K12S D
High Performance SMT Detect Switches

Features/Benefits

- *Harsh environment applications - IP67*
- *Compatible with SMT lead free soldering process*
- *Illuminated*
- *Permanent actuation possible*
- *High reliability / long life*
- *DPST version available*
- *RoHS compliant*

Typical Applications

- **Automotive**
- **Joysticks**
- **Off-road transportation**
- **Motorcycles**
- **Industrial**
- **Medical**

Construction:

FUNCTION: Momentary
CONTACT ARRANGEMENT: SPST or DPST
CONTACT TYPE: NO or NC
TERMINALS: SMT

Mechanical

TOTAL TRAVEL: 1,5 mm
OPERATING FORCE: 3N
SEALING: IP40 or IP67

Packaging

Reels of 900 pieces

Electrical

SWITCHING POWER MIN./MAX.: 0.02mW/3 W DC
SWITCHING VOLTAGE MIN./MAX.: 2 V / 30 V DC
SWITCHING CURRENT MIN./MAX.: 10 mA /100 mA DC
DIELECTRIC STRENGTH: > 300 V RMS
OPERATING LIFE: > 10^6 operations (detect version)
CONTACT RESISTANCE: Initial < 100mΩ - After test < 250mΩ
INSULATION RESISTANCE: >10^9 Ω
BOUNCE TIME: < 10 ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.
STORAGE TEMPERATURE: -40°C to 95°C.
RoHS compliant and Halogen free.

Process

SOLDERABILITY: Lead free soldering compatible.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on the next page. For additional options not shown in catalog, consult Customer Service Center.

| K | 1 | 2 | S | — | □ | — | □ | □ | □ | 1 | . | 5 | 3 | N | □ | □ | L | F | T | X |

Sub-Series
A   IP40 with peg
B   IP67 with peg
C   IP40 without peg
D   IP67 without peg

Option
S   SPST version
L   LED version (SPST)
D   DPST version

LED Color
NONE   No LED
YE0   Yellow
RD0   Red
GN0   Green
OR0   Orange
WH0   White
AM0   Amber

Travel
1.5   1.5 mm

Operating Force
3N   3 N
(detect - no tactile)

Contact Arrangement
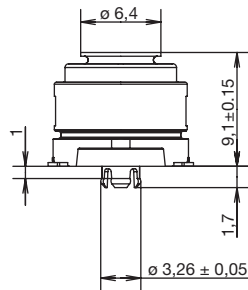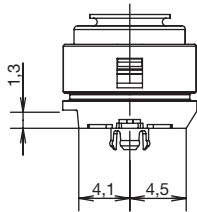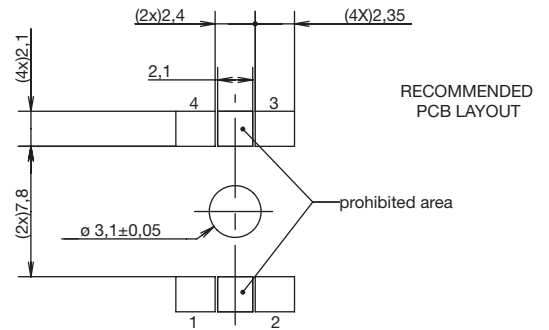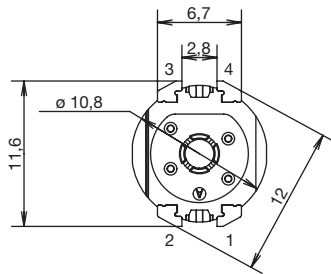O   Normally open (SPST)
C   Normally closed (SPST)
OO   2 Normally open (DPST)
CC*   2 Normally closed (DPST)
OC*   1 Normally open
1 Normally closed (DPST)
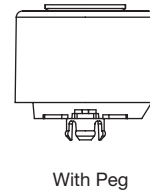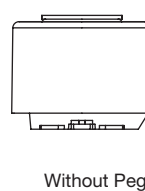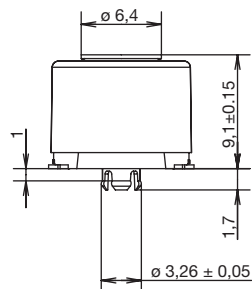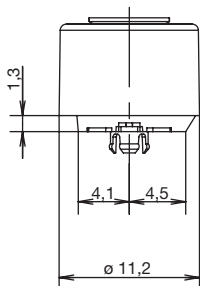
* Please contact technical support for this configuration

LFTX   Lead free, RoHS terminals tin plated Translucent button

Dimensions are shown: mm
Specifications and dimensions subject to change

K12SA/K12SC IP40 with peg / IP40 without peg

Without Peg

With Peg

RECOMMENDED PCB LAYOUT

prohibited area
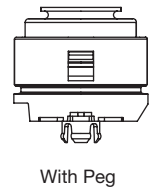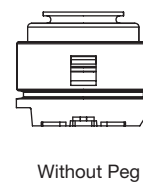
K12SB / K12SD IP67 with peg / IP67 without peg
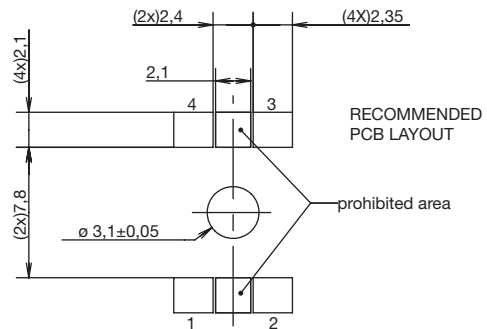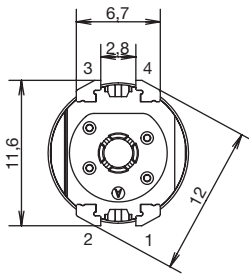
Without Peg

With Peg

RECOMMENDED PCB LAYOUT

prohibited area

First Angle Projection

Dimensions are shown: mm
Specifications and dimensions subject to change
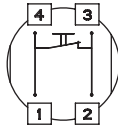
C&K

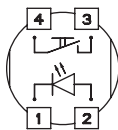Detect

E

OPTION

S SPST version

Single NO
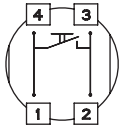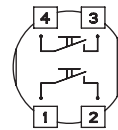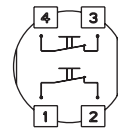
Single NC

L LED version

Single NO + LED

Single NC + LED
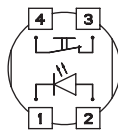
D DPST version

Double NO

Double NC

LED COLOR

OPTION CODE	LED COLOR
	No LED
YE0	Yellow
RD0	Red
GN0	Green
OR0	Orange
WH0	White
AM0	Amber

TRAVEL

1.5 1.5 mm

OPERATING FORCE

OPTION CODE	OPERATING FORCE
3N	3N (detect - no tactile)

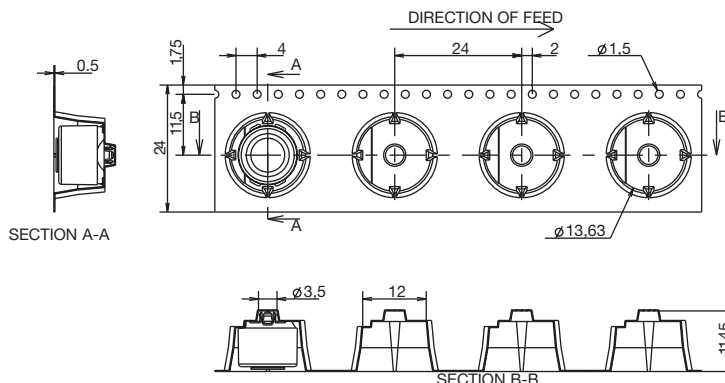## CONTACT ARRANGEMENT

O Normally open (SPST and LED versions)

C Normally closed (SPST and LED versions)

OO 2 Normally open (DPST version)

CC* 2 Normally closed (DPST version)

OC* 1 Normally open/ 1 Normally closed (DPST)

* Please contact technical support for this configuration

TAPE AND REEL

DIRECTION OF FEED

SECTION A-A

0.5

1.75

11.5

24

4

A

A

24

2

ø1,5

B

B

ø13,63

ø3,5

12

11,45

SECTION B-B

First Angle Projection

Dimensions are shown: mm
Specifications and dimensions subject to change