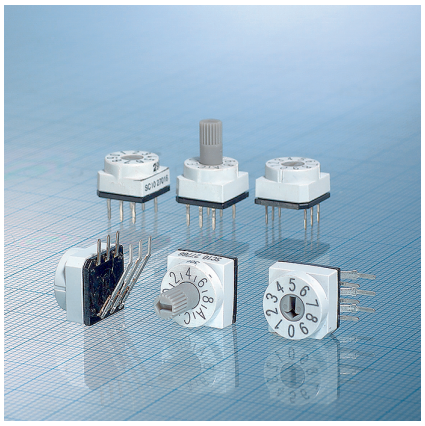
Miniature Code Switch SC10, watertight



Washtight miniature code switch
for direct soldering to printed circuits.

- Pins in grid 3 + 3.
- BCD or hexadecimal code, 10 or 16 switching positions.
- Shaft parallel or rectangular to PC-board.
- Operating by plastic shaft, screwdriver slot or operating knob.
- Small dimensions: 10 x 10 x 6,5 mm.
- High life-expectancy.
- Trouble-free mounting due to tightness, against flux and cleaning agents.
- Insensitive to aggressive atmosphere, dust etc.
- Switches are delivered with screw-driver slot. – If additional actuators shall be mounted, version X with cross slot has to be ordered separately. Additional actuators have to be ordered separately.
- Packed in tubes of 50 switches each.

1.0 Construction		
1.1 Number of wafers max.		1 wafer
1.2 Switching combinations per wafer		—
Design D, detent angle 36°		Code 51, BCD; Code 52, BCD-Complement
Design H, detent angle 22,5°		Code 61, Hexadecimal Code 62, Hexadecimal-Complement
1.3 Contacts		Soldering pins
1.4 Mounting		Soldering

2.0 Electrical Data		
2.1 Switching power max.		1,5 VA/W
2.2 Switching voltage max.		24 V~
2.3 Switching current max.		150 mA
2.4 Rest current max. at ∂u 20°C		400 mA
2.5 Test voltage at 50 Hz		100 V
2.6 Life expectancy	without electrical load	≥ 10 000 detents
	with power max.	≥ 10 000 detents
2.7 Contact resistance	initial value	≤ 80 mΩ
	after life expectancy	≤ 100 mΩ
2.8 Insulation resistance		$\geq 10^8\,\Omega$

3.0 Mechanical Data	
3.1 Stops	Without stop
3.2 Operating torque	≥ 0,5 Ncm
3.3 Vibratory strength	10 g, 10–500 Hz
3.4 Shock strength	50 g
3.5 Dust protection	Sealed wafers
3.6 Cleaning *	Complete immersion in ultrasonic bath

* With the known agents as Freon, Methanol, Trichlorätylen etc.

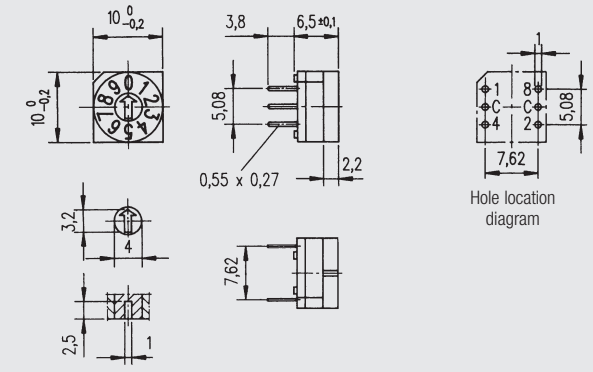
4.0 Other Data	
4.1 Contact material	Au
4.2 Insulating material	Polyacetal, POM, UL 94 V1; Code PM
4.3 Ambient temperature	–20 to 70°C
4.4 Soldering time and temperature max.	10 s at 260°C 2 s at 340°C

Ordering Codes

Designation of type	**SC 10**
1. Contacts and mounting position	**V1** = PC pins 7,62 mm: Vertical mounting, shaft rectangular to PC board **H1** = PC pins 2,54 mm: Horizontal mounting, shaft parallel to PC board **H2** = PC pins 5,08 mm: Horizontal mounting, shaft parallel to PC board
2. Code	**51, 52, 61** or **62**
3. Distribution	**D** = 10, **H** = 16
4. Operation mode	**S** = Screw driver slot, **X** = Cross slot for additional actuator

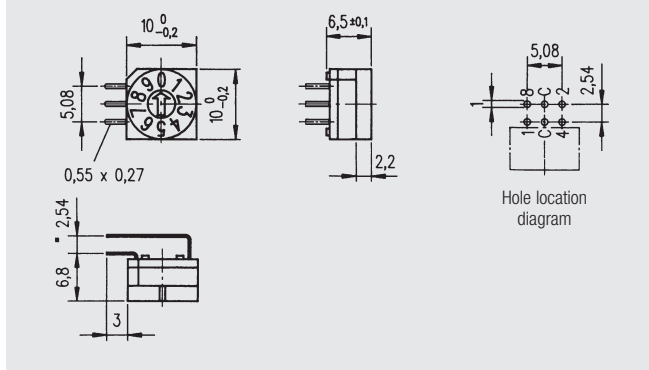
The bold-typed data in the yellow order blocks remain unchanged.
Normal-typed data match the drawings and can be modified according to your wishes.
Blanks need to be completed according to the ordering details on the previous page.

Dimensional Drawings · Dimensions in mm



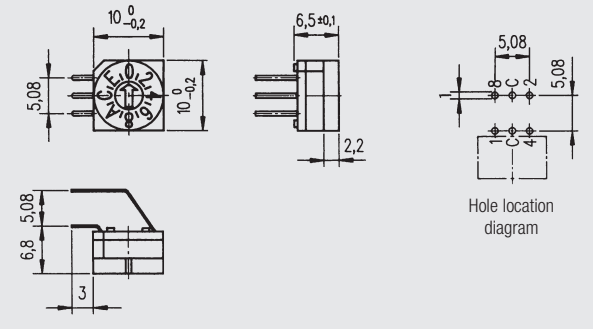
SC10 - V1[1] - [2] - D[3] - S[4]

SC 10 · Vertical mounting. Version with screw driver slot



SC10 - H1[1] - [2] - D[3] - S[4]

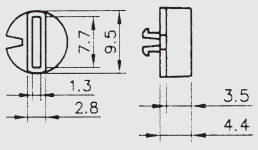
SC 10 · Horizontal mounting. Spacing of connections 2,54 mm



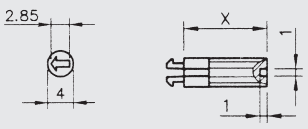
SC10 - H2[1] - [2] - D[3] - S[4]

SC 10 · Horizontal mounting. Spacing of connections 5,08 mm

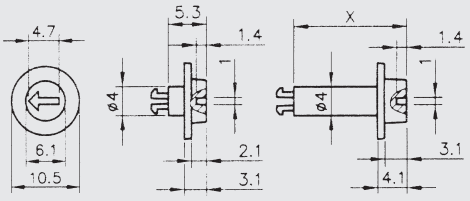
Segment wheel
SR
colour red



Axe
SA/x
colour grey
x = 7,3
x = 11,6
x = 13,3



Knob
DK/x
colour red
x = 5,3
x = 15,7
x = 29,1
x = 34,4



SC 10 · Additional actuators

51	C connected with			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

Code 51
BCD

52	C connected with			
	$\overline{1}$	$\overline{2}$	$\overline{4}$	$\overline{8}$
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	

Code 52
BCD
Complement

61	C connected with			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Code 61
Hexadecimal

62	C connected with			
	$\overline{1}$	$\overline{2}$	$\overline{4}$	$\overline{8}$
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	
A	●		●	
B			●	
C	●	●		
D		●		
E	●			
F				

Code 62
Hexadecimal
Complement

SC 10 · Codes