

Metal Switch Short Stroke Ring Illuminated



MCS 30 RI red

**Description**

- Switch available in version ring Illumination and Lettering
- Assembly by mounting with nut
- Flexible wire connection

Characteristics

- Housing material: zinc die-cast, actuator material types: zinc die-cast or stainless steel
- flat front design metal made
- Switching voltage 48 VDC, switching current 125 mA
- With ring illumination
- for use in harsh environments

Weblinks

[html-datasheet](#), [General Product Information](#), [Approvals](#), [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
Switching Voltage	min. 4 VDC , max. 48 VDC
Switching Current	max. 125 mA
Rated Breaking Capacity	1.2 W
Lifetime	1 mill. actuations at Rated Braking 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 mill. actuations
Shock Protection	IK 05 ,

Climatical Data

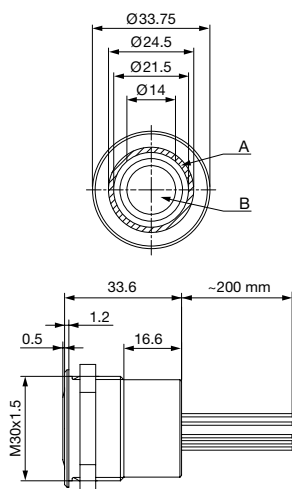
Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP 40 , IP 65 , IP 67 Illumination
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

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

Dimensions

MCS 30 RI



Legend:

A = Illumination Area

B = Actuating Area

C = Width Across Flats

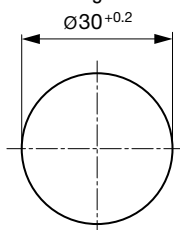
Lettering:

- optional with/without lettering

- location of the wires to the location of the lettering is not defined

Dimensions

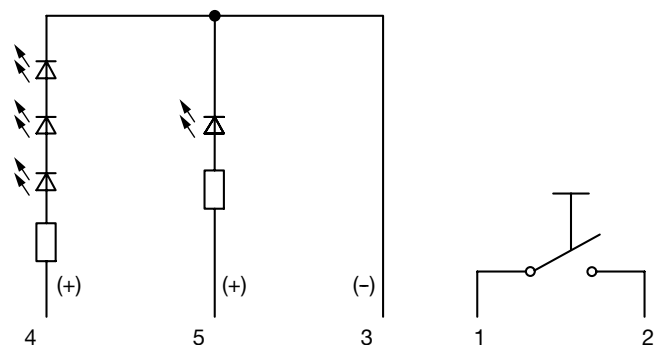
Front Panel Drilling MCS 30 RI



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.



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

Order Index Lettering

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	

Lettering Colour of Laser Lettering

Material	Lettering Colour	
Stainless Steel	black	Filled letters

For further Lettering details see also weblink:

[General Product Information](#)

Variants

Terminal	Contact	Actuator Material	Lettering	Illumination, LED	Type	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	without Lettering	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	without Lettering	Ring Illumination, green, 24 VDC	MCS 30 RI	1241.6406

Flexible wire	Ag	Stainless Steel	without Lettering	Ring Illumination, yellow, 24 VDC	MCS 30 RI	1241.6407
Flexible wire	Ag	Stainless Steel	without Lettering	Ring Illumination, red / green, 24 VDC	MCS 30 RI	1241.6408
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, red, 12 VDC	MCS 30 RI	1241.6421
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, green, 12 VDC	MCS 30 RI	1241.6422
Flexible wire	Ag	Zinc Diecasting	without Lettering	Ring Illumination, yellow, 12 VDC	MCS 30 RI	1241.6423
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, blue, 12 VDC	MCS 30 RI	1241.6425
Flexible wire	Ag	Stainless Steel	without Lettering	Ring Illumination, red, 12 VDC	MCS 30 RI	1241.6426
Flexible wire	Ag	Stainless Steel	without Lettering	Ring Illumination, green, 12 VDC	MCS 30 RI	1241.6427
Flexible wire	Ag	Stainless Steel	without Lettering	Ring Illumination, yellow, 12 VDC	MCS 30 RI	1241.6428
Flexible wire	Ag	Stainless Steel	without Lettering	Ring Illumination, red / green, 12 VDC	MCS 30 RI	1241.6429

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

The 12 V versions of the MCS 30 switch are available on request.

Packaging unit 20 in cardboard box separately in air cushion bag (20 pcs.)