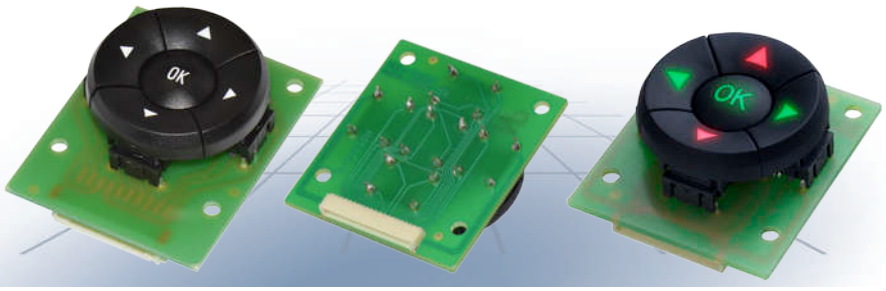
# Navimec

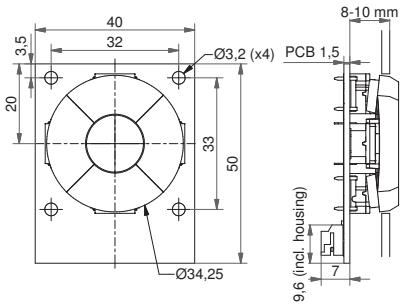
# Navimec Module standard and illuminated

**Technical Data:**

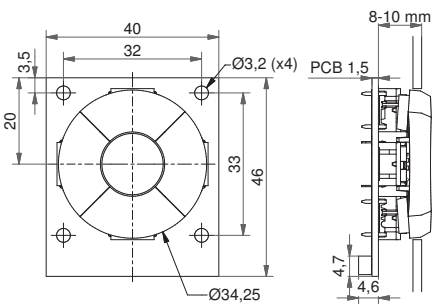
- module should be attached to the front plate with bolts (bolts not supplied by MEC)
- 50mA/24VDC
- single pole/momentary
- 10.000.000 operations lifetime
- switches sealed to IP67
- temperature range:
  switch body:-40/+160°C
  LED: -30/+85°C
- actuation force: 2.0, 3.5, 6.5 N




## Dimensions Standard Navimec module




## Dimensions illuminated Navimec module

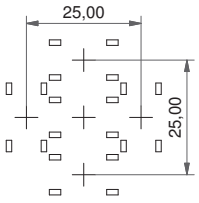



*When the 1ZB is activated the diameter changes from 34,25mm to 35,0mm

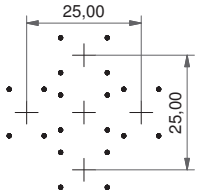
**Recommended panel cut-out:**
ø = 35,0 - 35,5 Depending on application

## PCB layout for Navimec solution

**SMD**




**TH**




## HOW TO ORDER

**Navimec Module ordering options:**

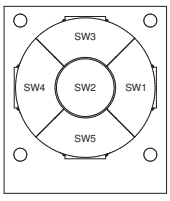
- Navimec Module excl. keycaps
- Navimec Module incl. keycaps
- Navimec Module incl. keycaps with legends
- illuminated Navimec Module excl. keycaps
- illuminated Navimec Module incl. keycaps with legends

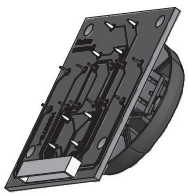
Part no. 9810120 - PCB and connector for Navimec Module
Part no. 9810125 - PCB and connector for illuminated Navimec Module

Part no. for switches and caps:
Navimec Module has many customisation options regarding actuation force, cap and LED colours and legends. Because of that ordering is based on part numbers of separate parts instead of one specific part number. MEC has the switches mounted on the module before delivery, which is included in the module price.
See the other side for information on switch and cap options as well as the examples below.

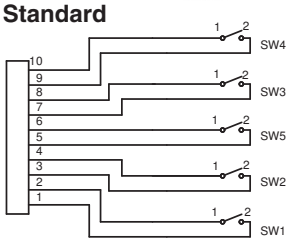
**For example:**
9810120 + 4x 5GTH920 + 1x 5GTH920 (without caps)
9810120 + 4x 5GTH965+1ZB42 + 1x 5GTH965+1ZCS42 (with caps)
9810125 + 4x 5GTH93501+1ZB16LM136 + 1x 5GTH93501 +1ZCS16LM118 (painted caps with laser engraved legends)

## Circuit diagram Navimec module



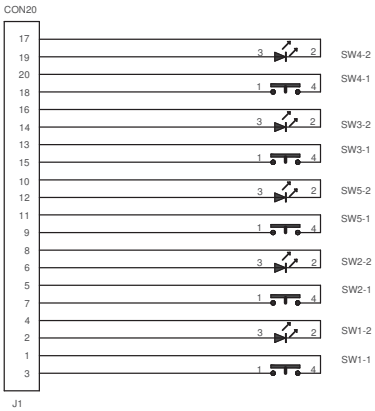



**Standard**




The connector on the standard Navimec module is JST SMT S108-PH-SM3-TB or similar. We recommend using:
Cable socket: JST PHR-10 or similar
Contact: JST SPH-002T-P0.5S or similar

**illuminated**




The connector on the illuminated Navimec module is CI1120M1H or similar.
We recommend using:
Cable socket: Cvilux CI1120S0000 or similar
Contact: Cvilux CI11T011PP0 or similar

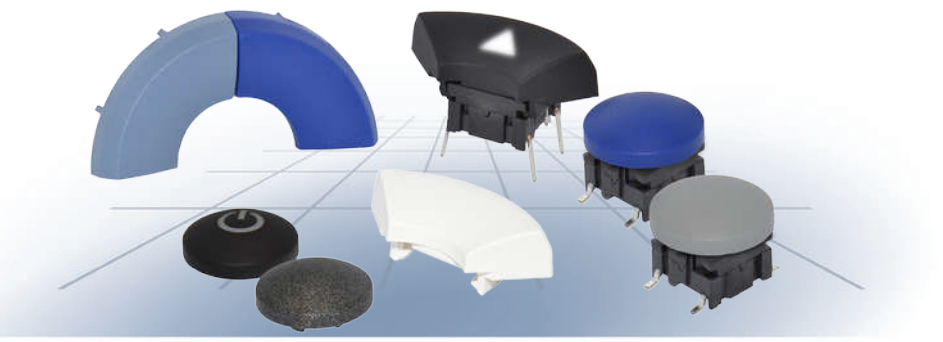
Distributor:

# multimec®

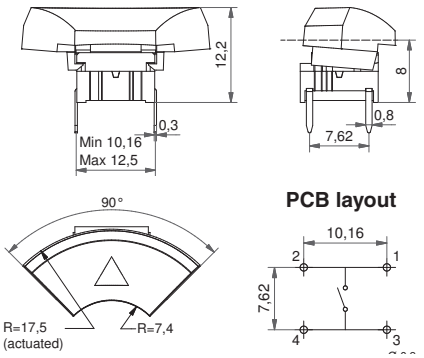
# 5G + 1ZB/1ZCS

**Technical Data:**

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



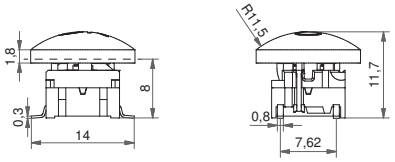
### Dimensions (through-hole) + 1ZB




### PCB layout



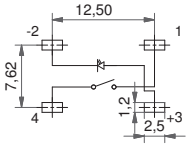

### Dimensions (SMD w/LED) + 1ZCS



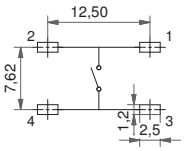




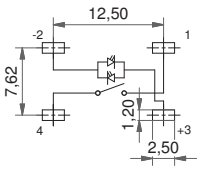
### PCB layout



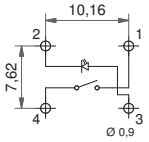

### PCB layout SMD



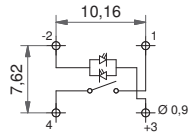

### PCB layout bicolour SMD




### PCB layout TH w/LED




### PCB layout bicolour TH




## HOW TO ORDER illuminated

| 5 G | | | | + | 1 Z B 1 6 L M | |
|---|---|---|---|---|---|---|
| **Switch** | **Mounting**<br>**TH9** through-hole<br>**SH9** surface mount | **Actuation force**<br>**20**<br>**35**<br>**65**<br>**Q*** | **LED**<br>**01** blue<br>**22** green<br>**42** yellow<br>**61** white<br>**82** red<br>**2242** green/yellow<br>**8222** red/green<br>**8242** red/yellow | | **Cap**<br><br>frosted white with black soft touch paint and laser marking | **Legend code**<br>**136** ▲ |
| | | | | | 1 Z C S 1 6 L M<br>**Cap**<br> | **Legend code**<br>**118** OK<br>**123** ⏻ |

## HOW TO ORDER non-illuminated

| 5 G | | | + | 1 Z B | | | |
|---|---|---|---|---|---|---|---|
| **Switch** | **Mounting**<br>**TH9** through-hole<br>**SH9** surface mount | **Actuation force**<br>**20**<br>**35**<br>**65**<br>**Q*** | | **Cap**<br> | **Colour code**<br>**02** green<br>**03** grey<br>**06** white<br>**08** red<br>**09** *black*<br>**30** ultra blue<br>**40** dusty blue<br>**42** aqua blue<br>**50** metal dark blue<br>**53** metal light grey<br>**57** metal dark grey<br>**58** metal bordeaux | **Legend code****<br>**136** ▲ |
| | | | | 1 Z C S<br>**Cap**<br> | | **Legend code****<br>**038** RESET<br>**105** ENTER<br>**118** OK<br>**119** SET<br>**120** MENU<br>**121** FUNC<br>**122** HOME<br>**123** ⏻ |

*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 ordering example.

**Ordering example:**

4x 5GTH93561+1ZB16LM136 + 1x 5GTH93561+1ZCS16LM118 (with illumination)

4x 5GSH920+1ZB09 + 1x 5GSH920+1ZCS09 (without illumination)

*5GTH92001Q or 5GSH920Q (quiet version)

For product updates and further information see our website: www.mec.dk

** White legends on black caps are standard, other options are available but considered custom products.

Dimensions (mm) Unless otherwise specified, all tolerances +/- 0,2

MEC A/S July 2011


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