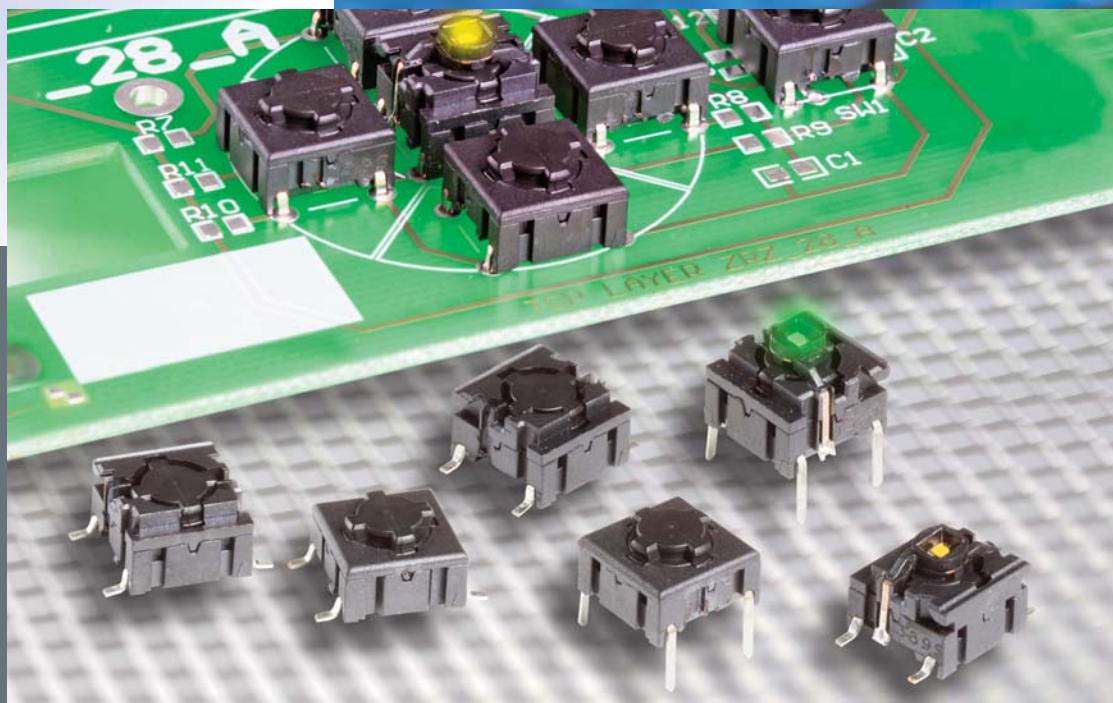


# mec

switches

## 5E/5G



The Multimec 5E and 5G series is the new generation of the existing 3A, 3C, 3E, 3F, 4A and 4F multimec switches. The 5E and 5G series is a narrower product line, but the flexibility is more advanced. The switches will be supplied in high temperature material only to stand today's advanced soldering processes. The cap holding system is improved, by a superior snap system.

The 5E and 5G series can be supplied with LED's integrated in the switch and also as a surface mount switch. A high variety of aesthetic designed keycaps is available for the multimec switches both as solid caps, but also with excellent illumination possibilities.

The standard program will include three different actuation forces: 2, 3.5, and 6.5N. The multimec switches are known for their crisp audible tactile feel although a quiet version is available for sensitive applications such as audio, conference and military equipment.

The switch can be used as through-hole or SMD versions, and are designed to be used in a wide variety of applications.



Distributor:

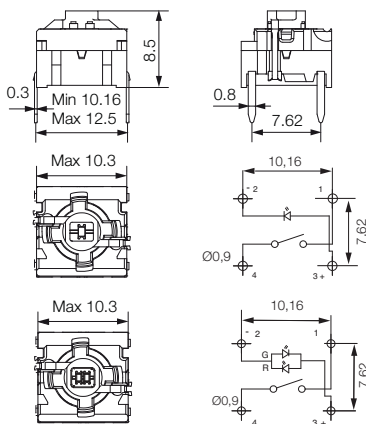
# multimec® 5E/5G



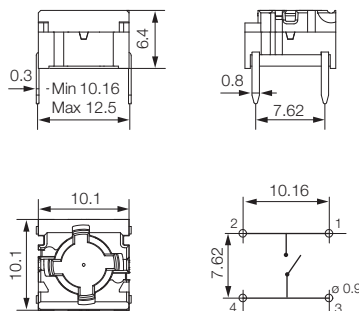
### Technical Data:

- through-hole or SMD / 50mA/24VDC / single pole/momentary
- 10.000.000 operations life time / IP67 sealing / actuation force: 2.0, 3.5, 6.5 N
- high temperature -40/+160° C

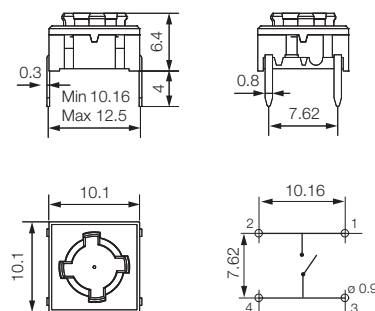
### 5GTH9 (through-hole) 1+2 LED



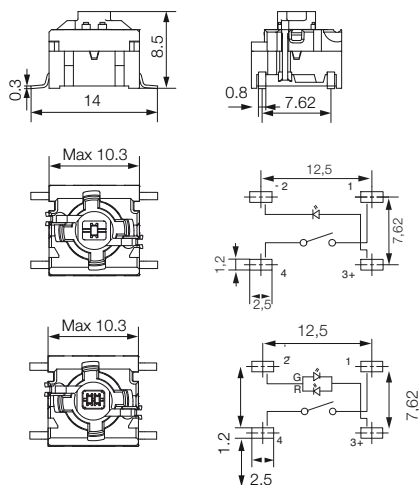
### 5GTH9 (through-hole)



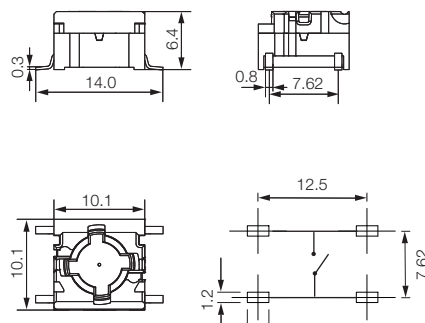
### 5ETH9 (through-hole)



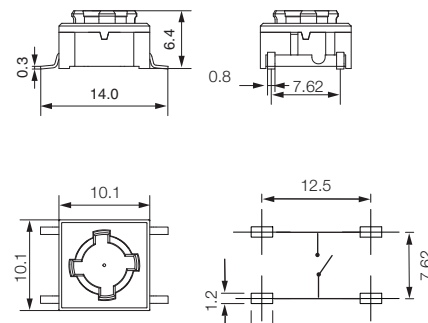
### 5GSH9 (SMD) 1+2 LEDs



### 5GSH9 (SMD)



### 5ESH9 (SMD)



### HOW TO ORDER

<b>5 G</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>LED</b>
	TH9 through-hole	20	01 blue / 22 green / 42 yellow / 61 white / 82 red / 2242 green/yellow / 8222 red/green / 8242 red/yellow
	SH9 surface mount	35	
		65	

<b>5 E</b>	<input type="checkbox"/>	<input type="checkbox"/>	<b>5 G</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>
	TH9 through-hole	20		TH9 through-hole	20
	SH9 surface mount	35		SH9 surface mount	35





# 1A/1H/1M/1ZA



1A/1H/1M/1ZA series caps have a hinge-type retention system which gives a rocker-action actuation when mounted on Multimec 5G switch.

Illumination can be provided with 1A in transparent colours or 1H with different colour lenses.

1A/1H, 1ZA and 1M caps offer three different dimensions, many solid and transparent colours as well as lens colours. 1A has many legend options in its standard offering; however, all caps can be provided with custom legends.



\*Letter legends on the picture are not standard

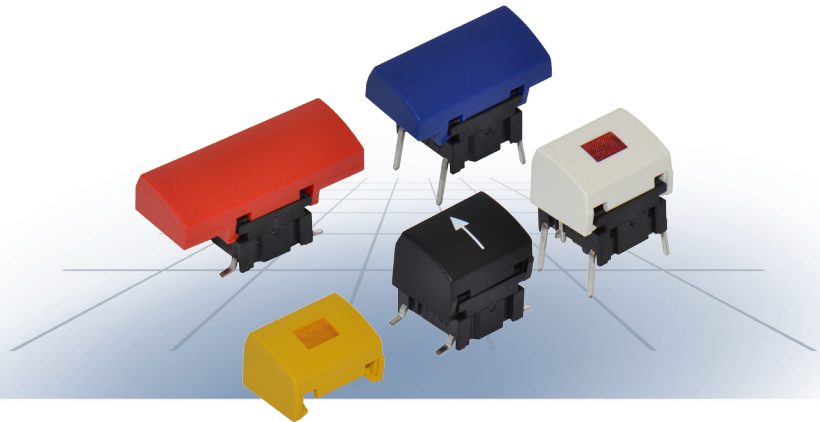
Distributor:

# multimec®

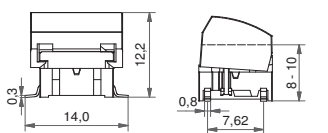
## 5G + 1A/1H/1M/1ZA

### Technical Data:

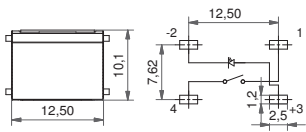
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations lifetime
- IP67 sealing
- temp. range: switch: -40/+160°C  
LED: -30/+85°C  
solid keycap: -40/+65°C  
transparent keycap: -40/+85°C
- actuation force: 2.0, 3.5, 6.5 N



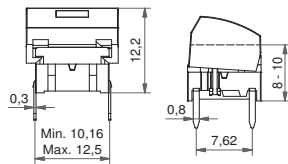
### Dimensions (SMD w/LED) 1A



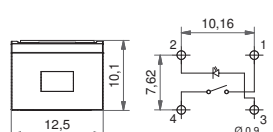
### PCB layout



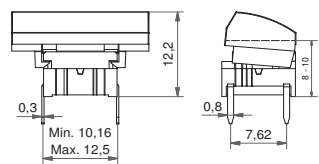
### Dimensions (TH w/LED) 1H



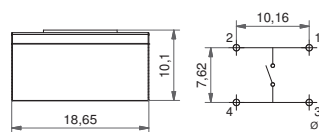
### PCB layout



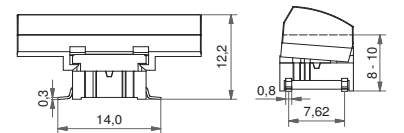
### Dimensions (through-hole) 1ZA



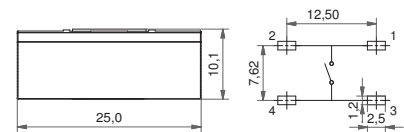
### PCB layout



### Dimensions (SMD) 1M



### PCB layout



### HOW TO ORDER illuminated

<b>5 G</b>				+			
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>LED</b>		<b>Cap</b>	<b>Colour code 1H</b>	<b>Lens 1H</b>
	TH9 through-hole SH9 surface mount	20 35 65 Q**	01 blue 22 green 42 yellow 61 white 82 red 2242 green/yellow 8222 red/green 8242 red/yellow		1H 	00 blue 06 white 02 green 08 red 03 grey 09 black 04 yellow	1 transparent 2 green 4 yellow 6 frosted white 8 red
					1A 	<b>Colour code 1A</b>	
						10 frosted blue 16 frosted white 12 frosted green 18 frosted red 14 frosted yellow	

### HOW TO ORDER non-illuminated

<b>5 G</b>			+		
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>		<b>Cap</b>	<b>Colour code</b>
	TH9 through-hole SH9 surface mount	20 35 65 Q**		1A 	00 blue 30* ultra blue 50* metal dark blue 02 green 40* dusty blue 53* metal light grey 03* grey 42* aqua blue 57* metal dark grey 04 yellow 32 mint green 58 metal bordeaux 06* white 33 tele grey 08 red 34 melon 09* black 38 noble red * Colours for 1ZA

\*\*Quiet version is only available for actuation force 2.0N (20) and the letter Q is added to the end of the switch part number. See the ordering example.

Dimensions (mm) Unless otherwise specified, all tolerances +/- 0.2





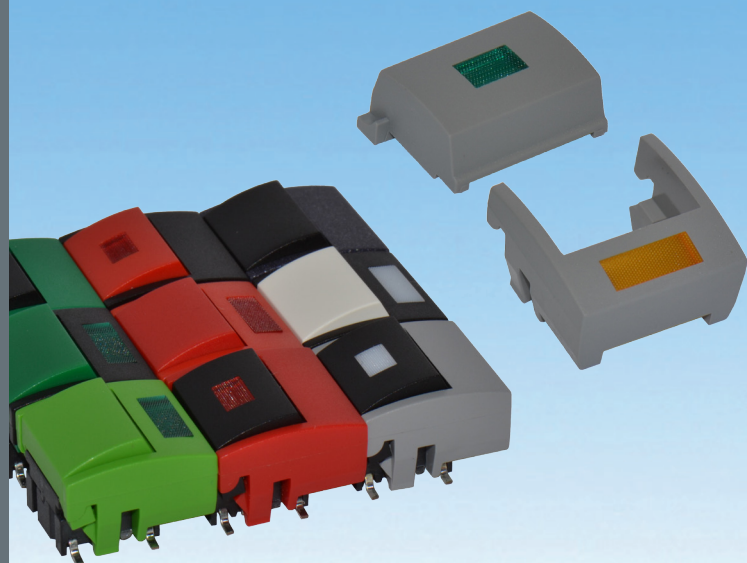
# 1B/1C+2C/2D



1B/1C cap and 2C/2D bezel series have a award-winning design. The cap is connected to the bezel with a hinge-type retention system and the bezel snaps on to the switch.

The series provides many design options with its solid and transparent colour range as well as different illumination option.

Illumination can be achieved by using 1B cap in transparent colour, 1C cap with a lens or 2D bezel with a lens where LED is placed on the PCB.

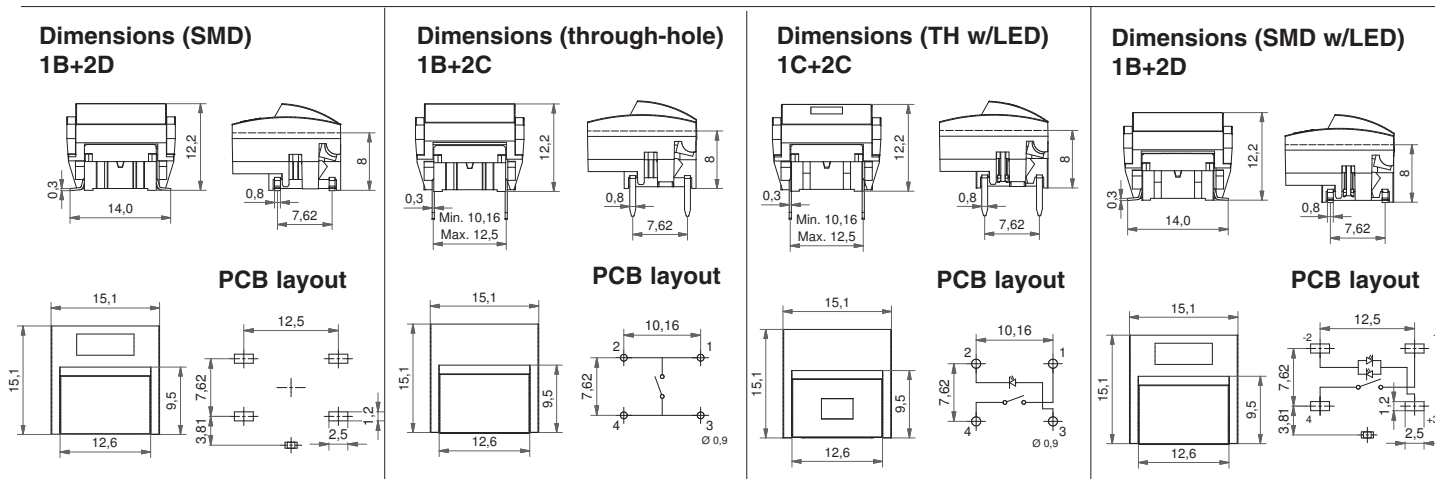
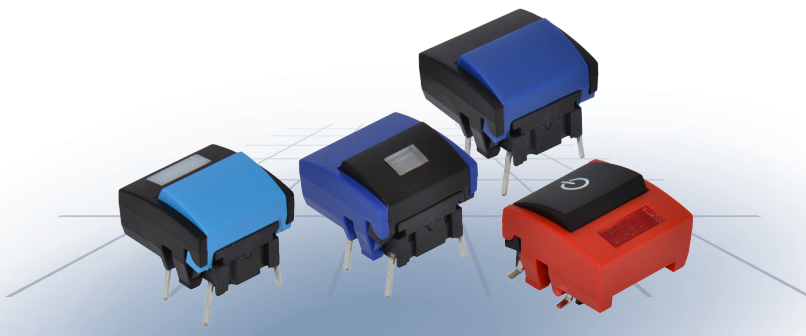


# multimec®

## 5G + 1B/1C + 2C/2D

### Technical Data:

- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations lifetime
- IP67 sealing
- temp. range: switch: -40/+160°C  
LED: -30/+85°C  
solid keycap: -40/+65°C  
transparent keycap: -40/+85°C
- actuation force: 2.0, 3.5, 6.5 N



### HOW TO ORDER illuminated

<b>5 G</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>1 C</b>	<input type="checkbox"/>	<input type="checkbox"/>	<b>2 C</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>LED</b>	<b>Cap</b>	<b>Colour code</b>	<b>Lens</b>	<b>Bezel</b>	<b>Colour code</b>	<b>Colour code</b>	<b>Colour code</b>
	TH9 through-hole SH9 surface mount	20 35 65 Q*	01 blue 22 green 42 yellow 61 white 82 red 2242 green/yellow 8222 red/green 8242 red/yellow	solid colour						
				<b>1 B</b>	<b>Colour code</b>	<b>2 D</b>	<b>Bezel</b>	<b>Colour code</b>	<b>Colour code</b>	<b>Lens</b>
				Cap transparent						

### HOW TO ORDER non-illuminated

<b>5 G</b>	<input type="checkbox"/>	<input type="checkbox"/>	+	<b>1 B</b>	<input type="checkbox"/>	+	<b>2 C</b>	<input type="checkbox"/>	or	<b>2 D</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>		<b>Cap</b>	<b>Colour code</b>		<b>Bezel</b>	<b>Colour code</b>		<b>Bezel</b>	<b>Colour code</b>	<b>Lens</b>
	TH9 through-hole SH9 surface mount	20 35 65 Q*		solid colour								

\*Quiet version only available for actuation force 2.0N (20) and the letter Q is added to the end of the switch part number. See the order

### COLOUR CODES

<b>Transparent caps</b>	<b>Solid caps</b>	<b>For 1B and 2C only:</b>	<b>Lenses</b>
10 frosted blue    16 frosted white	00 blue    06 white	30 ultra blue    33 tele grey    50 metal dark blue	1 transparent
11 transparent    18 frosted red	02 green    08 red	40 dusty blue    34 melon    53 metal light grey	2 green
12 frosted green	03 grey    09 black	42 aqua blue    38 noble red    57 metal dark grey	4 yellow
14 frosted yellow	04 yellow	32 mint green    58 metal bordeaux	6 frosted white
			8 red



**mec**  
switches

**1DS/1ES/1FS**



The new caps for the Multimec switches 1DS / 1ES / 1FS is optimized with a “snap on” system to ensure the cap to stay on the switch actuator even under heavy vibrations or similar scenarios.

- The 1DS cap is a solid cap which can be supplied in different colours
- The 1ES cap is a solid cap like 1DS, but with a small round lens for intensive or smooth illumination
- The 1FS cap is a solid cap like 1DS, but with a large round lens for intensive or smooth illumination



# multimec®

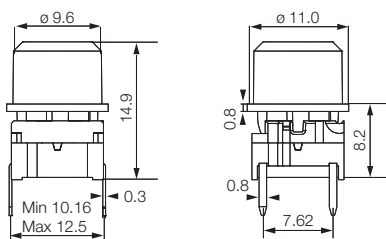
## 5G + 1DS/1ES/1FS

### Technical Data

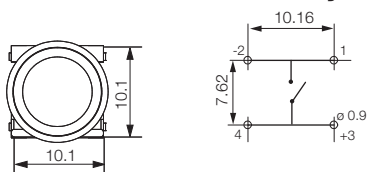
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations life time
- IP67 sealing
- temperature range:  
LED: -40/+85°C  
solid cap +65°C  
transparent +85°C
- actuation force: 2.0, 3.5, 6.5 N



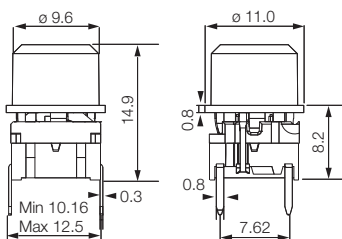
### Dimensions (through-hole)



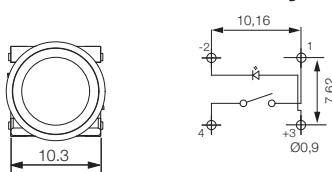
#### PCB layout



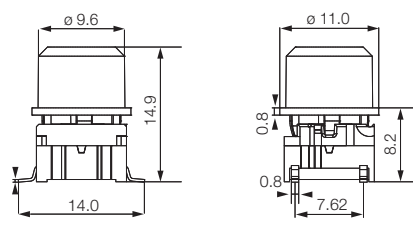
### Dimensions (w. LED)



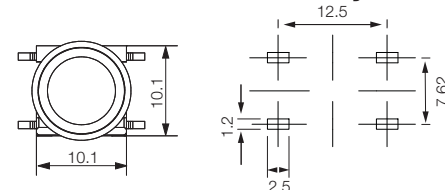
#### PCB layout



### Dimensions (SMD)



#### PCB layout



### HOW TO ORDER

<b>5 G</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>LED</b>	<b>Cap</b>	<b>Colour code</b>	<b>Lens</b>
<b>TH9</b> through-hole	<b>20</b>	<b>01</b> blue	<b>1ES</b> with lens	<b>00</b> blue	<b>1</b> transparent	
<b>SH9</b> surface mount	<b>35</b>	<b>22</b> green		<b>03</b> grey	<b>6</b> frosted white	
	<b>65</b>	<b>42</b> yellow	<b>1FS</b> with lens	<b>08</b> red		
		<b>61</b> white		<b>09</b> black		
		<b>82</b> red				
		<b>2242</b> green/yellow				
		<b>8222</b> red/green				
		<b>8242</b> red/yellow				
			<b>1DS</b>			
				<b>11</b> transparent		
				<b>16</b> frosted white		

<b>5 G</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>Cap</b>	<b>Colour code</b>
<b>TH9</b> through-hole	<b>20</b>	<b>1DS</b> solid colour		<b>00</b> blue
<b>SH9</b> surface mount	<b>35</b>			<b>02</b> green
	<b>65</b>			<b>03</b> grey
				<b>04</b> yellow
				<b>06</b> white
				<b>08</b> red
				<b>09</b> black





# 1GAS/1GCS



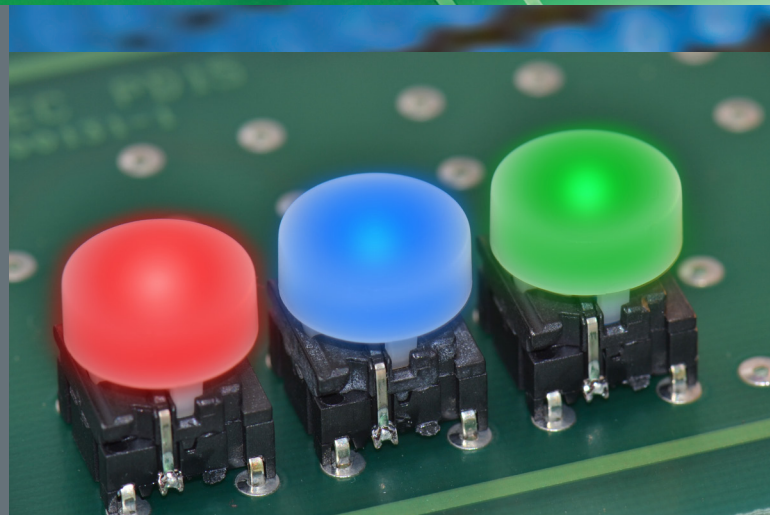
The 1GAS/1GCS caps are optimised for use with foil overlays.

Compared to conventional membrane panels it provides an extremely rugged and a long-term cost-effective solution with increased reliability, enhanced product life and improved tactile feel.

The new caps have 9 standard colour options: blue, green, grey, yellow, white, red, black, transparent and frosted white.

Even more, the under part of the new cap series has been cleared, so the caps in transparent and frosted white can provide excellent illumination.

When used with the 2SS variable height extender, the 1GAS/1GCS caps can be to any required operating height between 17.5-22.5mm.

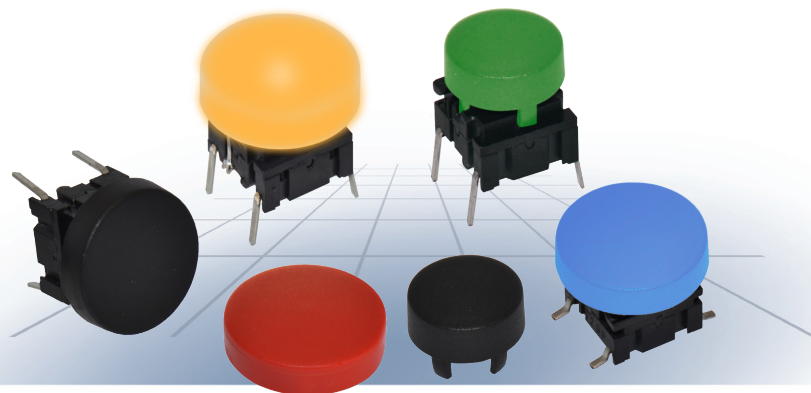




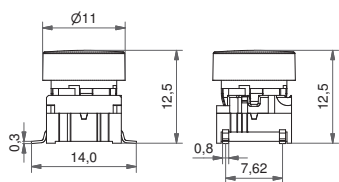
## 5G + 1GAS/1GCS

### Technical Data:

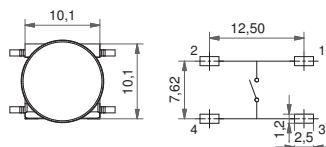
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations lifetime
- IP67 sealing
- temp. range: switch: -40/+160°C  
LED: -30/+85°C
- solid keycap: -40/+160°C  
transparent keycap: -40/+85°C
- actuation force: 2.0, 3.5, 6.5 N



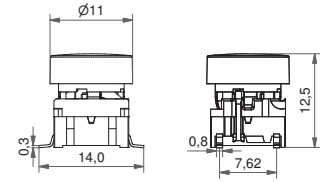
### Dimensions (SMD) + 1GAS



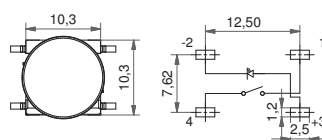
#### PCB layout



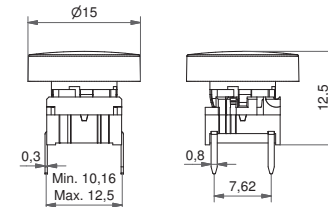
### Dimensions (SMD w/LED) + 1GAS



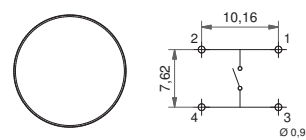
#### PCB layout



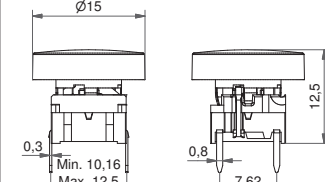
### Dimensions (through-hole) + 1GCS



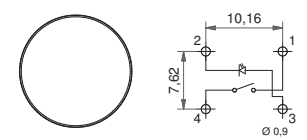
#### PCB layout



### Dimensions (TH w/LED) + 1GCS



#### PCB layout



### HOW TO ORDER illuminated

<input type="checkbox"/> <b>5</b> <input type="checkbox"/> <b>G</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	+	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>	<b>LED</b>		<b>Cap</b>	<b>Colour code</b>
	TH9 through-hole SH9 surface mount	20 35 65 Q*	01 blue 22 green 42 yellow 61 white 82 red 2242 green/yellow 8222 red/green 8242 red/yellow		transparent colour	11 transparent 16 frosted white
					<b>1GAS</b>	<b>1GCS</b>

### HOW TO ORDER non-illuminated

<input type="checkbox"/> <b>5</b> <input type="checkbox"/> <b>G</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	+	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
<b>Switch</b>	<b>Mounting</b>	<b>Actuation force</b>		<b>Cap</b>	<b>Colour code</b>
	TH9 through-hole SH9 surface mount	20 35 65 Q*		solid colour	00 blue 02 green 03 grey 04 yellow 06 white 08 red
				<b>1GAS</b>	<b>1GCS</b>