

CONTROL COMPONENT

KH-5012 Series



CLASSIFICATION

KH-5012- A 1 1 R
① ② ③ ④

| | |
|------------|--|
| ① SHAPE | A: SQUARE |
| | C: ROUND |
| ② FUNCTION | 0: LED PILOT LAMP |
| | 1: ILLUMINATE PUSHBUTTON SWITCH (MOMENTARY) |
| | 2: ILLUMINATED PUSHBUTTON SWITCH(MAINTAINED) |
| | 3: PUSHBUTTON SWITCH (MOMENTARY) |
| ③ CONTACTS | 4: PUSHBUTTON SWITCH (MAINTAINED) |
| | 0: NO CONTACTS(LED PILOT LAMP) |
| ④ COLOR | 1: 1C (1A1B) |
| | R: RED |
| | G:GREEN |
| | Y: YELLOW |
| | O: ORANGE |
| | W: WHITE |

Lamp operating voltage is under 2V. Connecting resistor is needed.

Please connect resistor [6V: 270Ω (0.5W), 12V: 680Ω (1W), 24V: 1.3KΩ (1W), 48V: 3.9KΩ (1W)] directly to the terminal.

| COLOR | LED(Ø3) RATINGS | | | | |
|---------------|-----------------|-------|--------|---------|-------|
| | RED | GREEN | YELLOW | OREANGE | WHITE |
| VOLTAGE | 1.75V | 2.1V | 2.0V | 2.0V | 2.0V |
| CURRENT | 25mA | | | | |
| AVERAGE VOLT. | 15 □20mA | | | | |
| REVERSE VOLT. | 4V | | | | |

CONTROL COMPONENT

Dimensions

KH-5012-C00



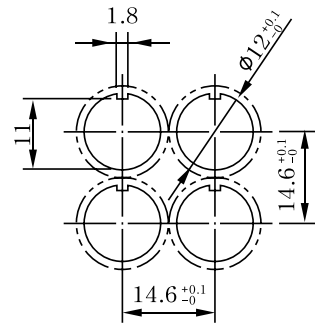
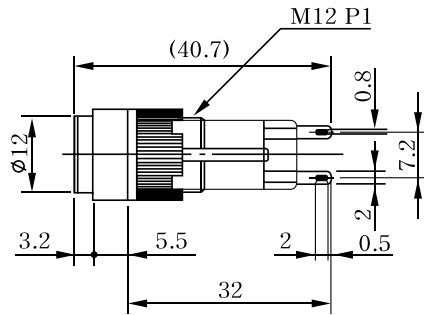
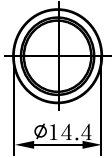
KH-5012-A00



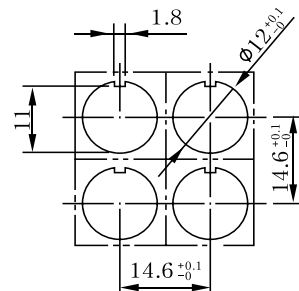
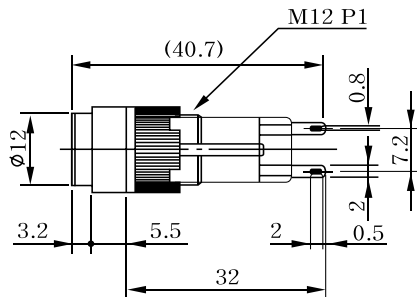
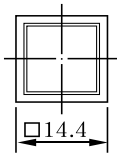
KH-5012-C11
KH-5012-C21
KH-5012-C31
KH-5012-C41



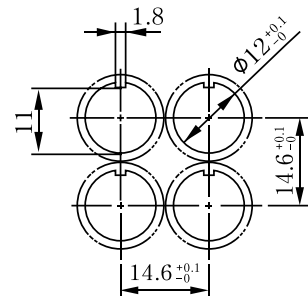
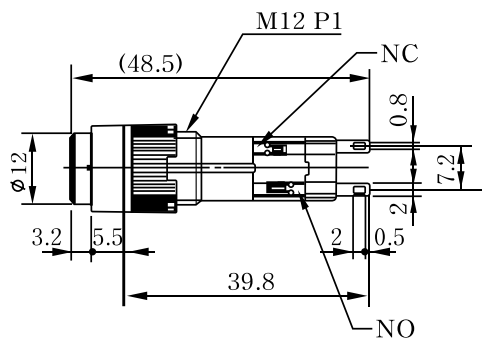
KH- 5012- C00



KH- 5012- A00



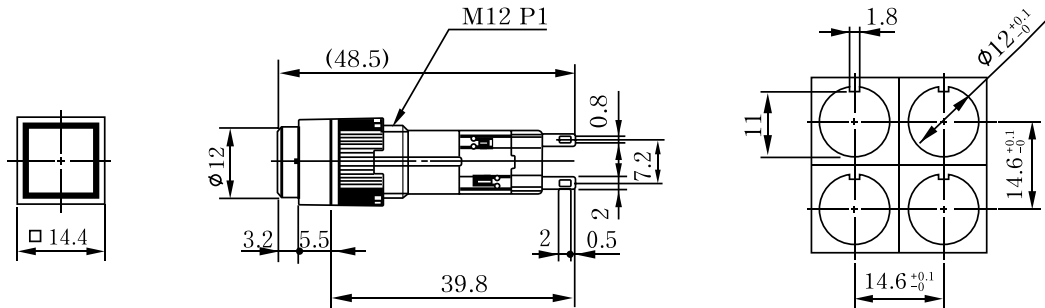
KH- 5012- C11
KH- 5012- C21
KH- 5012- C31
KH- 5012- C41



CONTROL COMPONENT

Dimensions

KH-5012-A11
KH-5012-A21
KH-5012-A31
KH-5012-A41



Specification

| | | | | | | |
|---------------------------|--|-----------------------|---------|----|---------|----|
| Switching System | The switching element of KH- 5012 is equipped with normally open contact and normally closed contact.1C contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | PC | Buttons | PC |
| Mechanical Lifetime | Momentary type: 500,000 Cycles of operation Maintained type: 200,000 Cycles of operation | | | | | |
| Standards | This product comply with “ Standards for low- voltage switching devices” EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 1A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 70,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Lamp Ratings | LED LAMP: DC2V 20mA | | | | | |
| Operational Temperature | - 15° C □+50° C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 100G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □5Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | KC | | | | | |
| Declaration of Conformity | None | | | | | |

CONTROL COMPONENT

KH-516 Series



CLASSIFICATION

KH- 516L- A 1 2- R (12)

① ② ③ ④ ⑤ ⑥

| | |
|-----------------|--|
| ① SHAPE | A: SQUARE |
| | B: RECTANGLE |
| | C: ROUND |
| | D: EMERGENCY STOP |
| ② FUNCTION | 0: PILOT LAMP |
| | 1: ILLUMINATE PUSHBUTTON SWITCH (MOMENTARY) |
| | 2: ILLUMINATED PUSHBUTTON SWITCH(MAINTAINED) |
| | 3: PUSHBUTTON SWITCH (MOMENTARY) |
| ③ CONTACTS | 4: PUSHBUTTON SWITCH (MAINTAINED) |
| | 0: NO CONTACTS(PILOT LAMP) |
| | 1: 1C (1A1B) |
| ④ COLOR | 2: 2C (2A2B) |
| | R: RED |
| | G:GREEN |
| | Y: YELLOW |
| | O: ORANGE |
| | W: WHITE |
| | B: BLUE |
| ⑤ INPUT VOLTAGE | 6: 6V |
| | 12:12V |
| | 24: 24V |

CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

CONTROL COMPONENT

PILOT LAMPS

KH- 516- C00
KH- 516L- C00



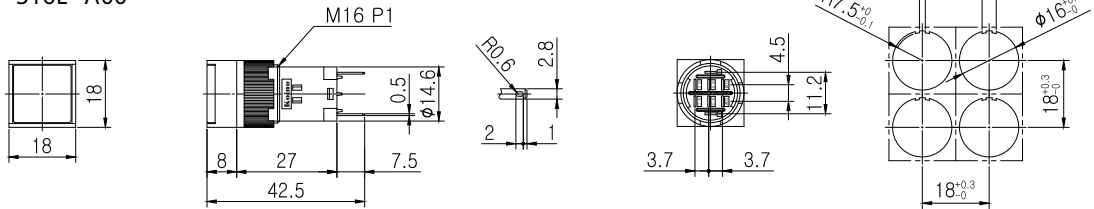
KH- 516- A00
KH- 516L- A00



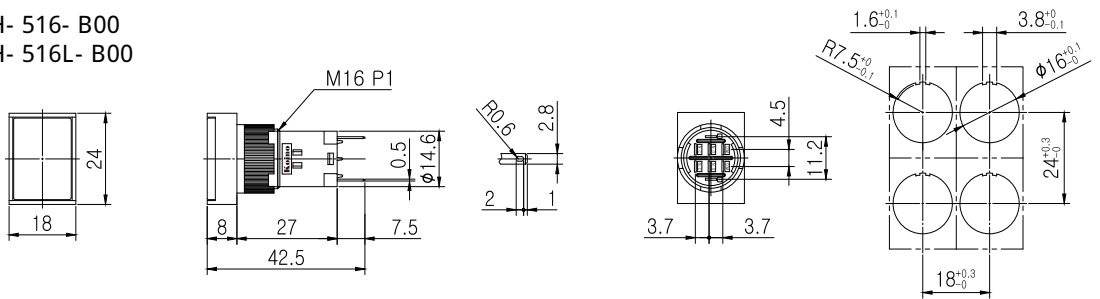
KH- 516- B00
KH- 516L- B00



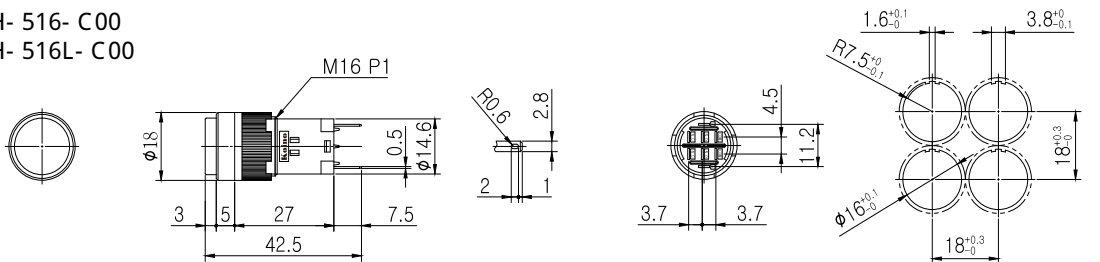
KH- 516- A00
KH- 516L- A00



KH- 516- B00
KH- 516L- B00



KH- 516- C00
KH- 516L- C00



CONTROL COMPONENT

ILLUMINATED PUSHBUTTON SWITCH(MOMENTARY)

KH- 516- C11,12
KH- 516L- C11,12



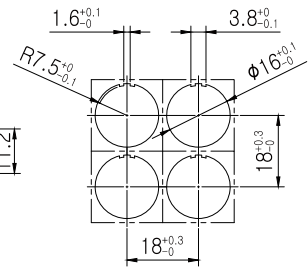
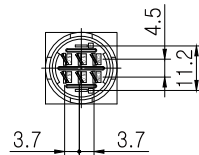
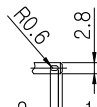
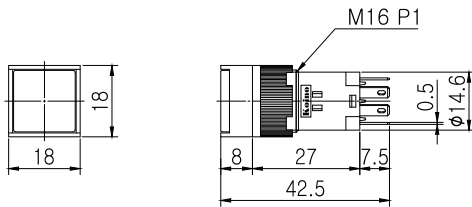
KH- 516- A11,12
KH- 516L- A11,12



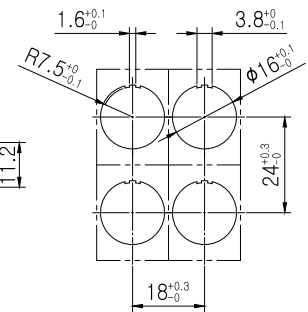
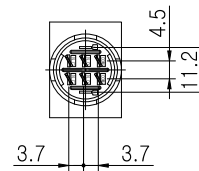
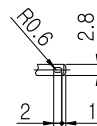
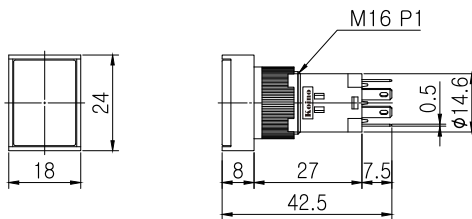
KH- 516- B11,12
KH- 516L- B11,12



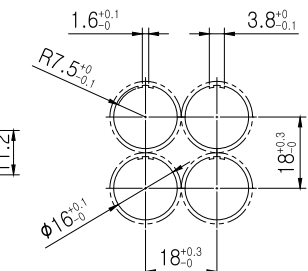
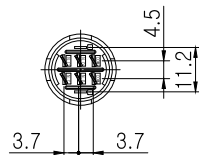
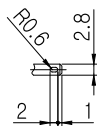
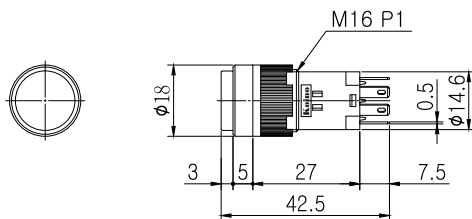
KH- 516- A11(1c),A12(2c)
KH- 516L- A11(1c),A12(2c)



KH- 516- B11(1c),B12(2c)
KH- 516L- B11(1c),B12(2c)



KH- 516- C11(1c),C12(2c)
KH- 516L- C11(1c),C12(2c)



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

CONTROL COMPONENT

ILLUMINATED PUSHBUTTON SWITCH(MAINTAINED)

KH- 516- C21,22
KH- 516L- C21,22



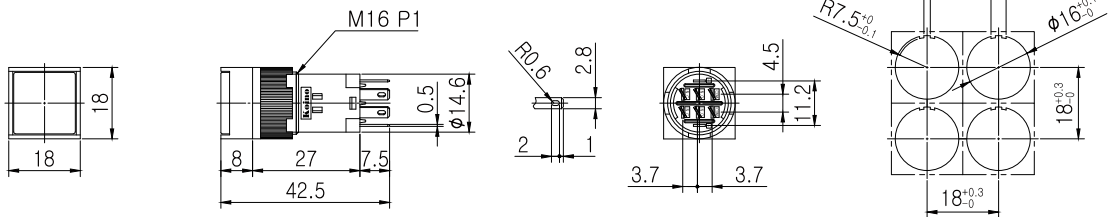
KH- 516- A21,22
KH- 516L- A21,22



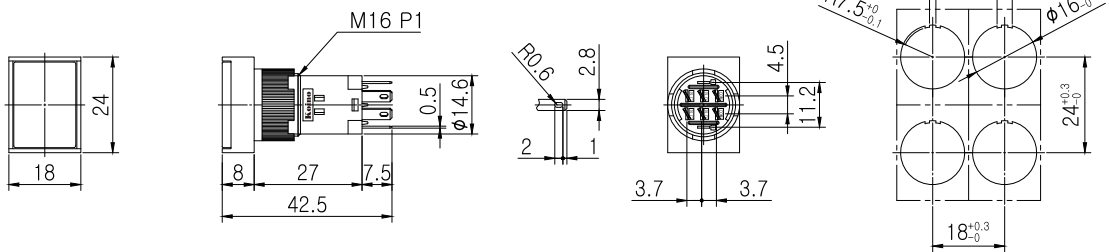
KH- 516- B21,22
KH- 516L- B21,22



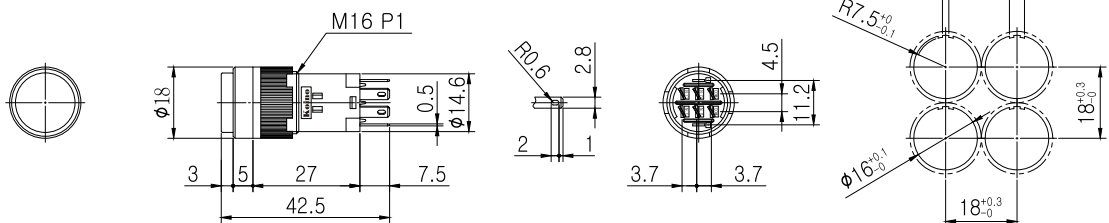
KH- 516- A21(1c),A22(2c)
KH- 516L- A21(1c),A22(2c)



KH- 516- B21(1c),B22(2c)
KH- 516L- B21(1c),B22(2c)



KH- 516- C21(1c),C22(2c)
KH- 516L- C21(1c),C22(2c)



CONTROL COMPONENT

PUSHBUTTON SWITCH(MOMENTARY)

KH- 516- C31,32



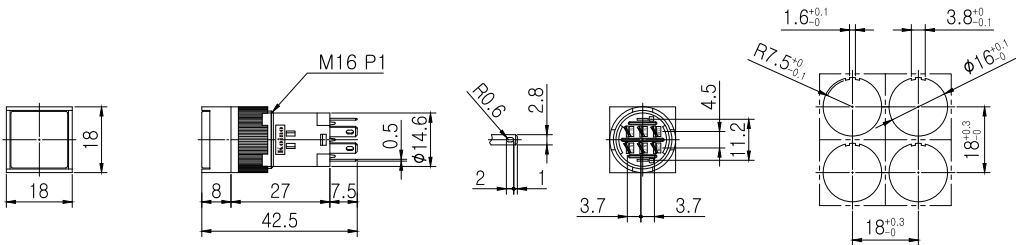
KH- 516- A31,32



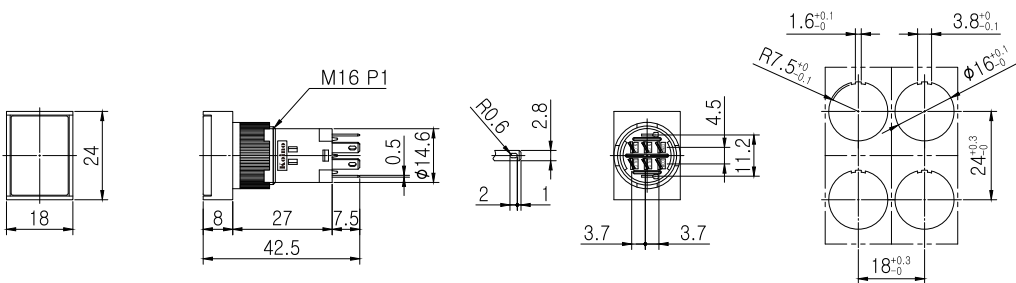
KH- 516- B31,32



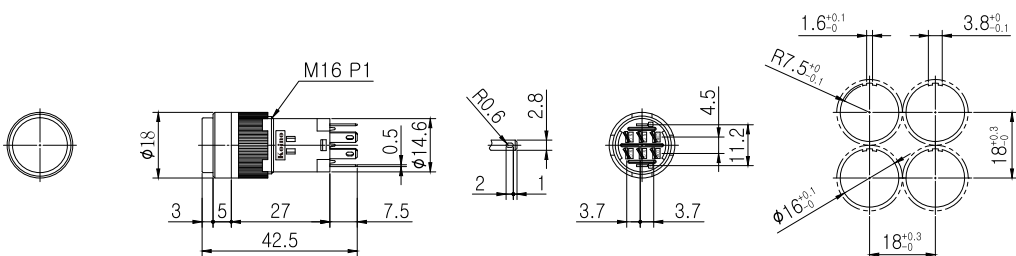
KH- 516- A31(1c),A32(2c)



KH- 516- B31(1c),B32(2c)



KH- 516- C31(1c),C32(2c)



CONTROL COMPONENT

PUSHBUTTON SWITCH(MAINTAINED)

KH- 516- C41,42



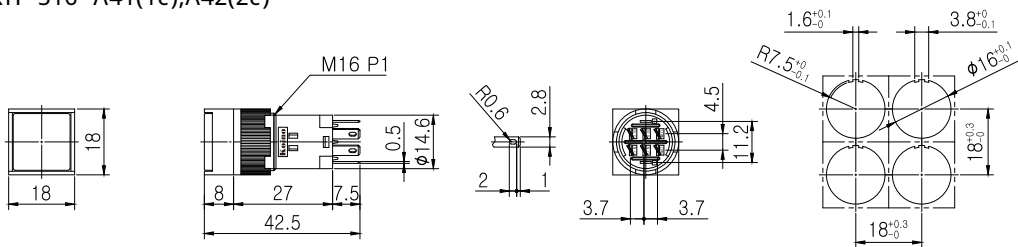
KH- 516- A41,42



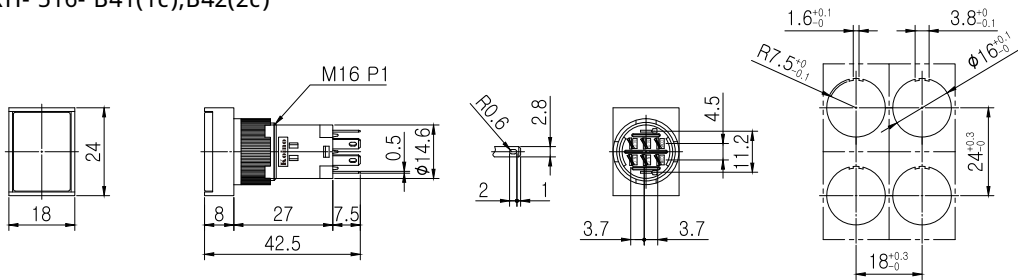
KH- 516- B41,42



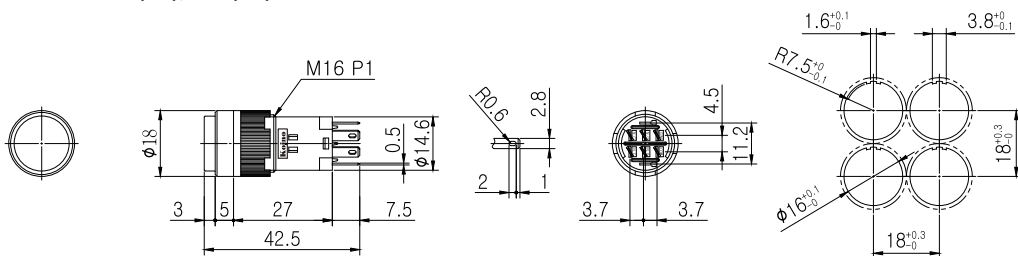
KH- 516- A41(1c),A42(2c)



KH- 516- B41(1c),B42(2c)



KH- 516- C41(1c),C42(2c)



CONTROL COMPONENT

PUSHBUTTON SWITCH(MUSHROOM HEAD TYPE)

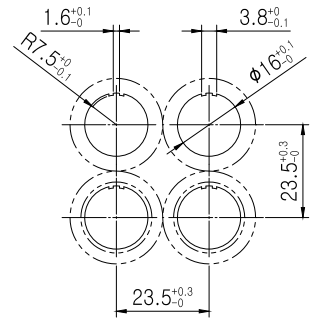
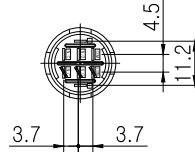
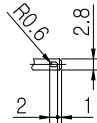
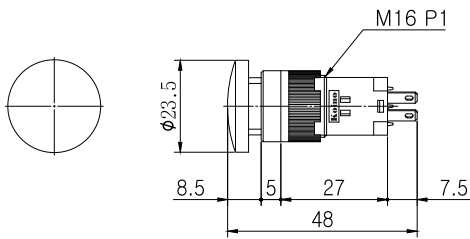
KH- 516- D31,32
MOMENTARY



KH- 516- D41,42
MAINTAINED



KH- 516- D31,32 KH- 516- D41,42

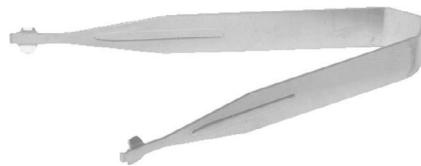


ACCESSORIES

KA- 16
SAFETY COVER FOR KH- 516



LAMP REMOVAL TOOL
FOR KH- 516



ANTI- ROTATION RING



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

CONTROL COMPONENT

Specification

| | | | | | | |
|---------------------------|--|--------------------------|---------|-------------|---------|----|
| Switching System | The switching element of KH- 516 is equipped with normally open contact and normally closed contact.1C and 2C contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | Nylon galss | Buttons | PC |
| Mechanical Lifetime | Momentary type: 500,000 Cycles of operation Maintained type: 200,000 Cycles of operation | | | | | |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | | | |
| Standards | This product comply with “ Standards for low- voltage switching devices” EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 1A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 70,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Lamp Ratings | FILAMENT LAMP: 6V(60mA), 12V(40mA), 24V(24mA) LED LAMP: DC 6V(40mA), DC 12V(20mA), DC 24V(20mA) | | | | | |
| Operational Temperature | - 15°C □+50°C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 100G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □55Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | KC | | | | | |
| Declaration of Conformity | None | | | | | |

PUSHBUTTON SWITCH KPB16 Series



CLASSIFICATION

KPB- 16 $\frac{S}{①}$ $\frac{M}{②}$ - $\frac{R}{③}$ $\frac{1}{④}$

| | | | | |
|------------|------|-------------|------|--------------------------------|
| ① SHAPE | NONE | ROUND | NONE | Ø18mm Head |
| | | | 0 | Ø25mm Head Flush Mounting Type |
| | | | 1 | Ø25mm Head |
| ② ACTUATOR | S | SQUARE | | |
| | R | RECTANGULAR | | |
| ③ COLOR | M | MOMENTARY | | |
| | AT | MAINTAINED | | |
| ④ CONTACTS | R | RED | | |
| | G | GREEN | | |
| | Y | YELLOW | | |
| | O | ORANGE | | |
| | W | WHITE | | |
| | B | BLUE | | |
| ④ CONTACTS | 1 | 1C | | |
| | 2 | 2C | | |

CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

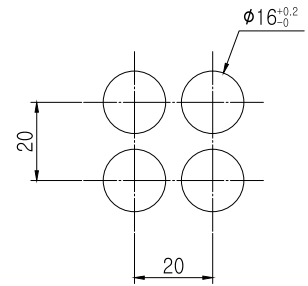
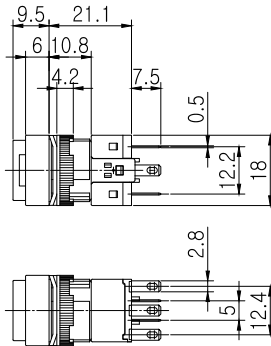
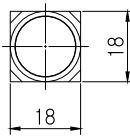
HOIST SWITCH

CAM SWITCH

Dimensions



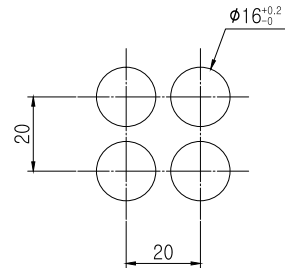
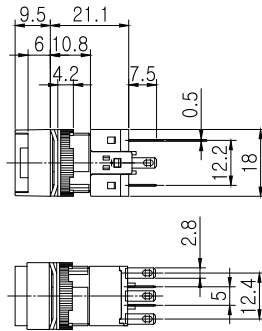
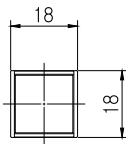
KPB16M
KPB16AT



Panel Cut Size



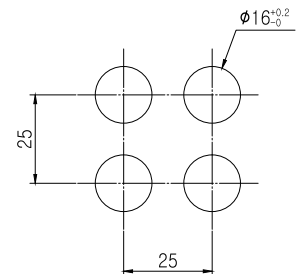
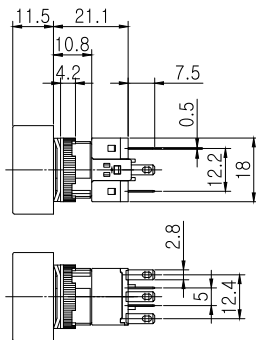
KPB16SM
KPB16SAT



Panel Cut Size



KPB160M
KPB160AT

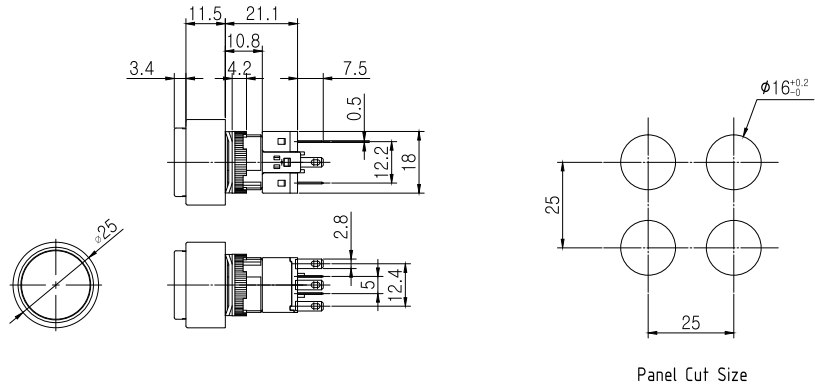


Panel Cut Size

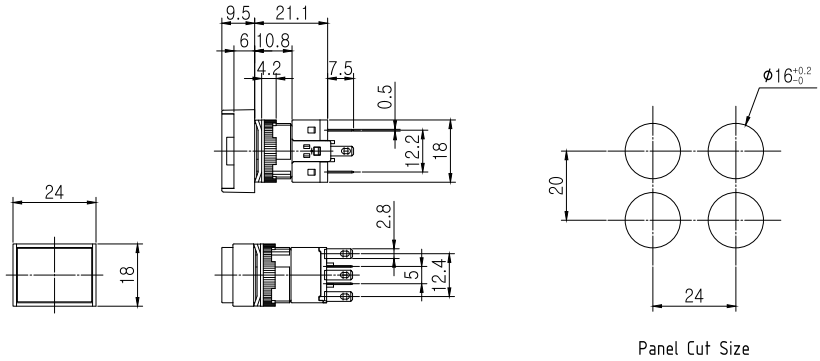
Dimensions



KPB161M
KPB161AT



KPB16RM
KPB16RAT



ACCESSORIES

KA-16
SAFETY COVER FOR KH-516



ANTI-ROTATION RING



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

Specification

| | | | | | | |
|---------------------------|---|-----------------------|---------|---|---------|----|
| Switching System | The switching element of KPB16 is equipped with normally open contact and normally closed contact. 1C and 2C contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | BODY: Nylon glass CONTACT HOUSING: PBT | Buttons | PC |
| Mechanical Lifetime | Momentary type: 1,000,000 Cycles of operation Maintained type: 200,000 Cycles of operation | | | | | |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 3A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 100,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Operational Temperature | - 15° C □+50° C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 10G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □55Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | UL, CCC, KC | | | | | |
| Declaration of Conformity | CE | | | | | |

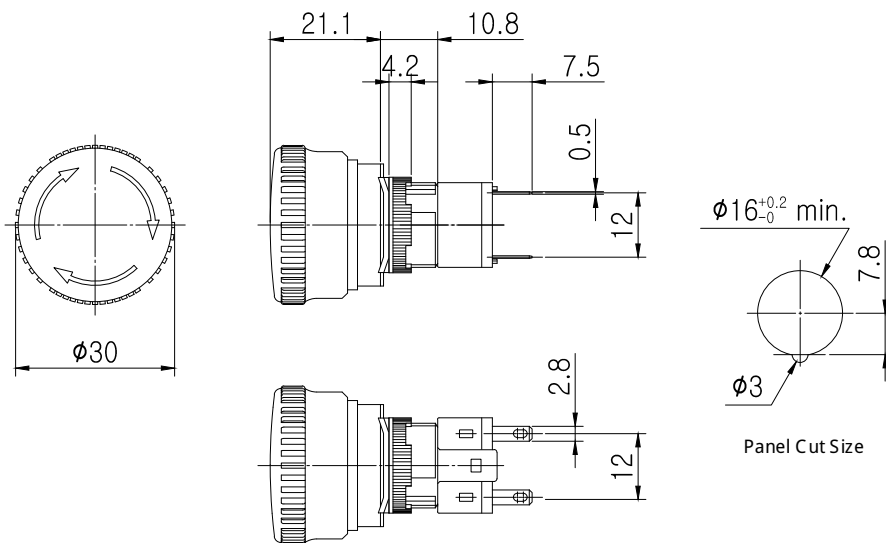
EMERGENCY STOP SWITCH **KEPB16ER**



CLASSIFICATION

KEPB16ER - R 1B
 ① ②

| | | |
|------------|------|--------|
| ① COLOR | R | RED |
| | G | GREEN |
| | Y | YELLOW |
| ② CONTACTS | 1A | 1A |
| | 1B | 1B |
| | 2A | 2A |
| | 2B | 2B |
| | 1A1B | 1A1B |



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

Specification

| | | | | | | |
|---------------------------|---|--------------------------|---------|---|---------|----|
| Switching System | The switching element of KEPB16 is equipped with normally open contact and normally closed contact. 1A, 1B, 2A, 2B, and 1A1B contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | BODY: Nylon glass CONTACT HOUSING: PBT | Buttons | PC |
| Mechanical Lifetime | 1,000,000 Cycles of operation | | | | | |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 3A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 100,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Operational Temperature | - 15°C □+ 50°C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 100G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □55Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | UL, CCC, KC | | | | | |
| Declaration of Conformity | CE | | | | | |

KEPB160ER

Mounting cut- out : $\varnothing 16\text{mm}$

Front dimension : $\varnothing 28\text{mm}$

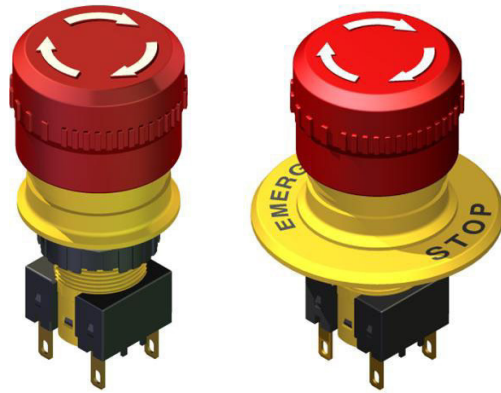
Marking: Arrows

IP- Rating : IP65

Switching action : Maintained

Function : Emergency STOP Switch

Twist to unlock clockwise



INSTALLATION



Dimensions



LP16-1



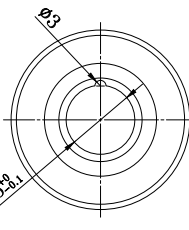
LP16-2



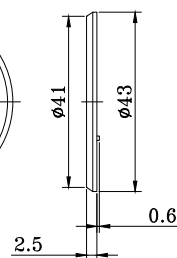
LP16-1



LP16-2



LP16-3



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

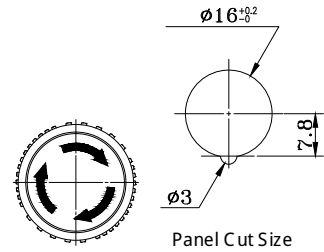
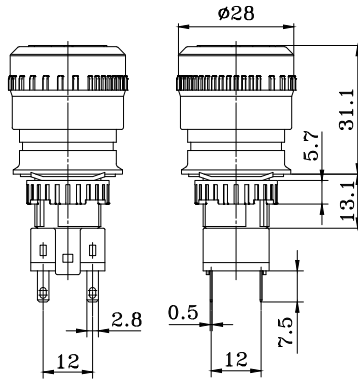
Dimensions

KEPB160ER

KEPB160ERS



White arrows

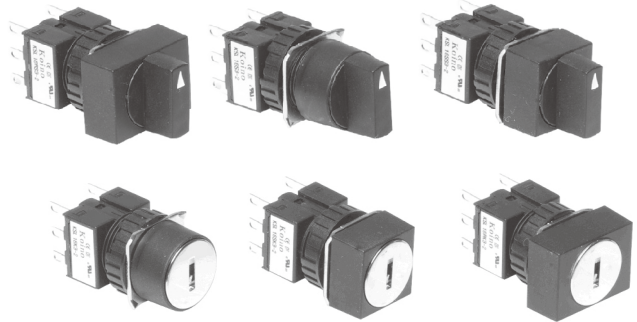


Panel Cut Size

Specification

| | | | | | | |
|---------------------------|--|-----------------------|---------|-------|---------|----|
| Switching System | The switching element of KEPB160ERS is equipped with normally open contact or normally closed contact. The normally closed contact has direct opening or forced opening structure. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | Nylon | Buttons | PC |
| Mechanical Lifetime | 150,000 Cycles of operation | | | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 3A, 125VAC 5A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 100,000 cycles of operation | | | | | |
| Operational Temperature | - 15° C □+50° C | | | | | |
| Protection Degree | IP65 | | | | | |
| Shock Resistance | Approximately 15G | | | | | |
| Vibration Resistance | 10 □55Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | UL | | | | | |
| Declaration of Conformity | CE | | | | | |

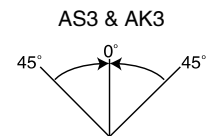
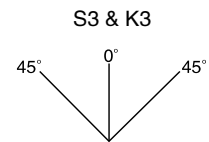
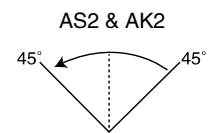
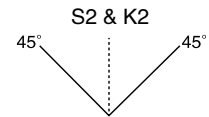
SELECTOR SWITCH KSL16 Series



CLASSIFICATION

KSL16 S S2 - L 1C R 1
 ① ② ③ ④ ⑤ ⑥

| | | |
|-----------------|------|--------------------------------|
| ① SHAPE | NONE | ROUND |
| | S | SQUARE |
| | R | RECTANGULAR |
| ② ACTUATOR | S2 | 2 STEPS MANUAL RETURN |
| | AS2 | 2 STEPS SPRING RETURN |
| | S3 | 3 STEPS MANUAL RETURN |
| | AS3 | 3 STEPS SPRING RETURN |
| | K2 | 2 STEPS MANUAL RETURN WITH KEY |
| | AK2 | 2 STEPS SPRING RETURN WITH KEY |
| | K3 | 3 STEPS MANUAL RETURN WITH KEY |
| ③ LAMP | NONE | NO LAMP |
| | F | FILAMENT LAMP |
| | L | LED LAMP |
| ④ INPUT VOLTAGE | 1C | 6V |
| | 2C | 12V |
| | 3C | 24V |
| ⑤ COLOR | R | RED |
| | G | GREEN |
| | Y | YELLOW |
| | O | ORANGE |
| | W | WHITE |
| ⑥ CONTACTS | 1 | 1C |
| | 2 | 2C |



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

Dimensions

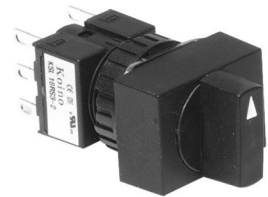
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KSL16S3,AS3



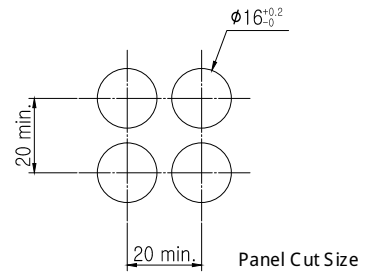
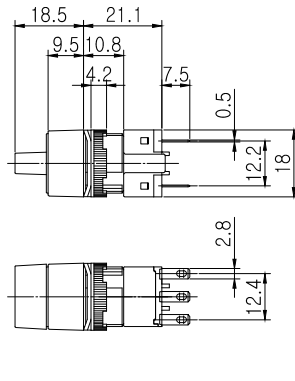
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KSL16SS3,SAS3



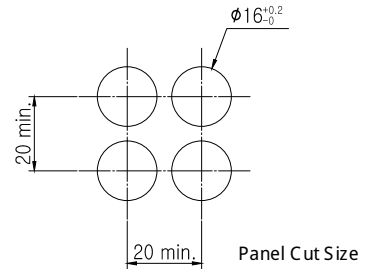
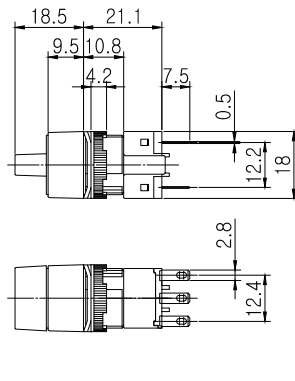
KSL16RS2,RAS2
KSL16RS3,RAS3



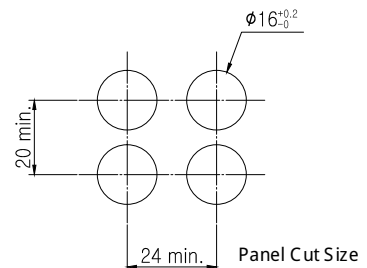
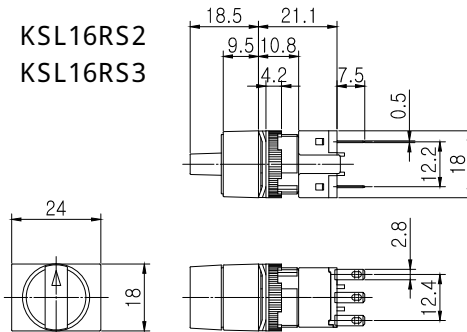
KSL16S2
KSL16S3



KSL16SS2
KSL16SS3



KSL16RS2
KSL16RS3

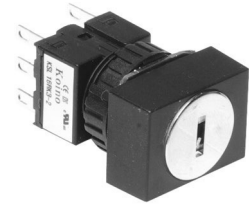


Dimensions

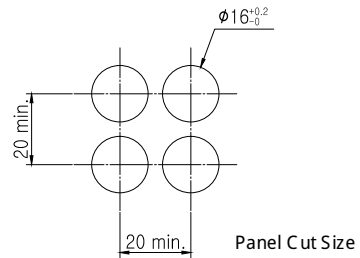
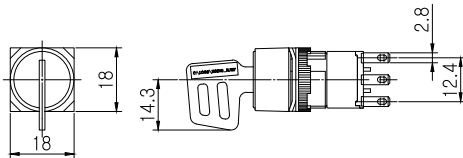
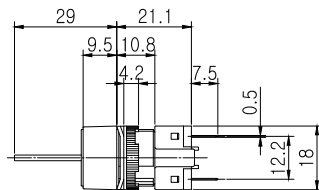
KSL16K2,AK2
KSL16K3,AK3

KSL16SK2,SAK2
KSL16SK3,SAK3

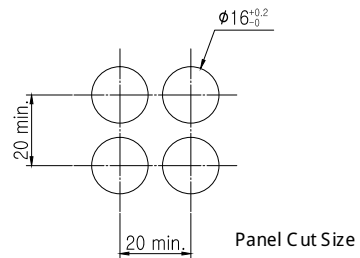
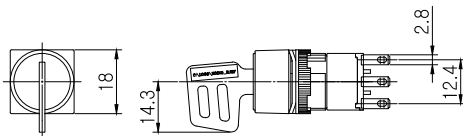
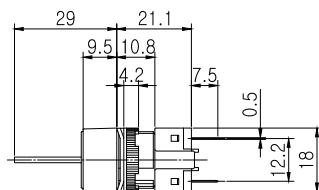
KSL16RK2,RAK2
KSL16RK3,RAK3



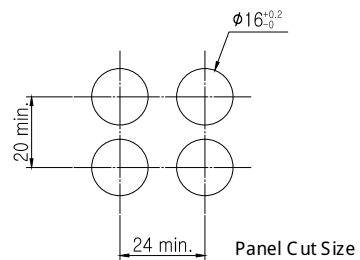
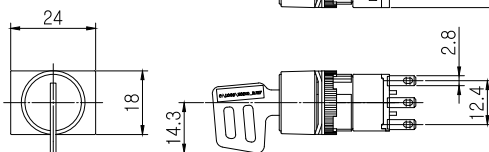
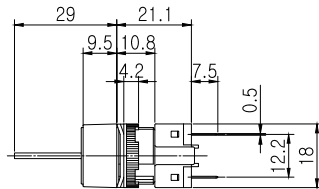
KSL16K2
KSL16K3



KSL16SK2
KSL16SK3



KSLR16SK2
KSLR16SK3



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

Specification

| | | | | | | |
|---------------------------|---|-----------------------|---------|---|------|-------------|
| Switching System | The switching element of KSL16 is equipped with normally open contact and normally closed contact. 1C and 2C contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | BODY: Nylon glass CONTACT HOUSING: PBT | Knob | Nylon glass |
| Mechanical Lifetime | 100,000 Cycles of operation | | | | | |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 3A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 100,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Operational Temperature | - 15°C □+50°C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 10G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □5Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | UL, CCC, KC | | | | | |
| Declaration of Conformity | CE | | | | | |

PILOT LAMP KPL16 Series

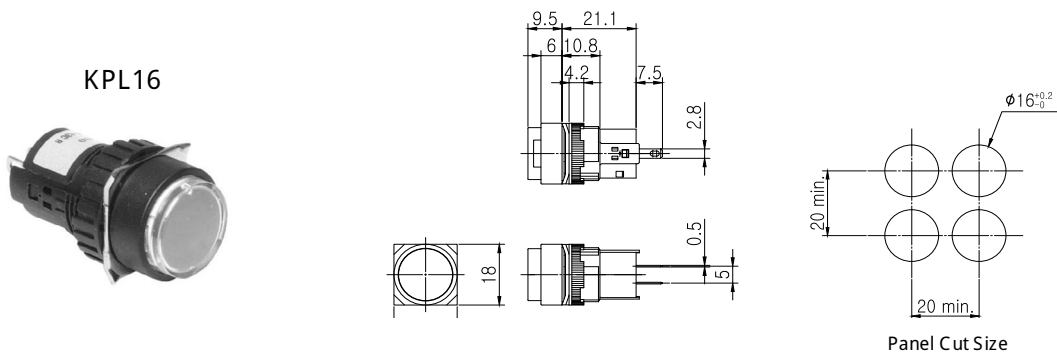


CLASSIFICATION

KPL16 $\frac{R}{①}$ - $\frac{L}{②}$ $\frac{1C}{③}$ $\frac{R}{④}$

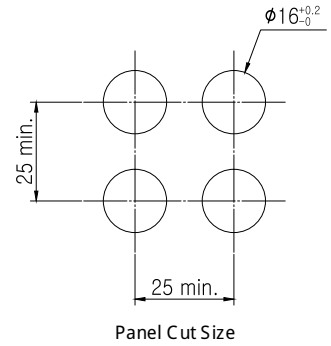
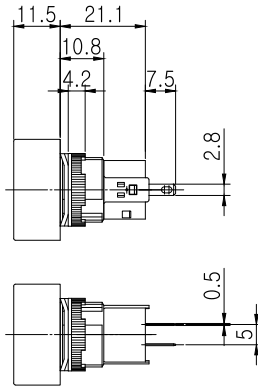
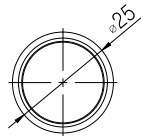
| | | | | |
|-----------------|------|---------------|------|----------------------|
| ① SHAPE | NONE | ROUND | NONE | Ø18mm Head |
| | | | 0 | Ø25mm Head FlushType |
| | | | 1 | Ø25mm Head |
| | S | SQUARE | | |
| | R | RECTANGULAR | | |
| ② LAMP | NONE | FILAMENT LAMP | | |
| | L | LED LAMP | | |
| ③ INPUT VOLTAGE | 1C | 6V | | |
| | 2C | 12V | | |
| | 3C | 24V | | |
| ④ COLOR | R | RED | | |
| | G | GREEN | | |
| | Y | YELLOW | | |
| | O | ORANGE | | |
| | W | WHITE | | |
| | B | BLUE | | |

Dimensions

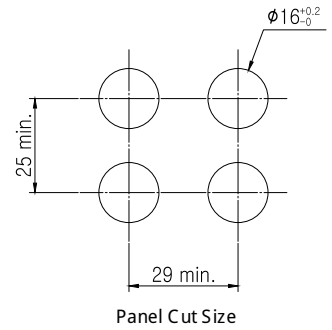
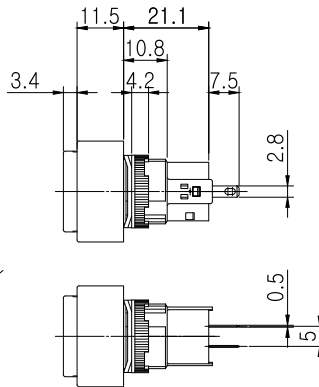
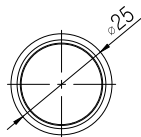


Dimensions

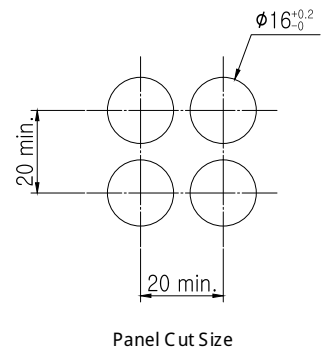
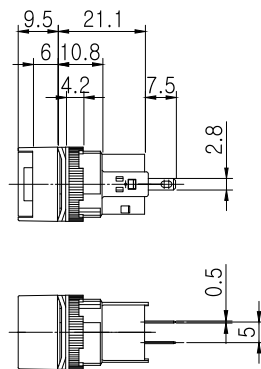
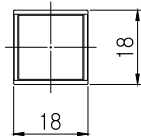
KPL160



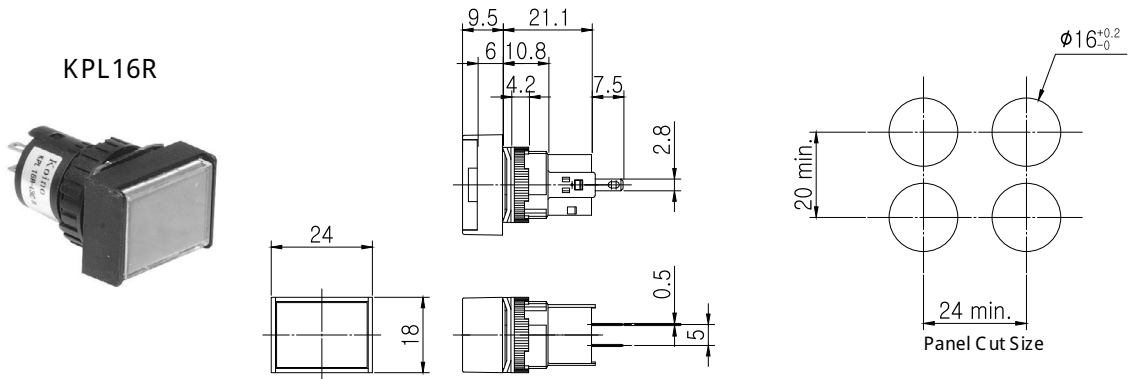
KPL161



KPL16S



Dimensions



Specification

| | | | | |
|---------------------------|---|--|-----|----|
| Material | Housing | BODY: Nylon glass RING: Nylon glass | Cap | PC |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | |
| Contact Resistance | Maximum 30mΩ | | | |
| Electrical Lifetime | 15,000 hours (for LED lamp) | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | |
| Operational Temperature | - 15° C □+ 50° C | | | |
| Operational Humidity | 45 □85%RH | | | |
| Protection Degree | IP40 | | | |
| Shock Resistance | Approximately 10G(1,000m/s ²) | | | |
| Vibration Resistance | 10 □55Hz double amplitude 1.5mm (at X, Y and Z axis) | | | |
| Approbations | UL, CCC, KC | | | |
| Declaration of Conformity | CE | | | |

ILLUMINATED PUSHBUTTON SWITCH **KBL16 Series**



CLASSIFICATION

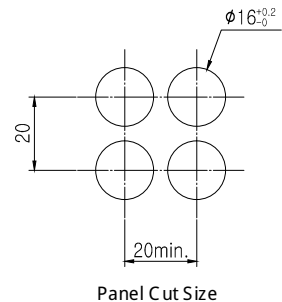
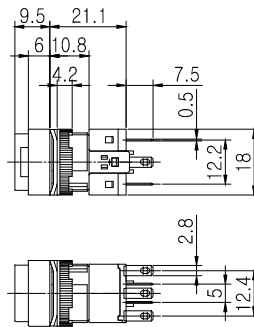
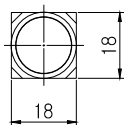
KBL16 S M - L 1C R 1

① ② ③ ④ ⑤ ⑥

| | | | | |
|-----------------|------|-------|---------------|----------------------|
| ① SHAPE | NONE | ROUND | NONE | Ø18mm Head |
| | | | 0 | Ø25mm Head FlushType |
| | | | 1 | Ø25mm Head |
| ② ACTUATOR | S | | SQUARE | |
| | R | | RECTANGULAR | |
| ③ LAMP | M | | MOMENTARY | |
| | AT | | MAINTAINED | |
| ④ INPUT VOLTAGE | NONE | | FILAMENT LAMP | |
| | L | | LED LAMP | |
| ⑤ COLOR | 1C | | 6V | |
| | 2C | | 12V | |
| | 3C | | 24V | |
| ⑥ CONTACTS | R | | RED | |
| | G | | GREEN | |
| | Y | | YELLOW | |
| | O | | ORANGE | |
| | W | | WHITE | |
| | B | | BLUE | |
| ⑦ CONTACTS | 1 | | 1C | |
| | 2 | | 2C | |

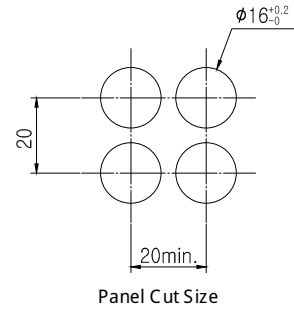
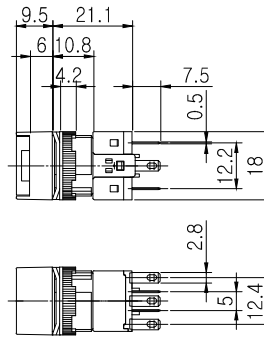
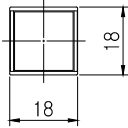
Dimensions

KBL16M
KBL16AT

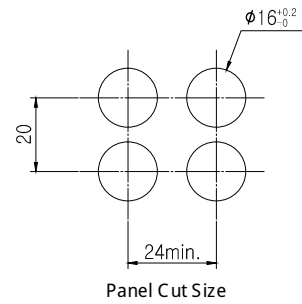
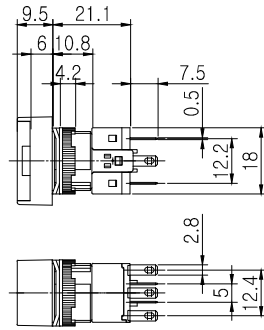
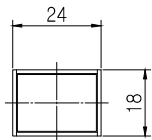


Dimensions

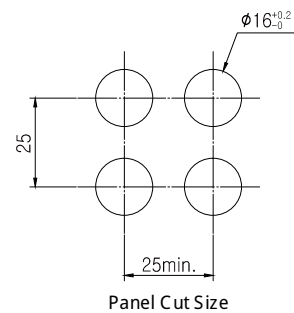
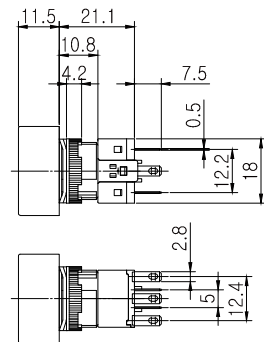
KBL16SM
KBL16SAT



KBL16RM
KBL16RAT



KBL160M
KBL160AT



CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

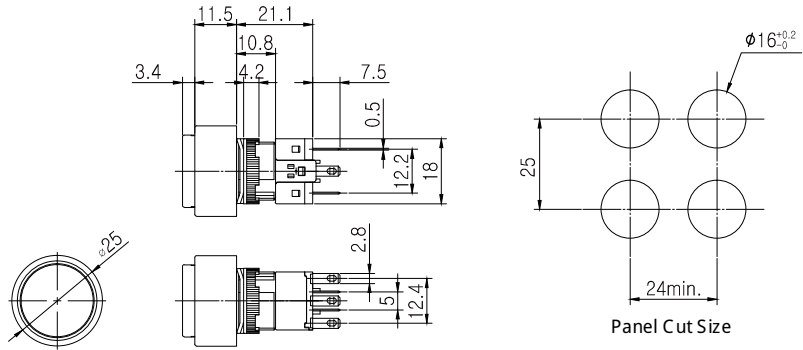
POWER SWITCH

HOIST SWITCH

CAM SWITCH

Dimensions

KBL161M
KBL161AT



Specification

| | | | | | | |
|---------------------------|---|-----------------------|---------|---|---------|----|
| Switching System | The switching element of KPB16 is equipped with normally open contact and normally closed contact. 1C and 2C contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | BODY: Nylon glass CONTACT HOUSING: PBT | Buttons | PC |
| Mechanical Lifetime | Momentary type: 1,000,000 Cycles of operation Maintained type: 200,000 Cycles of operation | | | | | |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 3A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100M Ω (500VDC) | | | | | |
| Contact Resistance | Maximum 30m Ω | | | | | |
| Electrical Lifetime | 100,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Operational Temperature | - 15°C □+55°C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 10G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □55Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | UL, CCC, KC | | | | | |
| Declaration of Conformity | CE | | | | | |

EMERGENCY STOP SWITCH **KEBL16ER**

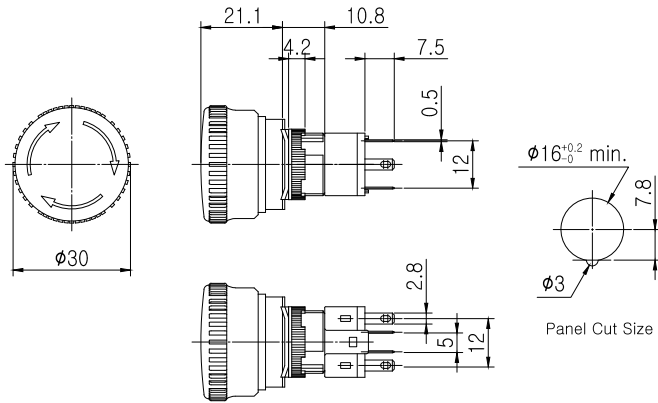


CLASSIFICATION

KEBL16ER - L 1C R 1B

① ② ③ ④

| ① LAMP | NONE | FILAMENT LAMP |
|-----------------|------|---------------|
| | | L |
| ② INPUT VOLTAGE | 1C | 6V |
| | 2C | 12V |
| | 3C | 24V |
| ③ COLOR | R | RED |
| | G | GREEN |
| | Y | YELLOW |
| ④ CONTACTS | 1A | 1A |
| | 1B | 1B |
| | 2A | 2A |
| | 2B | 2B |
| | 1A1B | 1A1B |

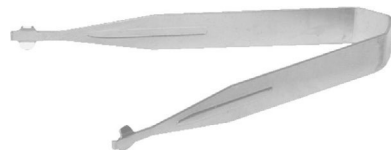


ACCESSORIES

Safety Cover



Separate Tool



Specification

| | | | | | | |
|---------------------------|---|-----------------------|---------|---|---------|----|
| Switching System | The switching element of KEPB16 is equipped with normally open contact and normally closed contact. 1A, 1B, 2A, 2B, and 1A1B contact available. | | | | | |
| Material | Contact | Silver alloy + Copper | Housing | BODY: Nylon glass CONTACT HOUSING: PBT | Buttons | PC |
| Mechanical Lifetime | 1,000,000 Cycles of operation | | | | | |
| Install | Tightening torque : Max. 6Kg/F.Cm | | | | | |
| Standards | This product comply with " Standards for low- voltage switching devices" EN IEC 60947- 5- 1 | | | | | |
| Contact Ratings | 250VAC 3A (resistive load) | | | | | |
| Insulation Resistance | Minimum 100MΩ (500VDC) | | | | | |
| Contact Resistance | Maximum 30mΩ | | | | | |
| Electrical Lifetime | 100,000 cycles of operation | | | | | |
| Dielectric Strength | Between Live Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| | Between Live and Dead Parts: 1,000VAC(50/60Hz) for 1 minute | | | | | |
| Operational Temperature | - 15° C □ +50° C | | | | | |
| Operational Humidity | 45 □85%RH | | | | | |
| Protection Degree | IP40 | | | | | |
| Shock Resistance | Approximately 10G(1,000m/s ²) | | | | | |
| Vibration Resistance | 10 □5Hz double amplitude 1.5mm (at X, Y and Z axis) | | | | | |
| Approbations | UL, CCC, KC | | | | | |
| Declaration of Conformity | CE | | | | | |

ACCESSORIES

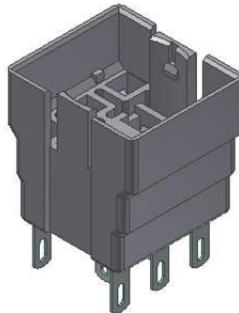
Terminal Socket

Terminal Socket For KPL16



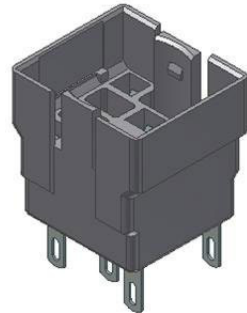
KPL16
NF22-L

Terminal Socket for KPB16



KPB16
KBL16
NF22-P
NF22-B
NF22-S
NF22-K

Terminal Socket for KEPB16



KEPB16
KEBL16