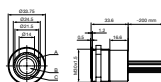
## Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

## Dimension [mm]

MCS 30 RI



Legend:

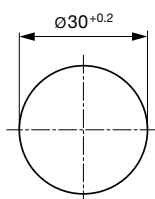
- A = Illumination Area
- B = Actuating Area
- C = Finger Guide

Lettering:

- optional with/without lettering
- location of the wires to the location of the lettering is not defined

## Dimension

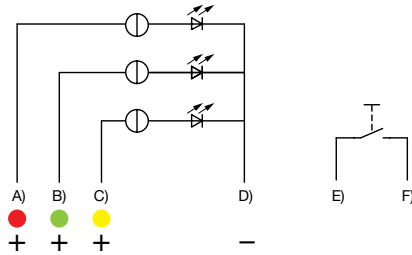
Front Panel Drilling MCS 30 RI



Drilling diagram

Diagrams

MCS 30 RI RGY

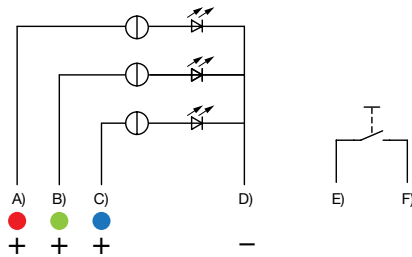


- A) Cable (color of the LED), Supply voltage
- B) Cable (color of the LED), Supply voltage
- C) Cable (color of the LED), Supply voltage
- D) Cable (black), Common mass
- E) Cable (white), Input and output MCS switch
- F) Cable (white), Input and output MCS switch

Illumination options for RGY

Lighting type	Active terminal A) <span style="color: red;">●</span>	Active terminal B) <span style="color: green;">●</span>	Active terminal C) <span style="color: yellow;">●</span>	Resulting Color
Multicolor Singlecolor	A			Red <span style="color: red;">●</span>
Multicolor Singlecolor		B		Green <span style="color: green;">●</span>
Multicolor Singlecolor			C	Yellow <span style="color: yellow;">●</span>

MCS 30 RI RGB



- A) Cable (color of the LED), Supply voltage
- B) Cable (color of the LED), Supply voltage
- C) Cable (color of the LED), Supply voltage
- D) Cable (black), Common mass
- E) Cable (white), Input and output MCS switch
- F) Cable (white), Input and output MCS switch

Illumination options for RGB

Lighting type	Active terminal A) <span style="color: red;">●</span>	Active terminal B) <span style="color: green;">●</span>	Active terminal C) <span style="color: blue;">●</span>	Resulting Color
Multicolor Singlecolor	A			Red <span style="color: red;">●</span>
Multicolor Singlecolor		B		Green <span style="color: green;">●</span>
Multicolor Singlecolor			C	Blue <span style="color: blue;">●</span>
Multicolor RGB Additive 2	A	B		Yellow <span style="color: yellow;">●</span>
Multicolor RGB Additive 2	A		C	Magenta <span style="color: magenta;">●</span>
Multicolor RGB Additive 2		B	C	Cyan <span style="color: cyan;">●</span>
Multicolor RGB Additive 3	A	B	C	White <span style="color: white;">○</span>

Marking

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
Stainless Steel	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	

Please note that the font size depends on the number of characters

## All Variants

Housing Material	Finger guide Material	Actuator Material	Marking	Illumination, LED	Config. Code	Bestellnummer
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, red, 5 - 28 VDC	MCS 30 RI	1241.6400
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, green, 5 - 28 VDC	MCS 30 RI	1241.6401
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, yellow, 5 - 28 VDC	MCS 30 RI	1241.6402
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, red / green, 5 - 28 VDC	MCS 30 RI	1241.6403
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, blue, 5 - 28 VDC	MCS 30 RI	1241.6404
Aluminum	Zinc Diecasting	Stainless Steel	lettering possible	illuminated, red, 5 - 28 VDC	MCS 30 RI	1241.6405
Aluminum	Zinc Diecasting	Stainless Steel	lettering possible	illuminated, red / green, 5 - 28 VDC	MCS 30 RI	1241.6408
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, multicolor, 5 - 28 VDC	MCS 30 RI	1241.6454
Aluminum	Zinc Diecasting	Zinc Diecasting	lettering not possible	illuminated, RGY, 5 - 28 VDC	MCS 30 RI	1241.6455
Stainless Steel	Stainless Steel	Stainless Steel	lettering possible	illuminated, multicolor, 5 - 28 VDC	MCS 30 RI	1241.6456

The MCS 30 switch versions "Lettering possible" can be lettered according to the lettering indices.

The MOQ for standard laser lettering on standard variants is a packing unit.

The contact material is silver

Terminal: wire 200 mm

Nut with gasket 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

20 in cardboard box packed in air cushion bag



- Actuating elements in ESD safe packaging
- Screw nuts and sealing O-ring in a bag (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