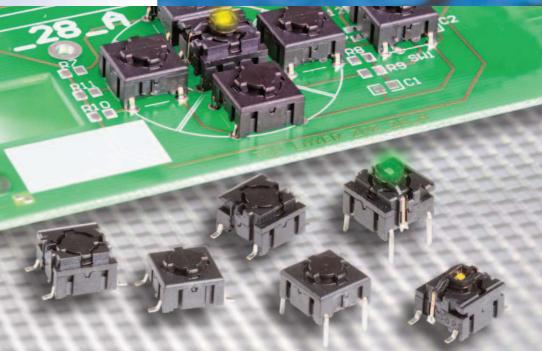


5E/5G



The Multimec 5E and 5G series is the new generation of the existing 3A, 3C, 3E, 3F, 4A and 4Fmultimec 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.





multimec®

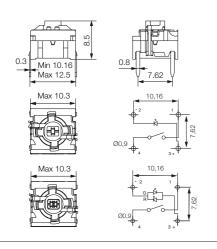
5E/5G

Technical Data:

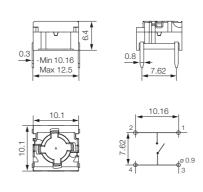
- through-hole or SMD / 50mA/24VDC / single pole/momentary
- 10.000.000 operations life time / IP67 sealing / actuation force: 2.0, 3.5, 6.5 N
- high temperature -40/+160° C



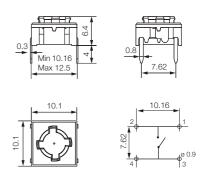
5GTH9 (through-hole) 1+2 LED



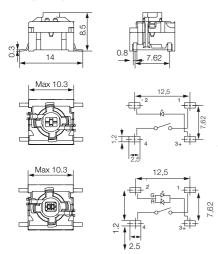
5GTH9 (through-hole)



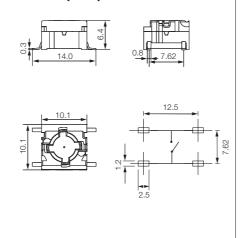
5ETH9 (through-hole)



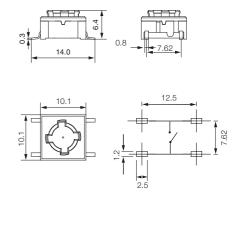
5GSH9 (SMD) 1+2 LEDS



5GSH9 (SMD)



5ESH9 (SMD)



HOW TO ORDER

5 G

Switch Mounting

TH9 through-hole

SH9 surface mount

TH9 through-hole

SH9 surface mount

Actuation force

20

35 65 **LED**

01 blue / 22 green / 42 yellow / 61 white / 82 red / 2242 green/yellow / 8222 red/green / 8242 red/yellow

5 E

Switch Mounting

Actuation force

20 35 65

5 G

Switch Mounting

TH9 through-hole SH9 surface mount

Actuation force

20 35

65

Ordering example: 5GSH96535

See colour codes on our website: www.mec.dk Dimensions (mm) Unless otherwise specified, all tolerances ±0,2



1PS/1QS/1RS



The new caps for the Multimec switches 1PS / 1QS / 1RS 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 1PS cap is a solid cap which can be supplied in different colours
- The 1QS cap is a solid cap like 1PS, but with a rectangular lens for intensive or smooth illumination
- The 1RS cap is a solid cap like 1PS, but with a round lens for intensive or smooth illumination





multimec®

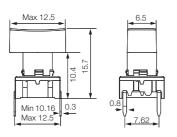
5E/5G + 1PS/1QS/1RS

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)

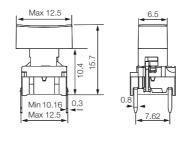


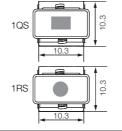
PCB layout

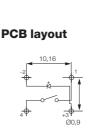




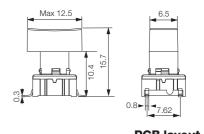
Dimensions (w/LED)

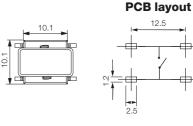






Dimensions (SMD)





HOW TO ORDER



Switch Mounting TH9 through -hole

> SH9 surface mount

Actuation

force 20

35 65

LED 01 blue

22 green

42 yellow

61 white **82** red

2242 green/yellow 8222 red/green

8242 red/yellow

Cap 1QS with lens

1RS with lens

Colour code

00 blue 03 grey

08 red 09 black Lens 1 transparent

6 frosted white

1PS

11 transparent

16 frosted white

Switch to be used: 5E or 5G



Mounting

TH9 through-hole SH9 surface mount

Actuation force

20 35 65

Cap 1PS solid colour

Colour code

00 blue **02** green

03 grey

04 yellow **06** white

08 red

09 black

Ordering example: 5ETH935+1PS08

Dimensions (mm) Unless otherwise specified, all tolerances ±0,2

See colour codes on our website: www.mec.dk



1SS/1LS/1IS



The new caps for the Multimec switches 1SS / 1LS / 1IS 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 1SS cap is a solid cap which can be supplied in different colours
- The 1LS cap is a solid cap like 1SS, but with a small round lens for intensive or smooth illumination
- The 1IS cap is a transparent or milk white cap like 1SS, for intensive or smooth illumination



multimec[®]

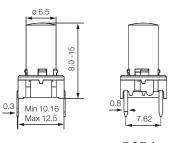
5E/5G + 1SS/1LS/1IS

Technical Data

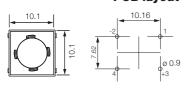
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations life time
- IP67 sealing
- temperature range: LED:-40/+85°C solid cap +65°C transparent +85°C
- actuation force: 2.0, 3.5, 6.5 N



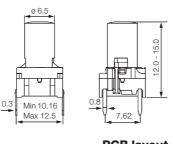
Dimensions (through-hole) 1SS



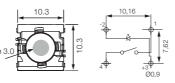
PCB layout



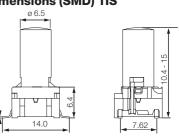
Dimensions (w. LED) 1LS



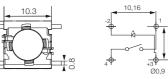
PCB layout



Dimensions (SMD) 1IS



PCB layout



HOW TO ORDER

5 G

Switch Mounting

Actuation TH9 through force -hole 20 SH9 surface 35 65 mount

LED

01 blue 22 green **42** yellow

61 white

82 red 2242 green/yellow 8222 red/green

Cap 11S transparent



1LS with lens



Colour code

00 blue 03 arev **08** red

09 black

11 transparent 16 frosted white



Lens Height/1IS 1 transparent 10.4 6 frosted white 11.0 2 green 12.0 15.0 4 yellow

8 red

Height/1LS 12.0

15.0

Switch to be used: 5E or 5G

5 E 5 G

Mounting

TH9 through-hole SH9 surface mount

Actuation force 20

35 65

Cap **1SS** solid colour



Colour code

00 blue 02 green 03 grey

04 yellow 06 white

08 red 09 black

39 black (high temperature)

Dimensions (mm) Unless otherwise specified, all tolerances ±0,2

Ordering example: 5GTH93501+1LS03115.0

See colour codes on our website: www.mec.dk

Height

08.0

09.5

10.4

11.0

12.0

15.0



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®

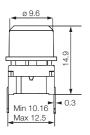
5G + 1DS/1ES/1FS

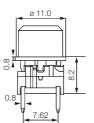
Technical Data

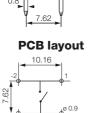
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations life time
- IP67 sealing
- temperature range: LED:-40/+85°C solid cap +65°C transparent +85°C
- actuation force: 2.0, 3.5, 6.5 N



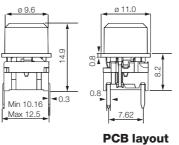
Dimensions (through-hole)

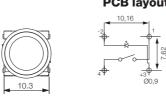




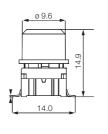


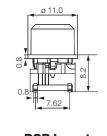


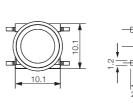


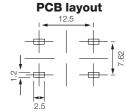


Dimensions (SMD)









HOW TO ORDER



Switch



Mounting

TH9 through
-hole
SH9 surface
35

SH9 surface mount

65

Actuation LED force 01 blue

22 green

42 yellow **61** white

O I VVI III

82 red

2242 green/yellow

8222 red/green

8242 red/yellow

Cap
1ES with lens

1FS with lens

Colour code 00 blue 03 grey

08 red **09** black

Lone

1 transparent6 frosted white

3

1DS



11 transparent

16 frosted white

5 G



Switch Mounting

TH9 through-hole **SH9** surface mount

Actuation force

20 35 65

Cap
1DS solid colour

0

00 blue

Colour code

02 green

03 grey

04 yellow

06 white

08 red

09 black

Dimensions (mm) Unless otherwise specified, all tolerances ±0,2

Ordering example: 5GTH935 + 1DS08

See colour codes on our website: www.mec.dk



1ZW "with panel seal"



Controlmec TM is a five position integrated switch solution, designed for outdoor, dusty and humid applications, to control a unit, navigate in a display, operate auxiliary equipment on a vehicle, boat or similar. The Controlmec is sealed to IP67, and exist of:

- One complete solid cap, with recess on the back site for the seal efficiency
- The unit panel plate (customers design)
- A gasket to seal between the cap, and the panel.
- A support ring to ensure the right position of sealing behind the front plate
- And then the PCB including the switches

The PCB with the switches, shall be assembled according to the MEC datasheet, and mounted to the back side of the front panel by bolts, to ensure the right pressure for the sealing efficiency.

The Controlmec is an extension of the Navimec system which includes the Multimec switches, of excellent high quality and long lifetime. Configurations can be made with through hole or SMD switch versions, provided they are accurately positioned.





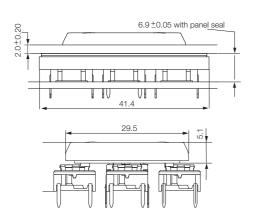
controlmec® 1ZW "sealed"

Technical Data

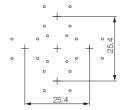
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations life time
- IP67 sealing
- temperature range: LED:-40/+85°C solid cap +65°C transparent +85°C
- actuation force: 2.0, 3.5, 6.5 N

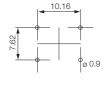


Dimensions 1ZW

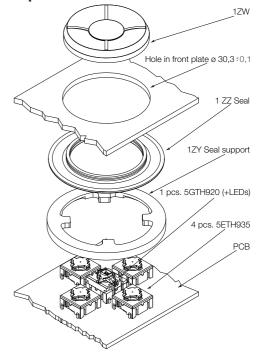


Recommented PCB layout





Mounting example



HOW TO ORDER

5 G

Switch Mounting

TH9 through -hole

SH9 surface

mount

Actuation

force

20

35

65

LED 01 blue

22 green **42** yellow

61 white **82** red

2242 green/yellow 8222 red/green

8242 red/yellow

Cap for seal **Colour code** 1ZW 00 blue

02 green 03 grey

04 vellow **06** white

08 red 09 black

11 transparent 16 frosted white

Panel seal

Seal

Seal support 1ZZ 1ZY

5 E

Actuation force Switch Mounting TH9 through-hole 20

SH9 surface mount 35 65

See colour codes on our website: www.mec.dk Dimensions (mm) Unless otherwise specified, all tolerances ± 0,2

Ordering example (sealed version) 1ZW: 1 x 5GTH920 + 4 x 5ETH935 + 1ZW03 + 1ZZ + 1ZY



1Z "without panel seal"



Controlmec TM is a five position integrated switch solution, designed for easy activations for indoor and non-dusty applications, to control a unit, navigate in a display, operate auxiliary equipment indoor on a vehicle, boat or similar. The Controlmec can also be supplied as an IP67 sealed solution. The Controlmec exist of:

- One complete solid cap
- The unit panel plate (customers design)
- The PCB including the switches

The PCB with the switches, shall be assembled according to the MEC datasheet, and mounted to the back side of the front panel.

The Controlmec is an extension of the Navimec system which includes the Multimec switches, of excellent high quality and long lifetime.

Configurations can be made with through hole or SMD switch versions, provided they are accurately positioned.





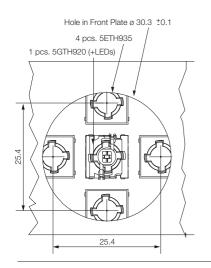
controlmec® 1Z "without sealing"

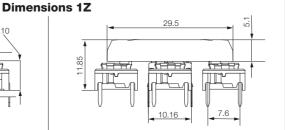
Technical Data

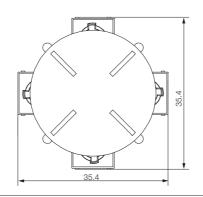
- through-hole or SMD
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations life time
- IP67 sealing
- temperature range: LED:-40/+85°C solid cap +65°C transparent +85°C
- actuation force: 2.0, 3.5, 6.5 N



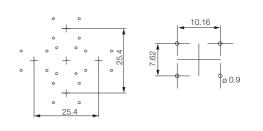
7.2 ±0.10







Recommented PCB layout



HOW TO ORDER

5 G



Switch Mounting TH9 through-hole SH9 surface mount

Actuation force 20 35 65

LED 01 blue 22 green **42** yellow 61 white **82** red

2242 green/yellow 8222 red/green 8242 red/yellow

Cap Colour code 1Z 00 blue 02 green **03** grey **04** yellow 06 white **08** red 09 black 11 transparent 16 frosted white

5 E



Switch Mounting

TH9 through-hole SH9 surface mount

Actuation force 20

35 65

See colour codes on our website: www.mec.dk Dimensions (mm) Unless otherwise specified, all tolerances ±0,2

Ordering example (unsealed version)1Z: 1 x 5GTH920 + 4 x 5ETH935 + 1Z03