

DATA MCS 18 SWITCHES – MOMENTARY ACTION

BENEFITS

- Absolutely unique, extremely low design
- Almost flush with the front plate
- High-quality gold and silver contacts
- Excellent price/performance ratio
- Available with various colours and lettering
- Reliable tactile feedback
- Ideal switch for applications with 2 to 6 keypoints
- Suitable for highly versatile applications

| | | MCS 18 gold contacts | MCS 18 silver contacts |
|--|--------------|--------------------------|------------------------|
| Electrical data | | | |
| Contact material | | gold | silver |
| Switching voltage | [mV] | min. 50 DC | min. 5V DC |
| | [V] | max. 24 DC | max. 48 DC |
| Switching current max. | [mA] | 80 | 125 |
| Rated breaking capacity | [W] | 0.36 | 0.72 |
| Lifetime (at rated breaking capacity) | | > 10 ⁶ | > 10 ⁶ |
| Initial contact resistance, new | [mΩ] | < 50 | < 50 |
| Initial contact resistance, after lifetime | [mΩ] | < 150 | < 150 |
| Insulation resistance | [Ω] | > 10 ⁸ | > 10 ⁸ |
| Contact bounce time | [ms] | typ. 0.1 | typ. 0.1 |
| Mechanical data | | | |
| Actuating force | [N] | 3 ± 1 | 3 ± 1 |
| Contact travel | [mm] | 0.5 ± 0.1 | 0.5 ± 0.1 |
| End stop strength | [N] | > 50 | > 50 |
| Lifetime | [operations] | > 10 ⁶ | > 10 ⁶ |
| Other data | | | |
| Solderability | [°C/s] | 235 / 2 | 235 / 2 |
| Soldering heat resistance | [°C/s] | 260 / 5 | 260 / 5 |
| Ambient temperature | [°C] | -25 – +60 | -25 – +60 |
| Storage temperature | [°C] | -25 – +60 | -25 – +60 |
| Degree of protection | | IP 65 | IP 65 |
| Materials | | | |
| Socket | | Thermoplast PES | Thermoplast PES |
| Face foil | | PETP | PETP |
| Bezel | | Thermoplast PBTP | Thermoplast PBTP |
| Contact material gold / silver | [µm] | CuZn 37, 3 µm Ni 2 µm Au | CuZn 37, 2.5 µm Ag |

OVERVIEW MCS 18 SWITCHES—MOMENTARY ACTION



Specification for lettering,
see page 29.

MCS 18

MCS 18

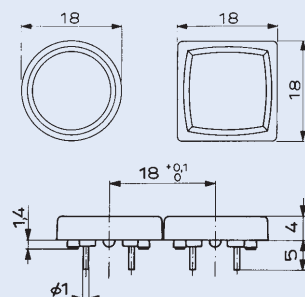
FEATURES

| | | |
|----------------------|-------|-------|
| Contact material | Ag | Au |
| Degree of protection | IP 65 | IP 65 |

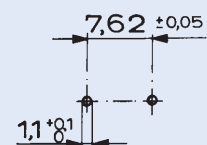
PART NUMBER *

| | 1241.1108.x xxx | 1241.1109.x xxx |
|------------------------------------|-----------------|-----------------|
| square | x xxx | x xxx |
| round | x xxx | x xxx |
| Colour of bezel | | |
| red | 3 | 3 |
| grey | 6 | 6 |
| black | 7 | 7 |
| Colour of face foil without legend | | |
| yellow | 091 | 091 |
| red | 093 | 093 |
| green | 095 | 095 |
| grey | 096 | 096 |
| black | 097 | 097 |
| white | 098 | 098 |
| Standard lettering | | |
| Order index | see page 29 | see page 29 |

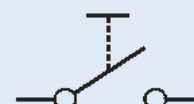
Dimensions:



Drilling diagram:



Circuit diagram:



* X in the Part No. must be replaced by the desired version

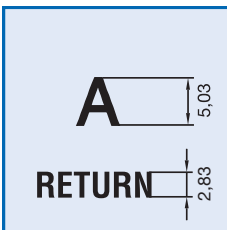


LETTERING

Depending on the application and font, there are various lettering possibilities. The following standards can be used for key letterings:

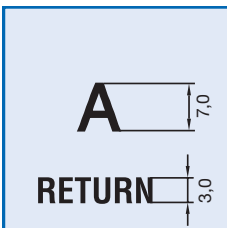
ORDER INDEX LETTERING

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



MCS 18, LETTER HEIGHTS AND FONTS

- Single characters, Univers 65
- Legends max. 6 characters in line, Univers 65
- Insert label and front foil anthracite, RAL 7016
- Characters and symbols light grey, RAL 7035



SSM 27, LETTER HEIGHTS AND FONTS

- Single characters, Univers 65
- Legends max. 6 characters in line, Akzident-Grotesk condensed bold type
- Front foil anthracite, RAL 7016
- Characters and symbols light grey, RAL 7035



LIGHTING TECHNOLOGY

TECHNICAL DATA LEDs

| 1. Maximum ratings | | | | |
|--|---|-------------|-------------|-------------|
| Part number | | 0925.9730 | 0925.9731 | 0925.9732 |
| Light colour | | red | green | yellow |
| Forward current, DC | I_f max. [mA] | 40 | 40 | 40 |
| Power dissipation | P_{tot} max. [mW] | 130 | 130 | 130 |
| 2. Characteristics (typ. at $T_u = 25^\circ\text{C}$) | | | | |
| Forward voltage | at $I_f = 10\text{mA}$, U_f typ. [mA] | 2.0 (< 2.6) | 2.0 (< 2.6) | 2.0 (< 2.6) |
| Luminous intensity | at $I_f = 10\text{mA}$, I_v typ. [mcd] | 11.2 - 28 | 18 - 45 | 11.2 - 28 |
| Viewing angle | θ typ. [Degree] | 50 | 50 | 50 |
| Peak wave length | λ_{peak} typ. [nm] | 635 | 565 | 586 |
| Reverse voltage | U_r typ. [V] | 5 | 5 | 5 |