Metal Switch Short Stroke Ring Illuminated

new



MCS 30 RI red



MCS 30 RI Multicolor

RoHS COMPLIANT

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: zinc die-cast, actuator material types: zinc die-cast or stainless steel
- for use in harsh environments

Weblinks

html-datasheet, General Product Information, CE declaration of conformity, RoHS, CHINA-RoHS, e-Shop, CAD-Drawings, Product News, Detailed request for product

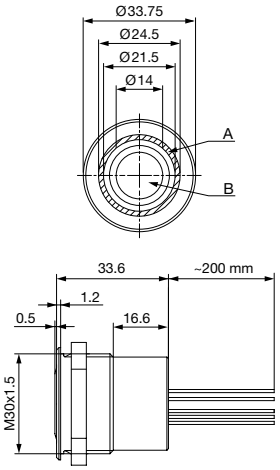
Technical Data

Electrical Data	
Supply Voltage	LED operating data are listed in separate table
Supply Voltage Ring Illumination	5 - 28 VDC
Switching Voltage	min. 4 VDC , max. 48 VDC
Switching Current	max. 125 mA
Rated Switching Capacity	1.2 W
Lifetime	1 million actuations at Rated Switching Capacity
Contact Resistance	< 50 mΩ, < 150 mΩ
Insulation Resistance	> 100 MΩ
Duration of Bounce	< 5 ms

Mechanical Data	
Actuating Force	3.7 N
Actuating Travel	0.4 mm,
Lifetime	1 million actuations
Shock Protection	IK 05 ,
Climatical Data	
Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP 65 Front Side Contact Area, IP 40 Front Side mechanical, IP 67 Illumination
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time
Material	
Contact Material	Ag
Housing of Switch	Zinc Die Casting Nickel Plated
Actuator unlettered	Zinc Die Casting Nickel Plated
Actuator lettered	Stainless Steel
Illumination Housing	Aluminium anodized

Dimension

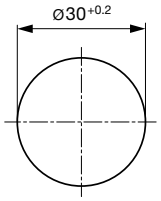
MCS 30 RI



Legend:
A = Illumination Area
B = Actuating Area
C = Width Across Flats
Lettering:
- optional with/without lettering
- location of the wires to the location of the lettering is not defined

Dimension

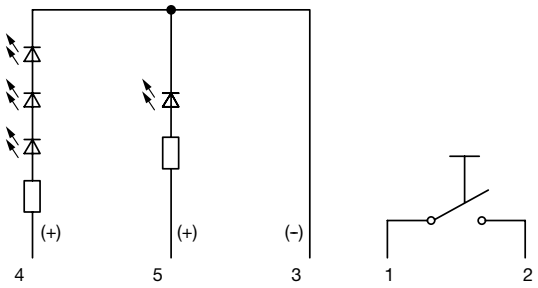
Front Panel Drilling MCS 30 RI



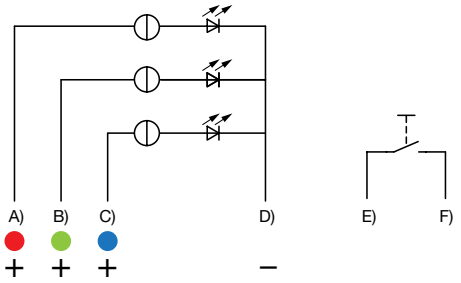
Drilling diagram

Diagrams

For 12 V and 24 V power requirement:
On the connection side the switch has 4 or 5 wires depending on the type of illumination. The colours of the wire 4 and 5 correspond with the illumination colours. The wire 3 (black) is the command ground. Cable 1 und 2 (2-times white) are input and output of the switch.



MCS 30 RI Multicolor



A) Cable 1 (color of the LED), Supply voltage
B) Cable 2 (color of the LED), Supply voltage
C) Cable 3 (color of the LED), Supply voltage
D) Cable 4 (black), Common mass
E) Cable 5/6 (white), Input and output MCS switch
F) Cable 5/6 (white), Input and output MCS switch

Lighting options Multicolor

Lighting type	Active terminal A) ●	Active terminal B) ●	Active terminal C) ●	Resulting Color
Multicolor Singlecolor	A			Red ●
Multicolor Singlecolor		B		Green ●
Multicolor Singlecolor			C	Blue ●
Multicolor RGB Additive 2	A	B		Yellow ●
Multicolor RGB Additive 2	A		C	Magenta ●
Multicolor RGB Additive 2		B	C	Cyan ●
Multicolor RGB Additive 3	A	B	C	White ○

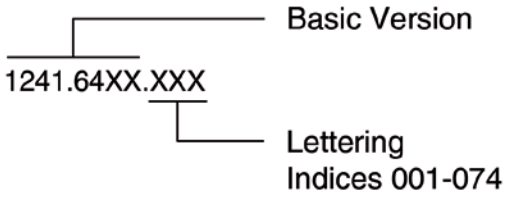
Ring Illumination

Operating Data	Forward Current max.	Forward Voltage at 10 mA typ.	Forward Voltage at 10 mA max.	Light Intensity at 20 mA	Wavelength Group at 20 mA
LED red	20 mA	2.0 VDC	2.3 VDC	71 - 180 mcd	645
LED green	20 mA	3.3 VDC	4.2 VDC	180 - 224 mcd	523
LED yellow	20 mA	2.0 VDC	2.4 VDC	112 - 280 mcd	591
LED blue	20 mA	3.5 VDC	3.9 VDC	35.5 - 90 mcd	465
LED white	25 mA	3.5 VDC	4.2 VDC	90 - 180 mcd	

Lettering

The last three digits in the order number define the lettering:	
000	No Lettering
001-074	Standard Lettering
101-	Customized Lettering

Ordering Example for Lettering



Lettering Colour of Laser Lettering

Material	Lettering Colour	
Stainless Steel	black	Filled letters

For further Lettering details see also weblink:

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**	
018 = **R**	038 = **-**	058 = **ENTER**	
019 = **S**	039 = **.**	059 = **BACK**	
020 = **T**	040 = x	060 = **LINE**	

All Variants

Terminal	Contact	Actuator Material	Lettering	Illumination, LED	Config. Code	Bestellnummer	
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, red, 24 VDC	MCS 30 RI	1241.6400	▮
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, green, 24 VDC	MCS 30 RI	1241.6401	▮
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, yellow, 24 VDC	MCS 30 RI	1241.6402	
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, red / green, 24 VDC	MCS 30 RI	1241.6403	▮
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, blue, 24 VDC	MCS 30 RI	1241.6404	▮
Flexible wire	Ag	Stainless Steel	Lettering possible	Ring Illumination, red, 24 VDC	MCS 30 RI	1241.6405	
Flexible wire	Ag	Stainless Steel	with Lettering	Ring Illumination, red, 24 VDC	MCS 30 RI	1241.6405.054	
Flexible wire	Ag	Stainless Steel	Lettering possible	Ring Illumination, green, 24 VDC	MCS 30 RI	1241.6406	
Flexible wire	Ag	Stainless Steel	Lettering possible	Ring Illumination, yellow, 24 VDC	MCS 30 RI	1241.6407	
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, red / green, 12 VDC	MCS 30 RI	1241.6424	
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, red / green / blue, 5 - 28 VDC	MCS 30 RI	1241.6454	▮
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, red / green / yellow, 5 - 28 VDC	MCS 30 RI	1241.6455	▮
Flexible wire	Ag	Stainless Steel	Lettering possible	Ring Illumination, red / green / blue, 5 - 28 VDC	MCS 30 RI	1241.6456	▮

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

The MCS 30 housing is made of aluminium

Plastic nut with gasket are enclosed in the box.

▮ Most Popular.

Availability for all products can be searched real-time:http://www.schurter.com/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 rings in a bag (enclosd in the box)

21.01.2016

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.