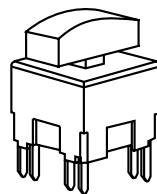


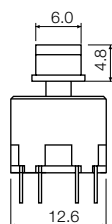
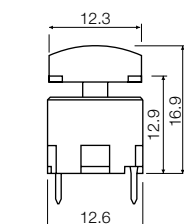
# unimec 16300/16700/16800



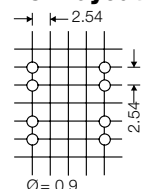
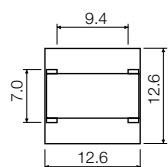
## Technical Data:

- 250mA/120V/9W AC/6W DC
- 2 pole
- momentary or alternate
- 8 contact functions
- temperature range:  
low temp: -40/+75°C  
high temp: -40/+160°C
- through-hole version

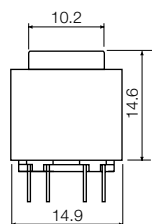
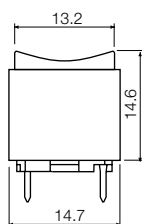
## Dimensions 16300:



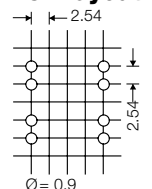
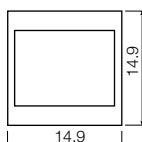
### PCB layout



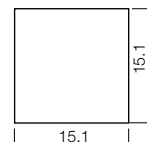
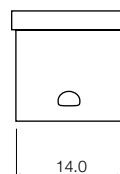
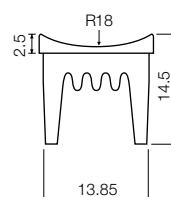
## Dimensions 16700:



### PCB layout



## Dimensions 16800:



Blanking Cap  
to be used with  
VARIO SUPPORT

## HOW TO ORDER

1 5

+

1 6 3 0 0



### Switch

- 15501** mom. silver  
**15551** alt. silver  
**15502** mom. gold  
**15552** alt. gold  
**15500** silent silver  
**15401** mom. silver  
high temp.  
**15451** alt. silver  
high temp.

### Cap



- 00** blue  
**01** brown  
**02** green  
**03** grey  
**04** yellow  
**05** golden  
**06** white  
**07** orange  
**08** red  
**09** black

- 30** ultra blue  
**40** dusty blue  
**42** aqua blue  
**32** mint green  
**33** tele grey  
**34** melon  
**38** noble red

- 50** metal dark blue  
**53** metal light grey  
**57** metal dark grey  
**58** metal bordeaux

1 5

+

1 6 7 0 0

### Switch



### Cap



- 00** blue  
**02** green  
**03** grey  
**04** yellow  
**06** white  
**08** red  
**09** black

1 6 8 0 0

### Blanking Cap

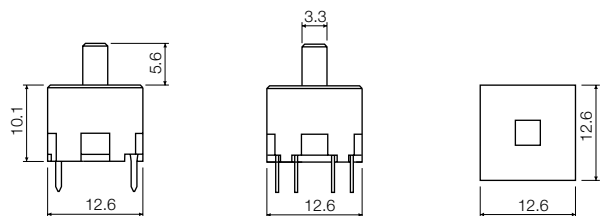


- 00** blue  
**01** brown  
**02** green  
**03** grey  
**04** yellow  
**05** golden  
**06** white  
**07** orange  
**08** red  
**09** black  
**11** transparent  
**12** transparent green  
**14** transparent yellow  
**18** transparent red

Ordering example: 15551 + 1670009

# unimec basic switch modules

Base module applies to all versions



Part no.



**Temperature:**

**5:** low temp.

**4:** high temp.

**Switch function:**

**0:** momentary

**5:** alternate

**Terminal:**

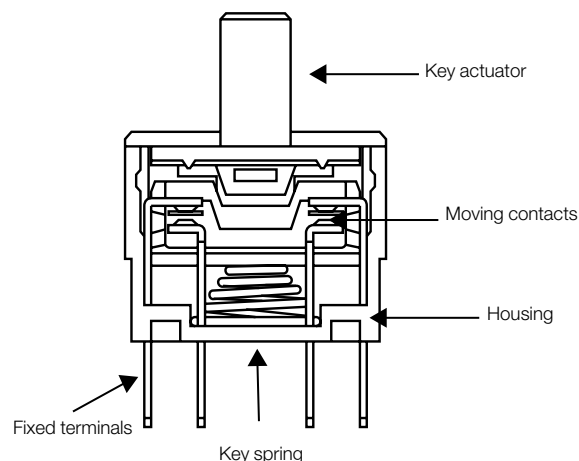
**1:** silver

**2:** gold

**0:** quiet version, silver

Standard stock items: 15501 - 15551

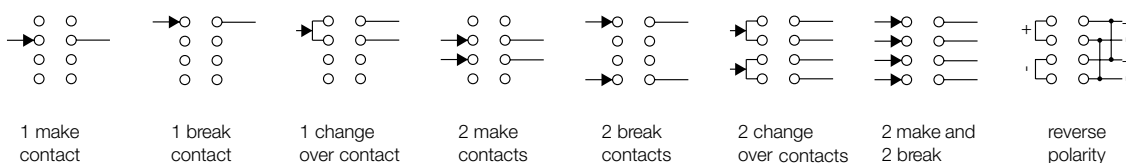
Other versions: 15401 - 15451 - 15452 - 15502 - 15552 - 15500



| PCB Mounting Hole Dimensions<br>Basic Switch | Circuit diagram                                                                | PCB Mounting hole Dimensions<br>(w/Extender 16250) | Functional diagram       |
|----------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|
| <p>2.54<br/>2.54<br/>Ø = 0.9</p>             | <p>Without LED<br/>With round LED 16920 and 16921<br/>With rect. LED 16922</p> | <p>13.1<br/>3.0<br/>With LED 16923 and 16924</p>   | <p>— up<br/>--- down</p> |

## Wiring Diagram

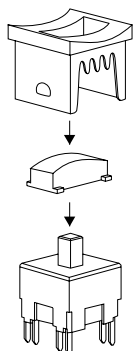
Select the contact function you desire - and design your PC board accordingly



## How to assemble

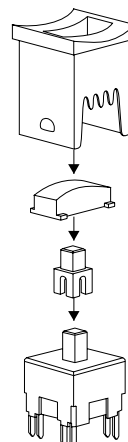
**unimec**

15XXX + 16300 +  
16310

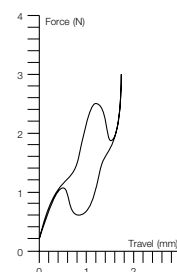


**unimec**

15XXX + 16270 +  
16300 + 16324



**Operating Force**  
( Typical example )



|                                                    |      | Low Temperature Versions                                             |                             | High Temperature Versions |                              |                             |
|----------------------------------------------------|------|----------------------------------------------------------------------|-----------------------------|---------------------------|------------------------------|-----------------------------|
|                                                    |      | Silver                                                               | Gold                        |                           | Silver                       | Gold                        |
| <b>Electrical Specifications</b>                   |      |                                                                      |                             |                           |                              |                             |
| Contact resistance                                 |      | Max. 100 mΩ (initially)                                              |                             |                           |                              |                             |
| Insulation resistance                              |      | >10M Ω                                                               |                             |                           |                              |                             |
| Recommended load                                   | min. | 0.5 mA                                                               | 0,5 μA                      |                           | 0.5 mA                       | 0,5 μA                      |
|                                                    | max. | 250 mA - 120 V - 9W AC - 6W DC                                       |                             |                           |                              |                             |
| Max. current in non switching state                |      | 0.5 A                                                                |                             |                           |                              |                             |
| Contact bounce                                     |      | Max. 10ms                                                            |                             |                           |                              |                             |
| Dielectric strength between adjacent contacts      |      | 1000 V for 2 min.                                                    |                             |                           |                              |                             |
| Insulation resistance between adjacent contacts    |      | 5 X 10 <sup>13</sup> Ω                                               |                             |                           |                              |                             |
| Capacitance between adjacent contacts              |      | 0.5 pF                                                               |                             |                           |                              |                             |
| <b>Mechanical Specifications</b>                   |      |                                                                      |                             |                           |                              |                             |
| Standard actuation force (switch)                  |      | typ 2.5N                                                             |                             |                           |                              |                             |
| Max. actuation force without cap                   |      | 100N for 10 sec.                                                     |                             |                           |                              |                             |
| Key travel (switch)                                |      | 1.8 mm                                                               |                             |                           |                              |                             |
| Life time                                          |      | Momentary 1.500.000 cycles                                           |                             |                           | Momentary >10.000.000 cycles |                             |
|                                                    |      | Alternate 500.000 cycles                                             |                             |                           | Alternate 5.000.000 cycles   |                             |
| <b>Temperature Range</b>                           |      |                                                                      |                             |                           |                              |                             |
| Working temperature                                |      | Min. -40°C Max. +75°C                                                |                             |                           | Min. -40°C Max. +160°C       |                             |
| Storage temperature                                |      | Min. -65°C Max. +85°C                                                |                             |                           | Min. -65°C Max. +160°C       |                             |
| Soldering IEC 68-2-20                              |      | Wave - max. 260°C for max. 10 sec., please refer to usage guidelines |                             |                           |                              |                             |
|                                                    |      | Soldering iron - max. 350°Cfor max. 3 sec. Flux tight.               |                             |                           |                              |                             |
| <b>Environmental Endurance IEC 68-2-3</b>          |      |                                                                      |                             |                           |                              |                             |
| Temperature                                        |      | +40°C                                                                |                             |                           |                              |                             |
| Humidity                                           |      | 93% RH                                                               |                             |                           |                              |                             |
| Duration                                           |      | 56 Days                                                              |                             |                           |                              |                             |
| Sealing IEC 529                                    |      | IP-54                                                                |                             |                           |                              |                             |
| Cleaning                                           |      | Standard methods such as freon, water and soap (not immersed)        |                             |                           |                              |                             |
| <b>Material Specifications - Switches</b>          |      |                                                                      |                             |                           |                              |                             |
| Housing and actuator                               |      | Glass fiber filled Polycarbonate UL94V1                              |                             |                           | PPS UL94V0                   |                             |
| Switch spring                                      |      | Stainless steel                                                      |                             |                           |                              |                             |
| Key spring                                         |      | Stainless steel                                                      |                             |                           |                              |                             |
| Latch pin                                          |      | Stainless steel                                                      |                             |                           |                              |                             |
| Fixed contact                                      |      | SnCu + 2μNi + 3μAg                                                   | SnCu + 2μNi + 3μAu          |                           | SnCu + 2μNi + 3μAg           | SnCu + 2μNi + 3μAu          |
| Moving contact                                     |      | Stainless steel + 3μAg                                               | Stainless steel + 3μAg+1μAu |                           | Stainless steel + 3μAg       | Stainless steel + 3μAg+1μAu |
| Contact lubricant                                  |      | Special protective lubricant Klüber Barrierta I EL Fluid             |                             |                           |                              |                             |
| <b>Material Specifications - Caps &amp; Bezels</b> |      | ABS (standard) UL94HB                                                |                             |                           |                              |                             |
| Temperature limit                                  |      | Max. +65°C                                                           |                             |                           |                              |                             |
| <b>Tampon Printing</b>                             |      | According to ISO Class.: 1/ ASTM Class.: 4B                          |                             |                           |                              |                             |

Specifications are subject to change without notice

## unimec LEDs

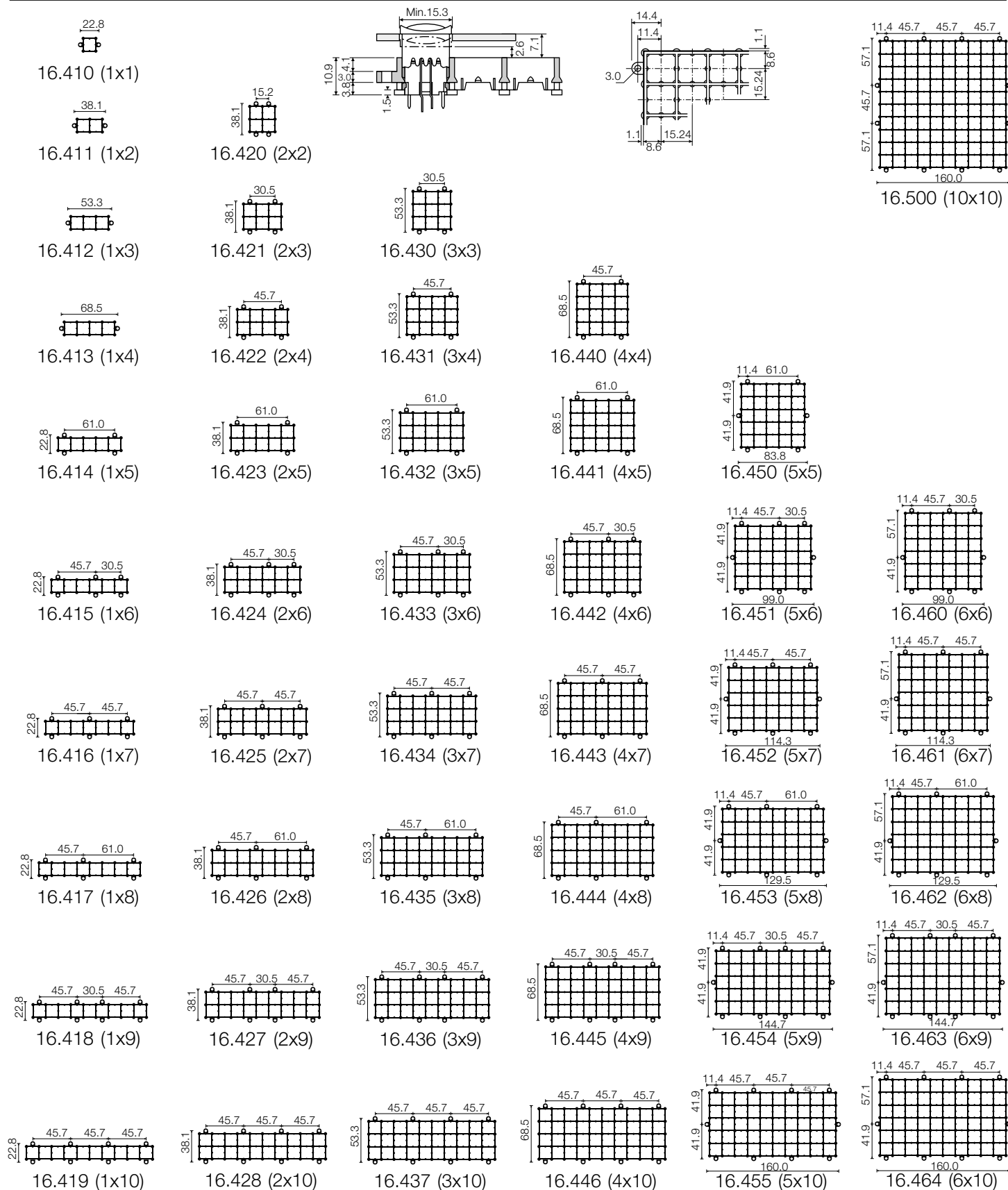
\*\* Pulse width 1ms Duty cycle 1:5

\*\*\*I<sub>F</sub> = 50mA

\*\*\*\* Luminous Flux mlm

| Part Nos.                                           |                                                          | 16920/16921           |     |     | 16922                |     |     | 16923               |      |      | 16924               |         |         |
|-----------------------------------------------------|----------------------------------------------------------|-----------------------|-----|-----|----------------------|-----|-----|---------------------|------|------|---------------------|---------|---------|
| Colour (G = Green, Y = Yellow, R = Red)             |                                                          | G                     | Y   | R   | G                    | Y   | R   | G                   | Y    | R    | G                   | Y       | R       |
| Colour Codes                                        |                                                          | 02                    | 04  | 08  | 02                   | 04  | 08  | 20                  | 40   | 80   | 22                  | 44      | 88      |
| <b>Absolute Maximum Ratings</b> (Ta=25°C)           |                                                          |                       |     |     |                      |     |     |                     |      |      |                     |         |         |
| Power                                               | mW                                                       | 100                   | 100 | 100 | 135                  | 135 | 135 | 70                  | 60   | 60   | 300                 | 300     | 300     |
| Current forward                                     | mA                                                       | 30                    | 30  | 30  | 30                   | 30  | 30  | 20                  | 20   | 20   | 75                  | 90      | 90      |
| Forward peak current                                | mA                                                       | 50                    | 50  | 50  | 90                   | 90  | 90  | 60**                | 60** | 60** | 2                   | 2.5     | 2.5     |
| Voltage reverse                                     | V                                                        | 5                     | 5   | 5   | 5                    | 5   | 5   | 3                   | 3    | 3    | 5                   | 5       | 5       |
| Operating temperature                               | °C                                                       | -25 - +100            |     |     | -55 - +100           |     |     | -25 ~ +85           |      |      | -55 ~ +100          |         |         |
| Storage temperature                                 | °C                                                       | -25 - +100            |     |     | -55 - +100           |     |     | -30 ~ +100          |      |      | -55 ~ +100          |         |         |
| Soldering temperature                               | °C                                                       | + 245 for max. 3 sec. |     |     | +300 for max. 3 sec. |     |     | 260 for max. 5 sec. |      |      | 300 for max. 3 sec. |         |         |
| <b>Electrical-Optical Characteristics</b> (Ta=25°C) |                                                          |                       |     |     |                      |     |     |                     |      |      |                     |         |         |
| Voltage forward                                     | Typ. V                                                   | 2.0                   | 2.0 | 2.0 | 2.1                  | 2.2 | 2.3 | 2.1                 | 2.1  | 2.0  | 2.4***              | 2.4***  | 2.4***  |
|                                                     | Max. V                                                   | 3.0                   | 3.0 | 3.0 | 3.0                  | 3.0 | 3.0 | 3.0                 | 3.0  | 3.0  | 3.8***              | 3.8***  | 3.8***  |
| Current reverse                                     | μA                                                       | 100                   | 100 | 100 | 100                  | 100 | 100 | 10                  | 10   | 10   | 10                  | 10      | 10      |
| Wave length                                         | nm                                                       | 560                   | 590 | 660 | 565                  | 585 | 635 | 563                 | 585  | 650  | 565                 | 586     | 635     |
| Spread                                              | Ønm                                                      | 10                    | 10  | 10  | 10                   | 10  | 10  | 40                  | 40   | 40   | 25                  | 45      | 45      |
| Spread angle                                        | degree                                                   | 20                    | 20  | 20  | 45                   | 45  | 45  | 45                  | 45   | 45   | 55                  | 30      | 55      |
| <b>Luminous Intensity</b>                           |                                                          |                       |     |     |                      |     |     |                     |      |      |                     |         |         |
|                                                     | Min. mcd                                                 | 1                     | 1   | 0.8 | 1.5                  | 2.5 | 2.5 | 9.0                 | 5.6  | 5.6  | 100****             | 100**** | 100**** |
|                                                     | Typ. mcd                                                 | 2                     | 3   | 1.6 | 2.5                  | 3.0 | 5.0 | 25                  | 16   | 16   | 160****             | 160**** | 160**** |
| Orientation                                         | The longer pin is the anode, the shorter is the cathode. |                       |     |     |                      |     |     |                     |      |      |                     |         |         |

For all types of UNIMEC switches with bezels - 16310-16315 and 16324-16326



Existing and New Part Nos. for Lead Free, RoHS compatible and Proces compatible mec products

MULTIMEC

| Part No.    | Part Name                         | Lead Free | RoHS Comp. | Proces Comp. | New Part No. Comments | Lead Free | RoHS Comp. | Proces Comp. | UL |
|-------------|-----------------------------------|-----------|------------|--------------|-----------------------|-----------|------------|--------------|----|
| 3ASH9       | Switch Surface Ag/High Temp       | N         | N          | Y            | RA3ASH9               | Y         | Y          | Y            | V0 |
| 3AXXXG      | All 3A Switches with Au           | N         | N          | Y            | RA3AXXXG              | Y         | Y          | Y            | V0 |
| 3AXXXQ      | All 3A Quiet Switches             | N         | N          | Y            | RA3AXXXQ              | Y         | Y          | Y            | VO |
| 3ASH9R      | All 3A Switches delivered on Tape | N         | N          | Y            | RA3ASH9R              | Y         | Y          | Y            | V0 |
| 3ATH9       | Switch Th Ag/High Temp.           | N         | N          | Y            | RA3ATH9               | Y         | Y          | Y            | V0 |
| 3ATL6       | Switch Th Ag/White But/Low Temp.  | N         | N          | Y            | RA3ATL6               | Y         | Y          | Y            | V0 |
| 3ATL6 w/LED | Switch Th Ag/Low Temp w/LED       | N         | N          | Y            | RA3ATL6 w/LED         | Y         | Y          | Y            | V0 |
| 3CSH9       | Switch Surface Ag/High Temp.      | N         | N          | Y            | RA3CSH9               | Y         | Y          | Y            | V0 |
| 3CXXXG      | All 3C Switches with Au           | N         | N          | Y            | RA3CXXXG              | Y         | Y          | Y            | V0 |
| 3CXXXQ      | All 3C Quiet Switches             | N         | N          | Y            | RA3CXXXQ              | Y         | Y          | Y            | V0 |
| 3CSH9R      | All 3C Switches delivered on Tape | N         | N          | Y            | RA3CSH9R              | Y         | Y          | Y            | V0 |
| 3CTH9       | Switch Th Ag/High Temp            | N         | N          | Y            | RA3CTH9               | Y         | Y          | Y            | V0 |
| 3CTL6       | Switch Th/White But/Low Temp      | N         | N          | Y            | RA3CTL6               | Y         | Y          | Y            | V0 |
| 3CTL6-2SL   | Switch Low Temp. 2 Straight Legs  | N         | N          | Y            | RA3CTL6-2SL           | Y         | Y          | Y            | V0 |
| 3CTL6RAS    | Right Angle Switch Low Temp.      | N         | N          | Y            | RA3CTL6RAS            | Y         | Y          | Y            | V0 |
| 3CTL9       | Switch Th Ag/Black But/Low Temp   | N         | N          | Y            | RA3CTL9               | Y         | Y          | Y            | V0 |
| 3ESH9       | Switch Surface Ag High Temp.      | N         | N          | Y            | RA3ESH9               | Y         | Y          | Y            | V0 |
| 3ESH9-XX.X  | Switch Ag/High Temp./w Actuator   | N         | N          | Y            | RA3ESH9-XX.X          | Y         | Y          | Y            | V0 |
| 3EXXXG      | All 3E Switches with Au           | N         | N          | Y            | RA3EXXXG              | Y         | Y          | Y            | V0 |
| 3EXXXQ      | All 3E Quiet Switches             | N         | N          | Y            | RA3EXXXQ              | Y         | Y          | Y            | V0 |
| 3ESH9R      | All 3E Switches delivered on Tape | N         | N          | Y            | RA3ESH9R              | Y         | Y          | Y            | V0 |
| 3ETH9       | Switch Th Ag High Temp.           | N         | N          | Y            | RA3ETH9               | Y         | Y          | Y            | V0 |

|             |                                    |   |   |   |                           |   |   |   |    |
|-------------|------------------------------------|---|---|---|---------------------------|---|---|---|----|
| 3ETH9-XX.X  | Switch Th Ag/High Temp. w/Actuator | N | N | Y | RA3ETH9-XX.X              | Y | Y | Y | V0 |
| 3ETL9       | Switch Th Ag/Low Temp.             | N | N | Y | RA3ETL9                   | Y | Y | Y | V0 |
| 3ETL9-XX.X  | Switch Th Ag/Low Temp. w/Actuator  | N | N | Y | RA3ETL9-XX.X              | Y | Y | Y | V0 |
| 3FSH9       | Switch Surface Ag/High Temp.       | N | N | Y | RA3FSH9                   | Y | Y | Y | V0 |
| 3FXXXG      | All 3F Switches with Au            | N | N | Y | RA3FXXXG                  | Y | Y | Y | V0 |
| 3FXXXQ      | All 3F Quiet Switches              | N | N | Y | RA3FXXXQ                  | Y | Y | Y | V0 |
| 3FSH9R      | All 3F Switches delivered on Tape  | N | N | Y | RA3FSH9R                  | Y | Y | Y | V0 |
| 3FTH9       | Switch Th Ag/High Temp.            | N | N | Y | RA3FTH9                   | Y | Y | Y | V0 |
| 3FTH9 w/LED | Switch Th High Temp w/ LED         | N | N | Y | RA3FTH9 w/LED             | Y | Y | Y | V0 |
| 3FTL6       | Switch Th Ag/Low Temp.             | N | N | Y | RA3FTL6                   | Y | Y | Y | V0 |
| 3FTL6 w/LED | Switch Th Ag/Low Temp w/LED        | N | N | Y | RA3FTL6 w/LED             | Y | Y | Y | V0 |
| 3FTL6-2SL   | Switch Low Temp. 2 Straight Legs   | N | N | Y | RA3FTL6-2SL               | Y | Y | Y | V0 |
| 3FTL6RAS    | Right Angle Switch Low Temp.       | N | N | Y | RA3FTL6RAS                | Y | Y | Y | V0 |
| 1CXXXX      | Leds for 1C or 1H Button           | N | N | N | RA1CXXXX                  | Y | Y | Y |    |
| 2BXXXX      | Leds for 2B Bezel                  | N | N | N | RA2BXXXX                  | Y | Y | Y |    |
| 3FXXXXX     | Leds Bent for 3F                   | N | N | N | RA3FXXXXX                 | Y | Y | Y |    |
| 1AXX        | DI Buttons all colours for 3A      | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1BXX        | DI Buttons f. Bezels all colours   | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1CXXX       | DI Buttons w/Lens all colours      | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1DXX        | Lk Buttons all colours             | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1EXXX       | Lk Buttons w/Lens all colours      | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1FXXX       | Lk Buttons w/Lens all colours      | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1GA09       | Cap black 11                       | Y | Y | Y | No change                 |   |   |   | V0 |
| 1GC09       | Cap black 15                       | Y | Y | Y | No change                 |   |   |   | V0 |
| 1HXXX       | DI Buttons w/Lens all colours      | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1KXX        | Lk Lid all colours                 | Y | Y | N | No change, pls see note 1 |   |   |   | HB |
| 1KXX16      | Lid all colours/Lens/Reflector     | Y | Y | N | No change, pls see note 1 |   |   |   | HB |

|            |                                      |   |   |   |                           |  |  |    |
|------------|--------------------------------------|---|---|---|---------------------------|--|--|----|
| 1KXX1      | Lens Milky White For 1K Button       | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1KXXX6     | Reflector For 1K Button White        | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1MXX       | DI Button Double Width all colours   | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1NXX       | Teardrop Buttons all colours         | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1PXX       | Gf Buttons all colours               | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1QXXX      | 1P But. W/Square Hole, all colours   | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1RXXX      | 1P Button w/Round Hole, all colours  | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1S09-XX.X  | Lk Button Black, all heights         | Y | Y | Y | No change                 |  |  | V0 |
| 1S11-XX.X  | Lk Button Transparent, all heights   | Y | Y | N | No change, pls see note 2 |  |  | V1 |
| 1TXX       | Sq. Button, all colours              | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1UXX       | Round Button, all colours            | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1VXX       | Arrow Button, all colours            | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1X XX      | Rectangular Button, all colours      | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1ZAXX      | DL Button, all colours               | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1ZBXX      | Curved Button, all colours           | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1ZCXX      | Round Button, all colours            | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 3E-XX.X    | Actuator f. 3E Switch, all heights   | Y | Y | Y | No change                 |  |  | V0 |
| 3E-AXXXX   | Varimec cap 5.2 Round, all heights   | Y | Y | Y | No change                 |  |  | V0 |
| 3E-BXXXX   | Varimec cap 5.2 Square, all heights  | Y | Y | Y | No change                 |  |  | V0 |
| 3E-EXXXX   | Varimec cap 7.8 Round, all heights   | Y | Y | Y | No change                 |  |  | V0 |
| 3E-FXXXX   | Varimec cap 7.8 Square, all heights  | Y | Y | Y | No change                 |  |  | V0 |
| 3E-KXXXX   | Varimec cap 11.6 Round, all heights  | Y | Y | Y | No change                 |  |  | V0 |
| 3E-LXXXX   | Varimec cap 11.6 Square, all heights | Y | Y | Y | No change                 |  |  | V0 |
| AQB01XX    | Sealing Boot (incl. Sea.ring)        | Y | Y | Y | No change                 |  |  |    |
| AQB0111    | Sealing Boot Trans. (incl. Sea.ring) | Y | Y | Y | No change                 |  |  |    |
| AQC09-XX.X | Cap Black, all overall heights       | Y | Y | Y | No change                 |  |  | V0 |
| AQC11-XX.X | Cap Trans. all overall heights       | Y | Y | N | No change, pls see note 2 |  |  | V1 |

|            |                                       |   |   |   |                           |  |  |    |
|------------|---------------------------------------|---|---|---|---------------------------|--|--|----|
| AQN-X.X    | Bushing, all heights                  | Y | Y | Y | No change                 |  |  |    |
| 1CXXX      | Lens f. 1C/1H/1Q Buttons, all colours | Y | Y | N | No change, pls see note 2 |  |  | V1 |
| 1EXXX      | Lens f. 1E Buttons, all colours       | Y | Y | N | No change, pls see note 2 |  |  | V1 |
| 1FXXX      | Lens f. 1F Buttons, all colours       | Y | Y | N | No change, pls see note 2 |  |  | V1 |
| 1RXX1      | Round Transparent Lens For 1R         | Y | Y | N | No change, pls see note 2 |  |  | V1 |
| 2AXX       | DI Bezel, all colours                 | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 2BXXX      | Bezel/Lens, all colours               | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 2BXXX      | Lens f. 2B Bezel, all colours         | Y | Y | N | No change, pls see note 2 |  |  | V1 |
| 2KXX       | Lk Bezel f. 1K, all colours           | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 2RAS       | Right Angle Support.                  | Y | Y | Y | No change                 |  |  |    |
| 2S09-XX.X  | Extender, Black Pps, all heights      | Y | Y | Y | No change                 |  |  | V0 |
| 1A09XDXXX  | Button 1A Down/all legends            | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1A09XUXXX  | Button 1A Up/all legends              | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1B09XDXXX  | Button 1b Down/0                      | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1B09XUXXX  | Button 1B Up/all legends              | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1D09XXX    | Round Button/all legends              | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1F096XXX   | 1F Button/Inverse legends             | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1ZB09XDXXX | Button1ZB09 Down / all legends        | Y | Y | N | No change, pls see note 1 |  |  | HB |
| 1ZC09XXX   | Button 1ZC09 / all legends            | Y | Y | N | No change, pls see note 1 |  |  | HB |

**Note 1:** Complies with RoHS, however plastic material limited to 65°C.  
Accessories must be mounted after soldering.

**Note 2:** Complies with RoHS, however plastic material is limited to 85°C,  
so excessive proces heat must be avoided.

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