

150-242-251  
148-921

# SCHURTER



## Membrane switches MCS 18 (18 mm)

for panel mounting  
for printed circuit board mounting

Single keys for front panel mounting



Single keys for PCB mounting



### General description

The membrane switches can be supplied in the following versions: round, square, with and without legend. Mounting possibilities available for panel or PCB mounting. Either gold or silver can be chosen as contact material. A snap-done will be used for the switching element. To reach an individual design, the bezel is supplied in 8 and the face foil in 9 different colours. The membrane switch complies with international degree of protection IP 65 and is flux-proof from the connecting side.

The front panel mounting version can also be used for IP 65 applications by using an O-ring and additional screw fitting with a securing clip.

### Technical data

#### 1. Mechanical data

Actuating force	3 N ± 1 N tested with rubber test finger hardness 40 shore, radius 15 mm	
Contact travel	0,5 ± 0,1 mm	
End stop strength (force axial, load 1 min.)	> 50 N	
Lifetime (IEC 512-5, test 9a)	min. 1 · 10 <sup>6</sup> operations	

#### 2. Electrical data

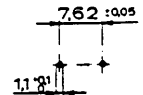
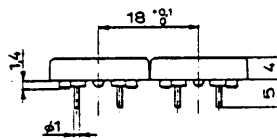
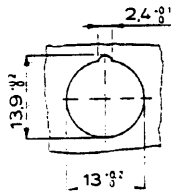
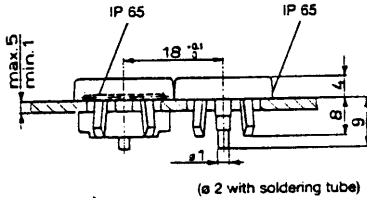
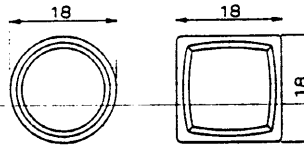
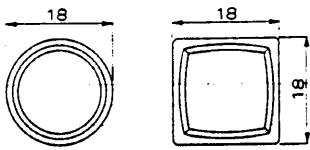
Contact material	silver 2,5 µm	gold 3 µm Ni 2 µm Au
Switching voltage	min. 5 V DC, max. 48 V DC	min. 50 mV DC, max. 24 V DC
Switching current	max. 125 mA	max. 80 mA
Rated interrupting capacity	24 V DC, 30 mA	12V DC, 30 mA
Lifetime	min. 1 · 10 <sup>6</sup> cycles	min. 1 · 10 <sup>6</sup> cycles
Initial contact resistance new / after 10 <sup>6</sup> cycles	50 / 150 mΩ	50 / 150 mΩ
Insulation resistance (pin to pin, off-position)	min. 100 MΩ	min. 100 MΩ
Contact bounce time	typ. 0,1 ms	

#### 3. Others

Solderability (IEC 68-2-20 test Ta method 1)	235 °C / 2 s	
Soldering heat resistance (IEC 68-2-20 test Tb method 1A)	260 °C / 5 s	
Ambient temperature	-25 °C - +60 °C	
Materials (mechanical)	socket: face foil: bezel:	PES thermoplastic PETP-foil, coated PBTP thermoplastic
Materials (electrical)	snap dome: contacts: soldering tube:	X12 CrNi 17 7, gold-plated CuZn 37, 2,5 µm Ag plated tin-plated
Degree of protection (IEC 529)	IP 65	



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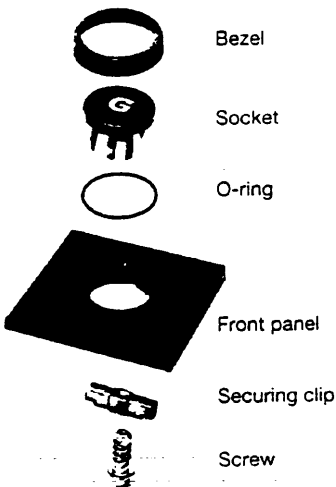


### Order No. standard types

	Membrane switch for panel mounting	
1241.1100.X.XXX	square, silver contact, soldering pins	IP 65
1241.1102.X.XXX	square, gold contact, soldering pins	IP 65
1241.1104.X.XXX	round, silver contact, soldering pins	IP 65
1241.1106.X.XXX	round, gold contact, soldering pins	IP 65
1241.1112.X.XXX	square, silver cont., soldering tubes	IP 65
1241.1113.X.XXX	round, silver cont., soldering tubes	IP 65

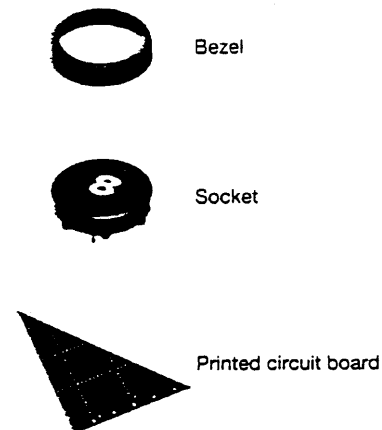
Availability: Order specific, custom made production

### Mounting indication, accessories



### Order No. standard types

	Membrane switch for PCB mounting	
1241.1108.X.XXX	square, silver contact	IP 65
1241.1109.X.XXX	square, gold contact	IP 65
1241.1110.X.XXX	round, silver contact	IP 65
1241.1111.X.XXX	round, gold contact	IP 65



Accessories for sealed version IP 65 (O-ring, securing clip and screw)

Order No.

0098.9201

Order-Index see page 26

Ordering example see page 72



## Membrane switches MCS 18 (18 mm)

### Order-Index

#### Legend

Index  
 001 = A  
 002 = B  
 003 = C  
 004 = D  
 005 = E  
 006 = F  
 007 = G  
 008 = H  
 009 = I  
 010 = J  
 011 = K  
 012 = L  
 013 = M  
 014 = N  
 015 = O  
 016 = P  
 017 = Q  
 018 = R

Index  
 019 = S  
 020 = T  
 021 = U  
 022 = V  
 023 = W  
 024 = X  
 025 = Y  
 026 = Z  
 027 = 0  
 028 = 1  
 029 = 2  
 030 = 3  
 031 = 4  
 032 = 5  
 033 = 6  
 034 = 7  
 035 = 8  
 036 = 9

Index  
 037 = +  
 038 = -  
 039 = .  
 040 = x  
 041 = +  
 042 = \*  
 043 = =  
 044 = #  
 045 = ↔  
 046 = ↓  
 047 = →  
 048 = ←  
 049 = ↓  
 050 = ↑  
 051 = %  
 052 = √  
 053 = CTRL  
 054 = RETURN

Index  
 055 = SHIFT  
 056 = LOCK  
 057 = STOP  
 058 = ENTER  
 059 = BACK  
 060 = LINE  
 061 = EIN  
 062 = AUS  
 063 = AUF  
 064 = AB  
 065 = ON  
 066 = OFF  
 067 = UP  
 068 = DOWN  
 069 = HIGH  
 070 = LOW  
 071 = ON/OFF  
 072 = START

#### Colour of face foil

Index if without legend  
 091 = yellow  
 092 = orange  
 093 = red  
 094 = blue  
 095 = green  
 096 = grey  
 097 = black  
 098 = white  
 099 = anthracite

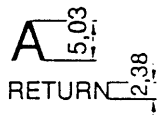
Colour of face foil with legend  
 anthracite RAL 7016, colour of legend light grey RAL 7035.

#### Colour of bezel

Index  
 1 = yellow  
 2 = orange  
 3 = red  
 4 = blue  
 5 = green  
 6 = grey  
 7 = black  
 8 = white

Other colours, symbols on request.

### Type height and type face



for single character Univers 65

for legend with max. 6 characters in a line  
 Univers 65

### Ordering example, see page 72

