

UG1410A



- ☐ Protected rocker
- ☐ Illuminated or non-illuminated
- ☐ VDE (EN 61058-1) approved
- ☐ Sealed to IP65

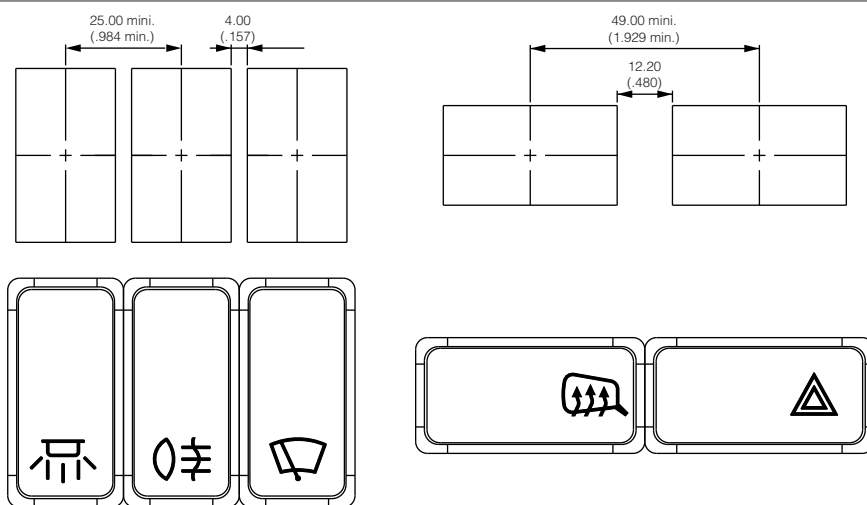
### ELECTRICAL SPECIFICATIONS

- Current/voltage rating :
  - functions 1 (ON-OFF) and 6 (ON-ON) : 15A 12VDC, 10A 24VDC max., 10mA 14VDC min.
  - functions 4 (ON ON ON) and 4-1R (ON ON MOM) : 8A 12VDC, 5A 24VDC max.
  - other functions : 10A 12VDC, 8A 24VDC max.
- Initial contact resistance : 10 mΩ max. at 1A 2VDC
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength : 2.000 Vrms 50 Hz min. between terminals
- Electrical life : 10.000 cycles min.
- Mechanical life : 2 position models : 100.000 cycles min.  
3 position models : 30.000 cycles min.

### ENVIRONMENTAL SPECIFICATIONS

- Degree of protection : IP65 according to IEC 60529
- Shock resistance : 100 g according to IEC 512-4, test 6c
- Vibration resistance : 10-500 Hz - 10 g according to IEC 512-4, test 6d
- Salt spray resistance : 96 hours according to IEC 512-6, test 11f
- Operating temperature : 2 position models : -40°C to + 85°C  
3 position models : -10°C to + 65°C

### MATRIX MOUNTING



### MATERIALS

- Case : thermoplastic UL94-V0
- Terminals : brass, silver plated
- Contacts : silver grain
- Contact roller : brass, nickel plated

### AGENCY APPROVAL



12(4)A 250VAC  
T85/55°C

**Availability** : double pole models, functions ON-OFF and ON-ON.

**Marking** : to order switches marked VDE, add "VDE" at the end of model number.



**Packaging unit** : 40 pieces



**Sealing boots** are available to protect the switches against dust and water. They are presented in section H.

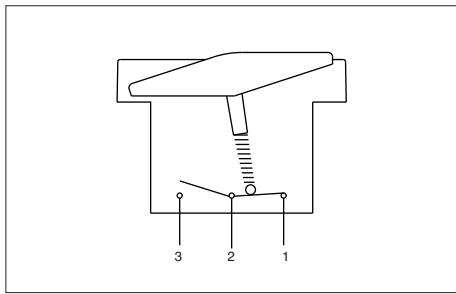
**Dimensions** : First dimensions are in mm while inches are shown as bracketed numbers.

The company reserves the right to change specifications without notice.

# KG series

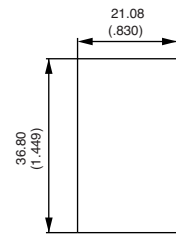
## Power rocker switches

### Case

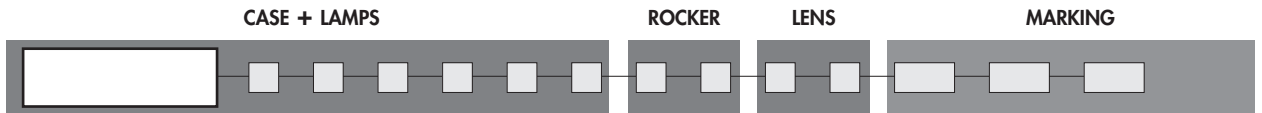


#### PANEL CUT-OUT

Panel thickness :  
0,8 mm to 4,6 mm  
Recommended thickness :  
between 2 mm and 3,5 mm

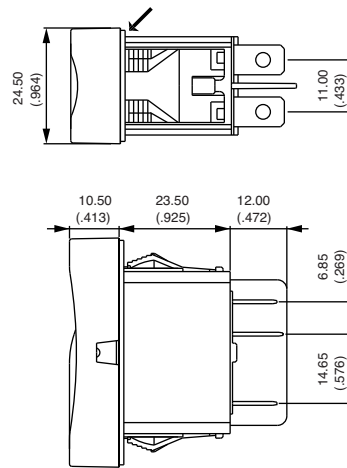


#### MODEL STRUCTURE

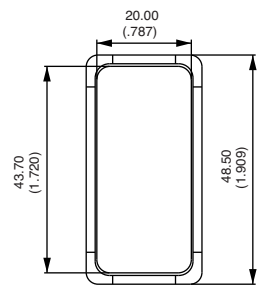


| Single pole | Double pole |
|-------------|-------------|
| KG31        | KG41        |
|             | KG44*       |
|             | KG44-1R*    |
| KG35        | KG45        |
| KG36        | KG46        |
| KG37        | KG47        |
| KG38        | KG48        |
| KG39        | KG49        |

| 2-3 | 1-2 |
|-----|-----|
| 5-6 | 4-5 |
| ON  | -   |
| ON  | ON  |
| ON  | ON  |
| MOM | -   |
| ON  | ON  |
| MOM | OFF |
| ON  | OFF |
| ON  | OFF |

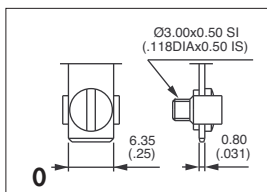
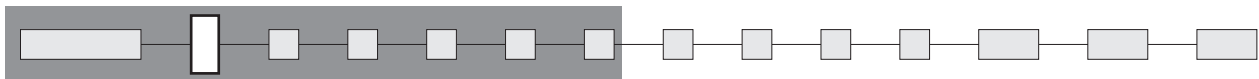


→ Flat seal

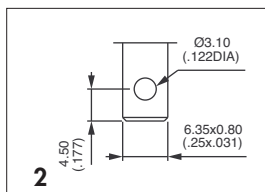


\* Function 4 : single pole in double pole case

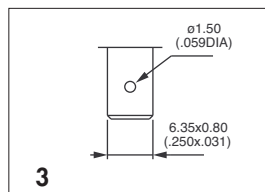
#### TERMINALS



Screw



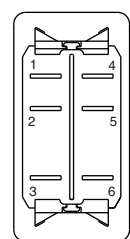
Solder lug / quick-connect



Quick-connect

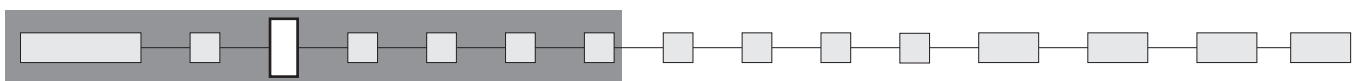
Terminals 1 to 6  
are marked on the case.

Side A : terminals 1 and 4  
Side B : terminals 3 and 6



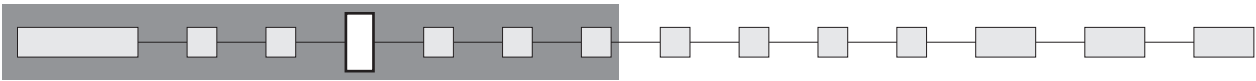
Side B

#### CONTACT MATERIALS



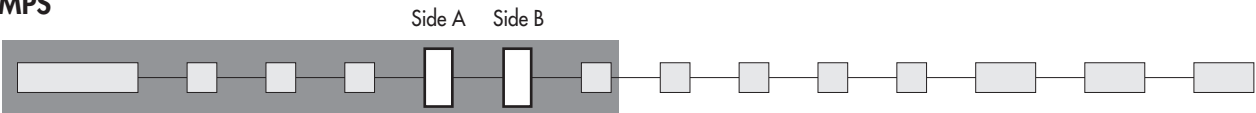
A Silver grain

### BEZEL



2 Black, sealed to IP65

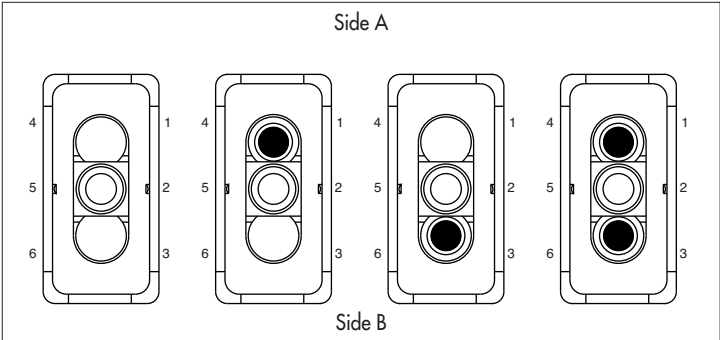
### LAMPS



Complete each enlarged box with one of the codes listed below.

|   |                |
|---|----------------|
| X | Without lamp   |
| A | 6V LED red     |
| B | 6V LED green   |
| C | 6V LED yellow  |
| D | 12V LED red    |
| E | 12V LED green  |
| F | 12V LED yellow |
| G | 18V LED red    |
| H | 18V LED green  |
| I | 18V LED yellow |

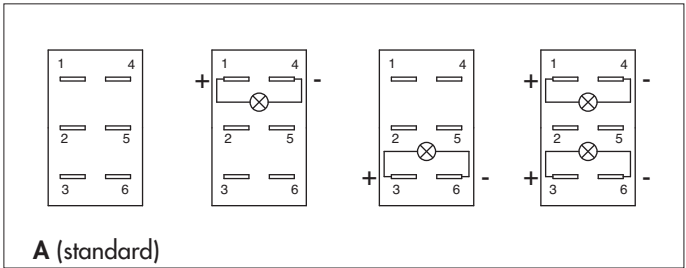
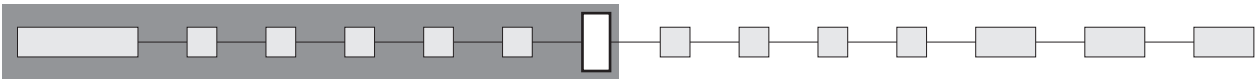
|   |                  |
|---|------------------|
| J | 24V LED red      |
| K | 24V LED green    |
| L | 24V LED yellow   |
| M | Neon 125V        |
| N | Neon 250V        |
| O | Filament 6V      |
| P | Filament 12V     |
| R | Filament 24V     |
| S | Fluorescent 220V |
| T | Fluorescent 110V |



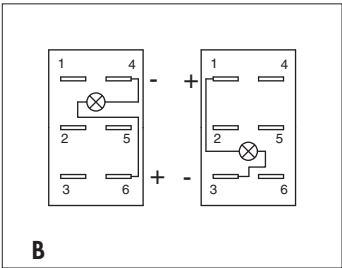
White and blue LEDs : on request.

### LAMP WIRING

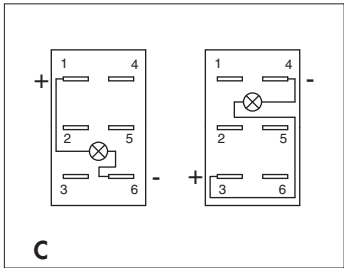
The lamp wiring diagram is shown on the case.



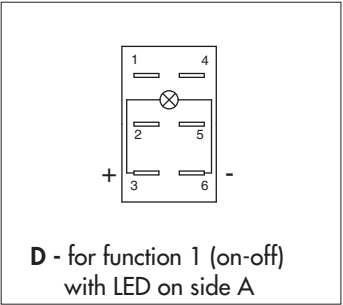
A (standard)



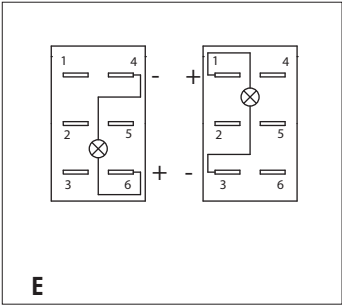
B



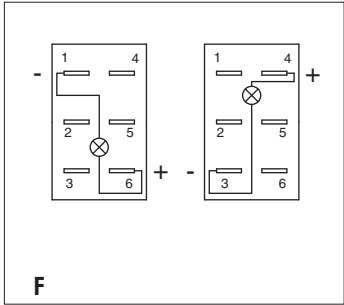
C



D - for function 1 (on-off)  
with LED on side A



E



F

Note : If not available,  
terminals are added to  
connect the LED.

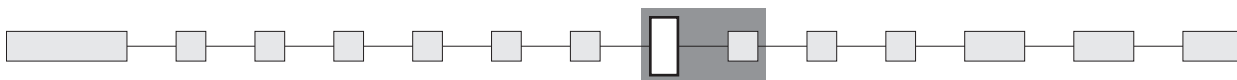
To order case only (without rocker), finish your order number with the lamp wiring code.

# KG series

## Power rocker switches

### Rocker - Lenses

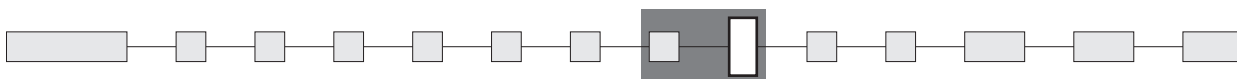
#### ROCKER COLOUR



|     |           |
|-----|-----------|
| 1   | Blue      |
| 1/4 | Dark blue |
| 2   | Black     |
| 3   | Green     |
| 4   | Grey      |

|   |        |
|---|--------|
| 5 | Yellow |
| 6 | Red    |
| 7 | Ivory  |
| 9 | Orange |

#### ROCKER SHAPE



1

Full rocker



4

Opening on side A



6

Opening on side B



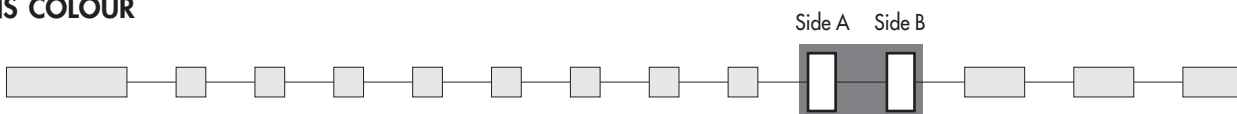
8

Opening on sides A and B

Other rocker shapes on customer specifications : on request.

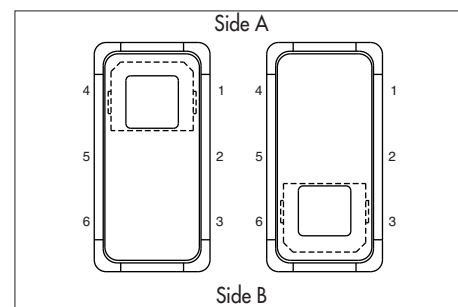
To order rocker only (without case), begin the order number with code KGR, then follow the order format from "rocker colour" until the end of the options.

#### LENS COLOUR



Complete each enlarged box with one of the codes listed below.

|   |             |
|---|-------------|
| X | No lens     |
| 1 | Blue *      |
| 3 | Green *     |
| 6 | Red         |
| 9 | Orange      |
| B | White       |
| T | Translucent |

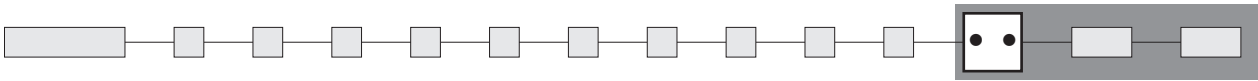


\* Blue or green lens recommended with fluorescent lamp.

To order lenses only, begin the order number with the codes :  
KGLA for lens A and KGLB for lens B,  
then follow the order format from "lens colour" until the end of the options.

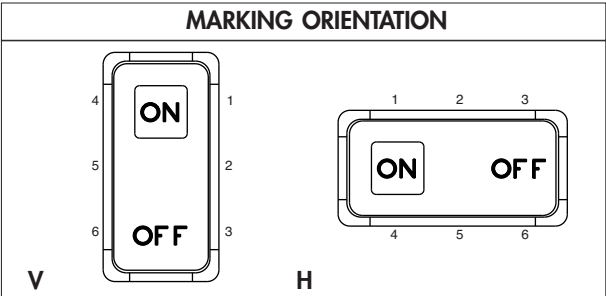
MARKING

If no marking required, leave all boxes blank.



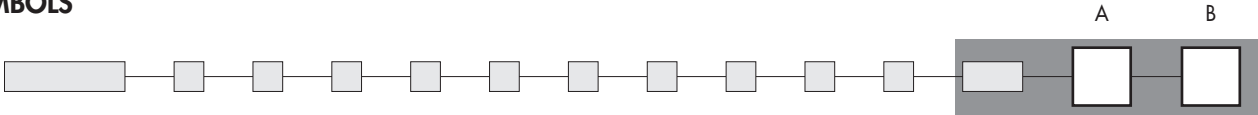
Select one option from each of the tables below.

| MARKING METHOD |              |
|----------------|--------------|
| C              | Hot stamping |



Other orientations :  
on request

SYMBOLS



XX No symbol

Available symbols : see end of section D.

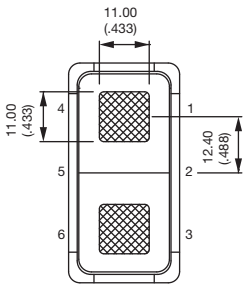
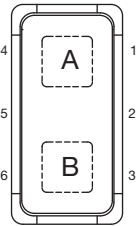
Marking colour

White marking for black rockers - Black marking for colour rockers

Other : on request.

Marking area

For illuminated versions. The symbol will be included in the hatched area.



# K range

## Power rocker switches and indicators

### Symbols

UG1410A

Most symbols meet the ISO 7000 standard "graphical symbols for use on equipments" (code given in bracket in the description). Contact us for symbols not featured in the following tables.

#### Legend scale :

KR series : 1:1

KL, KG and KI series : depending on space available on the product (see "Symbols" section at the end of each series).

| CODE | SYMBOL | DESCRIPTION            |
|------|--------|------------------------|
| XX   | None   | -                      |
| 01   | ON     | -                      |
| 02   | OFF    | -                      |
| 03   | O      | -                      |
| 04   | I      | -                      |
| 05   | II     | -                      |
| 06   | STOP   | -                      |
| 07   | A      | Stop                   |
| 08   | M      | Motion                 |
| 09   | ▲      | Up motion              |
| 10   | ▼      | Down motion            |
| 11   | ☀      | Hot                    |
| 12   | ✱      | Cold                   |
| 13   | ⚠      | Hazard warning (0085)  |
| 14   | ☀      | Traveller lighting     |
| 15   | ☀      | Driver lighting (1421) |

| CODE | SYMBOL | DESCRIPTION                          |
|------|--------|--------------------------------------|
| 16   | ☀      | Revolving light                      |
| 17   | ☀      | Rear ventilator                      |
| 18   | ☀      | Heating (0637)                       |
| 19   | ☀      | Door opening                         |
| 20   | ☀      | Windshield demister/defroster (0635) |
| 21   | ☀      | Windshield wiper (0086)              |
| 22   | ☀      | Windshield washer (0088)             |
| 23   | ☀      | Ventilator fan (0089)                |
| 24   | ☀      | Side mirror defroster                |
| 25   | ☀      | Restarting pump                      |
| 26   | ☀      | Front fog lights (0633)              |
| 27   | ☀      | Rear fog lights (0634)               |
| 28   | ☀      | Propulsion system trim               |
| 29   | ☀      | Beacon (1141)                        |
| 30   | ☀      | Anchor                               |
| 31   | ☀      | Electric motor (0011)                |

| CODE | SYMBOL | DESCRIPTION                           |
|------|--------|---------------------------------------|
| 32   | ☀      | Emergency first aid vehicle (2565)    |
| 33   | ☀      | Load tipping (1557)                   |
| 34   | ☀      | Loading light (2457)                  |
| 35   | ☀      | Tractor, rear-ward (1667)             |
| 36   | ☀      | Combine, direction of movement (1678) |
| 37   | ☀      | Use no forks (2406)                   |
| 38   | ☀      | Transmission (1166)                   |
| 39   | ☀      | Working spot light (1145)             |
| 40   | ☀      | Engine (0640)                         |
| 41   | ☀      | Horn (0244)                           |
| 42   | ☀      | Lock (1656)                           |
| 43   | ☀      | Taxi sign light (2551)                |
| 44   | ☀      | Working light (1204)                  |
| 45   | ☀      | Working light symmetric (1204)        |
| 46   | ☀      | -                                     |
| 47   | ASM    | -                                     |

# K range

## Power rocker switches and indicators

### Symbols

Most symbols meet the ISO 7000 standard "graphical symbols for use on equipments" (code given in bracket in the description). Contact us for symbols not featured in the following tables.

#### Legend scale :

KR series : 1:1

KL, KG and KI series : depending on space available on the product (see "Symbols" section at the end of each series).

| CODE | SYMBOL                                                                              | DESCRIPTION               |
|------|-------------------------------------------------------------------------------------|---------------------------|
| 48   |    | All wheel drive           |
| 49   |    | Differential lock (1662)  |
| 50   |    | -                         |
| 51   |    | -                         |
| 52   |   | -                         |
| 53   |  | -                         |
| 54   |  | Rear window wiper (0097)  |
| 55   |  | Rear window washer (0099) |
| 56   |  | Lower load (2223)         |
| 57   |  | Cab lock (1560)           |
| 58   |  | Extraction                |
| 59   |  | Pumping in                |
| 60   |  | Rear PTO (1572)           |
| 61   |  | Front PTO                 |
| 62   |  | Rockshaft down            |
| 63   |  | Rockshaft up              |

| CODE | SYMBOL                                                                              | DESCRIPTION              |
|------|-------------------------------------------------------------------------------------|--------------------------|
| 64   |    | Indicator                |
| 65   |    | Brake release            |
| 66   |    | Baggage room left door   |
| 67   |    | Baggage room right door  |
| 68   |   | Power blinds             |
| 69   |  | Engine idle control      |
| 70   |  | Cruise res/set           |
| 71   |  | Driver windows up/down   |
| 72   |  | Middle door opening      |
| 73   |  | Front door opening       |
| 74   |  | Lighting in baggage room |
| 75   |  | Cruise on/off            |
| 76   |  | TV                       |
| 77   |  | Pump                     |
| 78   |  | Toilet                   |
| 79   |  | Toilet decontamination   |

| CODE | SYMBOL                                                                                | DESCRIPTION              |
|------|---------------------------------------------------------------------------------------|--------------------------|
| 80   |    | Front windshield heating |
| 81   |    | Aus                      |
| 82   |    | Radiator fan             |
| 83   |    | Remove retarder          |
| 84   |   | Restricted speed         |
| 85   |  | Preheater                |
| 86   |  | ABS detection            |
| 87   |  | ECAS detection           |
| 88   |  | Engine stop              |
| 89   |  | Cruise res/cancel        |
| 90   |  | ECAS reset               |
| 91   |  | Driver windows heating   |
| 92   |  | Cruise set               |
| 93   |  | Air bag up/down          |
| 94   |  | Read lighting            |
| 95   |  | Lighting main switch     |

# K range

## Power rocker switches and indicators

### Symbols

Most symbols meet the ISO 7000 standard "graphical symbols for use on equipments" (code given in bracket in the description). Contact us for symbols not featured in the following tables.

#### Legend scale :

KR series : 1:1

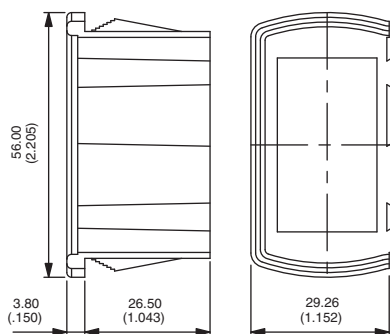
KL, KG and KI series : depending on space available on the product (see "Symbols" section at the end of each series).

| CODE | SYMBOL                                                                              | DESCRIPTION                  |
|------|-------------------------------------------------------------------------------------|------------------------------|
| 96   |    | Heating using water          |
| 97   |    | Low beam                     |
| 98   |    | Position lights              |
| 99   |    | Diesel acceleration          |
| A1   |   | Manual mode                  |
| A2   |  | Clockwise cabin rotation     |
| A3   |  | Anticlockwise cabin rotation |
| A4   |  | -                            |
| A5   |  | -                            |
| A6   |  | Parking brake                |
| A7   |  | -                            |
| A8   |  | -                            |
| A9   |  | -                            |
| AA   |  | -                            |
| AB   |  | -                            |
| AC   |  | -                            |

| CODE | SYMBOL                                                                              | DESCRIPTION                                 |
|------|-------------------------------------------------------------------------------------|---------------------------------------------|
| AD   |    | -                                           |
| AE   |    | -                                           |
| AF   |    | -                                           |
| AG   |    | Battery charging condition (0247)           |
| AH   |   | Turn signals (0084)                         |
| AJ   |  | High beam (0082)                            |
| AK   |  | Differential lock, bogie (2600)             |
| AL   |  | Brushing with a rotating brush (0070)       |
| AM   |  | Differential lock, transfer case 4x4 (2475) |
| AN   |  | Loader bucket, float (1441)                 |
| AP   |  | Loader bucket (1437)                        |
| AQ   |  | Rear window washer & wiper (0098)           |
| AR   |  | Header Header drive (1579)                  |
| AS   |  | Excavator/backhoe boom side shift (2091)    |
| AT   |  | Chemical water treatment (1851)             |
| AU   |  | Grapple skidder, single funct° boom (1762)  |

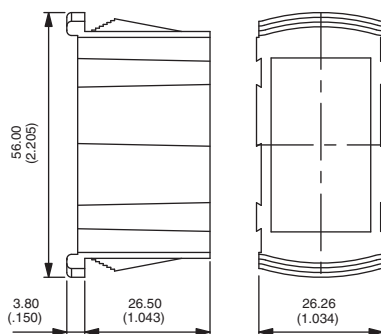
| CODE | SYMBOL                                                                                | DESCRIPTION |
|------|---------------------------------------------------------------------------------------|-------------|
| AV   |    | -           |
| AW   |    | -           |
| AY   |    | -           |
| AZ   |    | -           |
| B1   | HIGH                                                                                  | -           |
| B2   | LOW                                                                                   | -           |
| B3   |  | -           |

### MOUNTING PANEL END



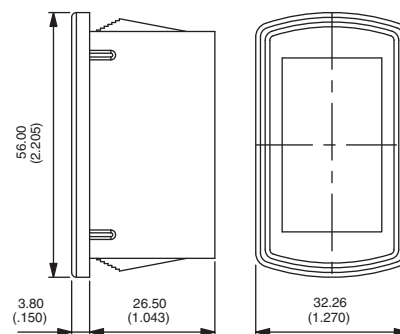
**U2261**

### MOUNTING PANEL MIDDLE



**U2262**

### SINGLE MOUNTING PANEL



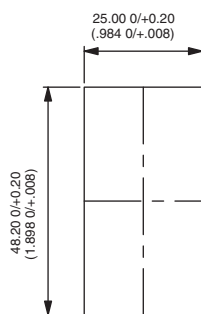
**U2267**

Recommended panel thickness : 1,10 mm - 1,80 mm - 2,60 mm - 3,40 mm - 4,20 mm - 5 mm - 5,80 mm

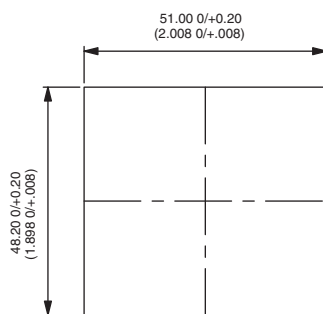
### MOUNTING PANEL CUT-OUT

For additional elements, add 26,40 mm (1.039)

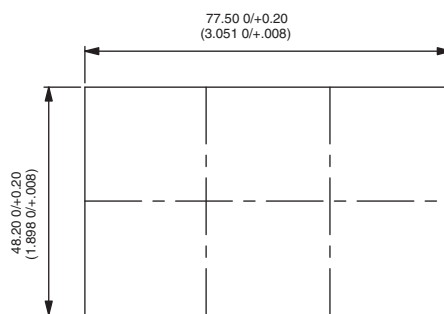
#### For 1 element U2267



#### For 2 elements U2261

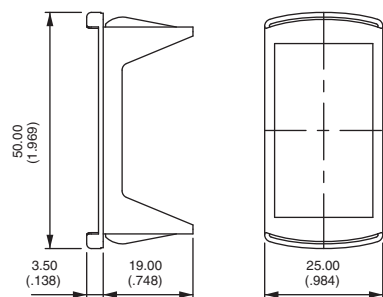


#### For 3 elements (2xU2261 + 1x U2262)



### 22 x 44 ADAPTER

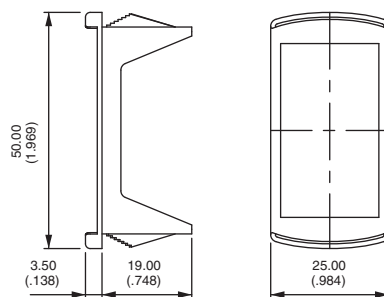
#### Front panel dismounting



**U3060**

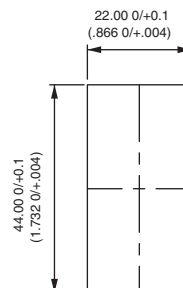
### 22 x 44 ADAPTER

#### Rear panel dismounting



**U3070**

### PANEL CUT-OUT



**Adapter colours** (replace 0 with code)  
 1/4 : dark blue - 2 : black - 4 : grey  
 5 : yellow - 6 : red - 7/1 : white

Recommended panel thickness : 0,60 mm to 1,50 mm

Recommended panel thickness : 1,60 mm -0,1/0 to 5,60 mm -0,1/0 in stages of 0,40 mm

# K range

## Power rocker switches and indicators

Accessories for KR, KL and KI series

### ACTUATOR REMOVING TOOL



U3052

2 tools are supplied

#### EXTRACT ACTUATOR (KR ONLY)

Allows the extraction of the rocker / rocker support assembly.  
Place the 2 claws under the support and push as indicated by the arrow.

#### EXTRACT ROCKER (KR ONLY)

Allows to separate the rocker from its support.

Insert the tool between rocker and support as indicated by the arrow. Pull out the tool in the opposite direction.

#### EXTRACT SWITCH (KR, KL AND KI)

Allows to extract switch from panel mounting units. 2 tools are necessary.

Insert the tools between switch and panel mounting units from the rear to compress the snap-in device. Pull off switch manually.

### CONNECTORS

Standard colour : black. Other colours : on request.

Connectors cannot be combined with wiring types H and I.

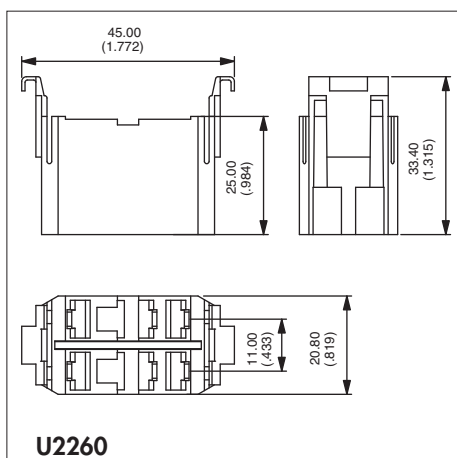


U2260

#### 6 terminal version

For use with terminals type 2, 3, 4 or 5.  
6,35 (1/4) tabs to be fitted by the user  
(example : TE42282-2).

Can be used for the KG series.



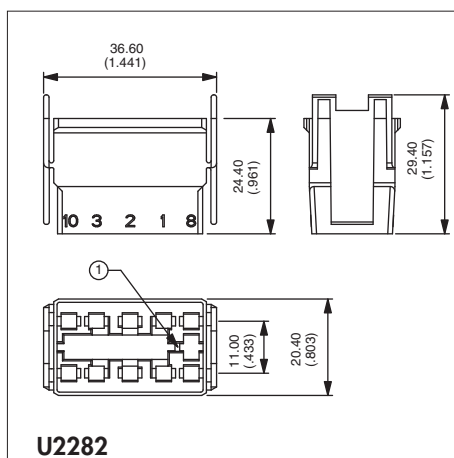
U2260



U2282

#### 10 terminal version

For use with terminals type H or J.  
2,8 (.110) tabs to be fitted by the user  
(example : AMP/Tyco 0-927779-3).



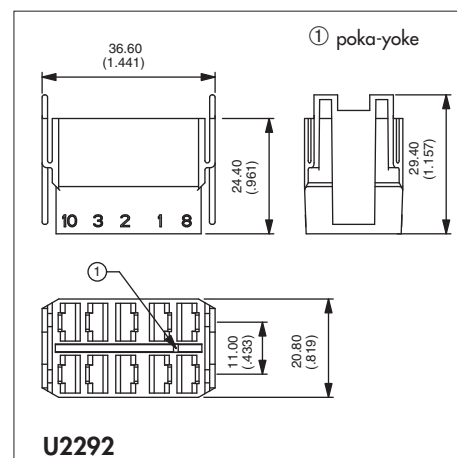
U2282



U2292

#### 10 terminal version

For use with terminals type B, C, E or F.  
6,35 (1/4) tabs to be fitted by the user  
(example : TE42282-2).



U2292

# K range

## Power rocker switches and indicators

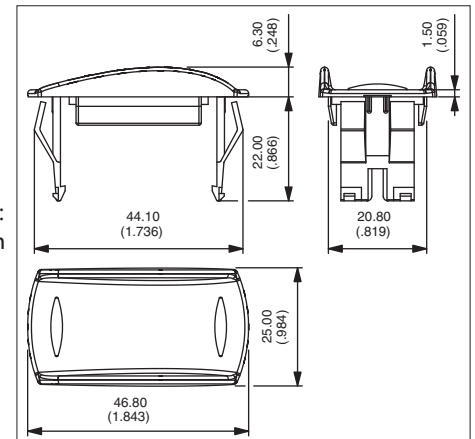
Accessories for KR, KL and KI series

### HOLE PLUGS

Usefull for future extensions.

| Code           | Colour    | Code         | Colour |
|----------------|-----------|--------------|--------|
| <b>U2271</b>   | Blue      | <b>U2274</b> | Grey   |
| <b>U2271/4</b> | Dark blue | <b>U2275</b> | Yellow |
| <b>U2272</b>   | Black     | <b>U2276</b> | Red    |
| <b>U2273</b>   | Green     | <b>U2277</b> | Ivory  |
|                |           | <b>U2279</b> | Orange |

Recommended panel thickness :  
1,50 mm to 6 mm



Connectors can be hanged on specific hole plugs. Contact APEM.

D

# Mouser Electronics

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