

K12

High Performance Key Switches

Features/Benefits

- Excellent tactile feel
- Wide choice of LED colors, travel and actuator forces
- High reliability / long life
- Sealed version available
- Designed for low-level switching
- Double stroke version available
- Detector version available

Typical Applications

- Automotive
- Off-road transportation
- Industrial electronics
- Computers & network equipment



Construction:

FUNCTION: momentary

DISTANCE BETWEEN BUTTON CENTERS:

min. 11 (0.433) K12C = 13 (0.512)

TERMINALS: PC pins, tinned

MOUNTING: Locating pins; K12D, K12G and K12P additionally with snap-in housing

Mechanical

TOTAL TRAVEL: 1 mm, 1,5 mm, 2 mm

SWITCHING TRAVEL: 0,6 mm*

OPERATING FORCE: 1.5 N OD without snap-point as detector switch, 2.5 N, 3.5 N, 5 N, 3.5/7 N, 6/12 N. Additional operating force 7N, 9N and 20N, available on request.

PROTECTION CLASS: K12C IP 67 (dust tight, protected against the effects of immersion in water; other versions IP 40)

* Additional switching travel (with pre-travel) available by request.

Electrical

SWITCHING POWER MIN./MAX.: 0.02mW/3 W

SWITCHING VOLTAGE MIN./MAX.: 2 V DC / 30 V DC

SWITCHING CURRENT MIN./MAX.: 10 µA /100 mA

DIELECTRIC STRENGTH (50 Hz, 1 min): \geq 500 V

OPERATING LIFE with max. switching power: \geq 10⁶ operations

K12G & K12GO; operating life of second switch 5 x 10⁴ operations, operating life K12C and version with more than 6N (7N, 9N 20N) please consult factory.

CONTACT RESISTANCE: Initial \leq 50 mΩ

INSULATION RESISTANCE: \geq 10¹⁰ Ω

BOUNCE TIME: \leq 1 ms

Operating speed 400 mm/s (15.75/s)

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.

STORAGE TEMPERATURE: -40°C to 95°C.

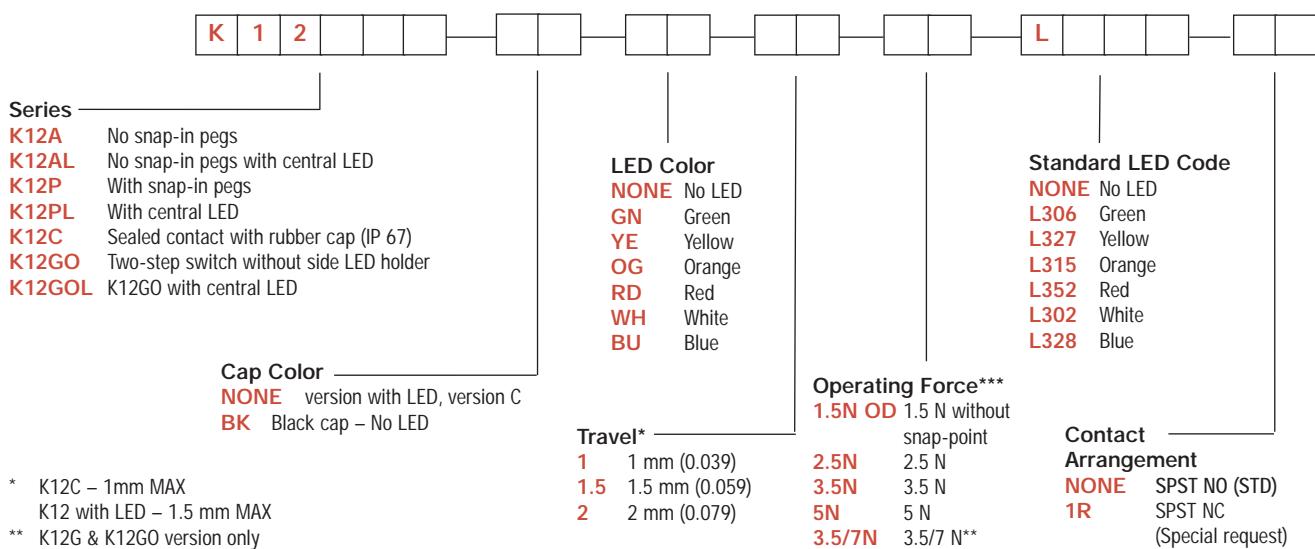
Process

SOLDERABILITY:

Max. soldering time and temperature: 5 s at 260°C

How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.



* K12C – 1mm MAX
K12 with LED – 1.5 mm MAX

** K12G & K12GO version only

*** Additional operating force: 7N, 9N, 20N available on request

Dimensions are shown: mm (inch)

Specifications and dimensions subject to change

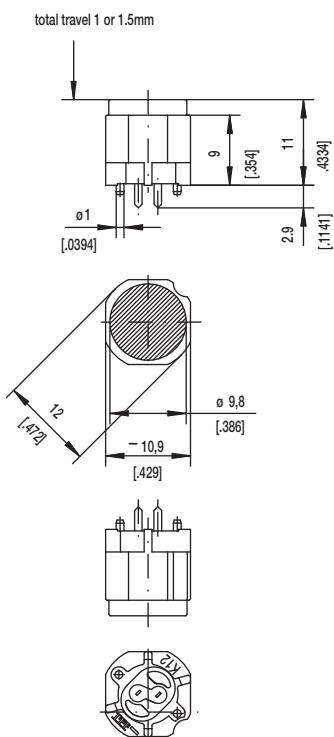
K12 High Performance Key Switches

SERIES

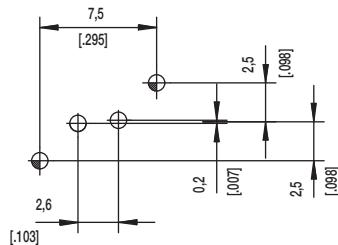


K12A

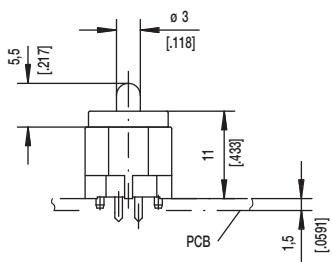
total travel 1 or 1.5mm



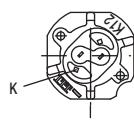
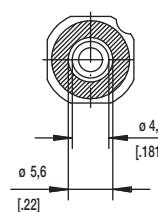
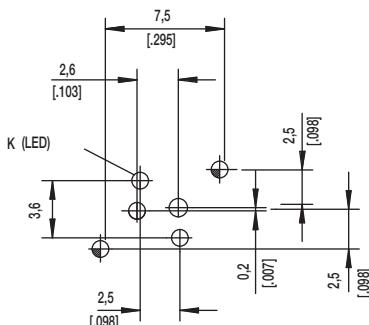
PCB LAYOUT, MOUNTING SIDE



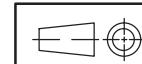
K12AL



PCB LAYOUT, MOUNTING SIDE



⊕	1,1 ^{+0,05}	2x	2x	center hole		
⊕	0,9 ^{±0,05}		2x	LED	ø0,5 (.020)	Sn
		2x	2x	switch	0,7x0,2 (.028x.081)	Sn
Hole	ø	Without	With LED	Description	Terminal Section	Surface



First Angle
Projection

Dimensions are shown: mm (inch)
Specifications and dimensions subject to change

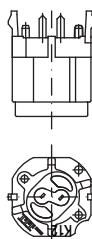
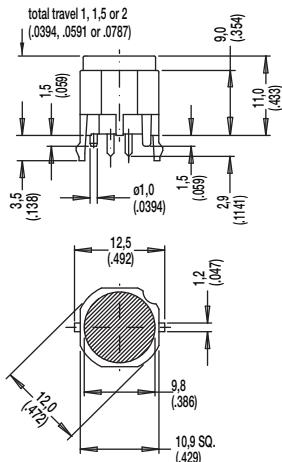
K12

High Performance Key Switches

SERIES

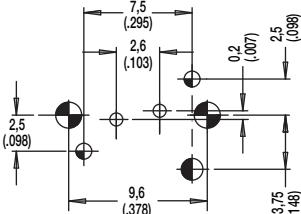


K12P



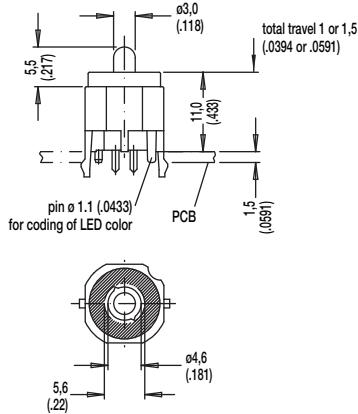
Hole	\varnothing	Without LED	Description	Terminal Section	Surface
●	1.7 (.069)	2x	snap-in		
●	1.6 (.062)	1x	coding hole (L,M,N)		
⊕	1.1 (.043)	2x	center hole		Sn
⊕	0.9 (.035)	2x	switch	0.7 x 0.2 (.028 x .081)	Sn

PCB LAYOUT, MOUNTING SIDE



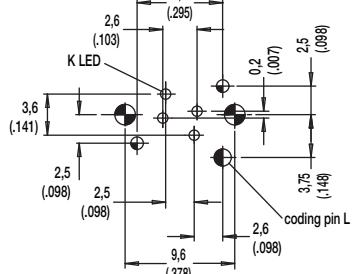
center of actuation area (notice LED)

K12PL



Hole	\varnothing	Without LED	Description	Terminal Section	Surface
●	1.7 (.069)	2x	snap-in		
●	1.6 (.062)	1x	coding hole (L,M,N)		
⊕	1.1 (.043)	2x	center hole		Sn
⊕	0.9 (.035)	2x	LED	m0.5 (.020)	Sn
		2x	switch	0.7 x 0.2 (.028 x .081)	Sn

PCB LAYOUT, MOUNTING SIDE



center of actuation area (notice LED)

C&K



Dimensions are shown: mm (inch)

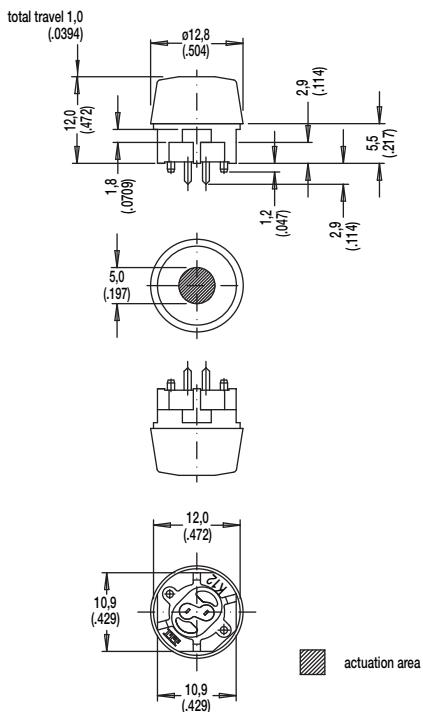
Specifications and dimensions subject to change

www.ck-components.com

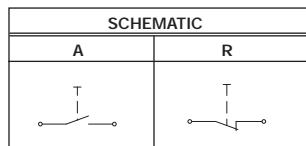
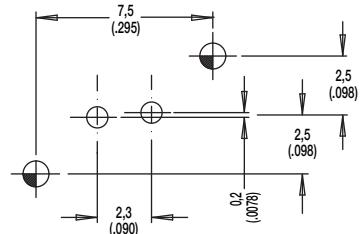
SERIES



K12C SEALED CONTACT WITH RUBBER CAP (IP 67)



PCB LAYOUT, MOUNTING SIDE



Hole	\varnothing	Without LED	Description	Terminal Section	Surface
	1,1 (.043)	2x	center hole		
	0,9 (.035)	2x	switch	0.7 x 0.2 (.0275 x .0787)	Sn

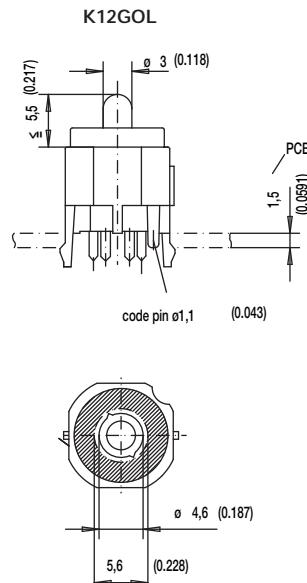
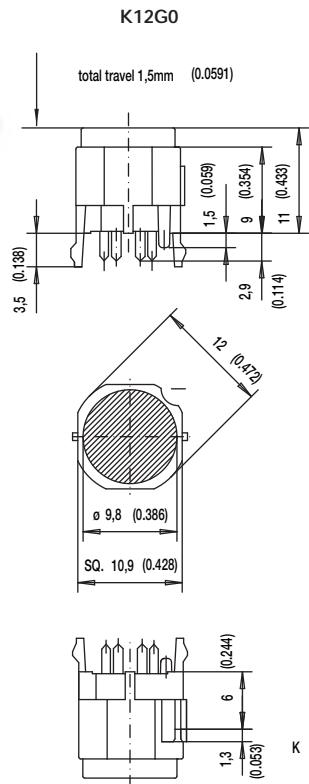


K12

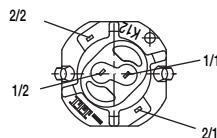
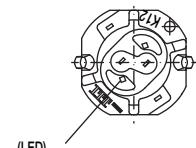
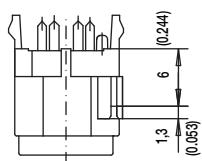
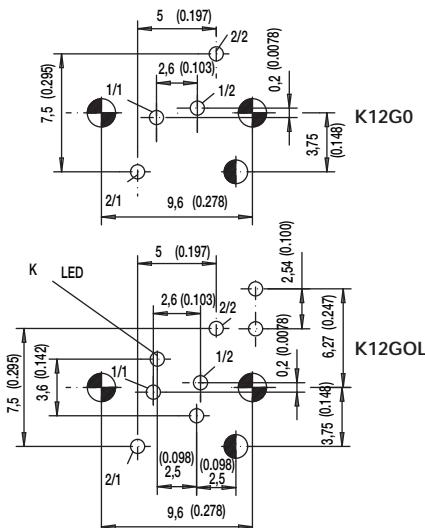
High Performance Key Switches

SERIES 

K12GO
K12GOL



PCB LAYOUT, MOUNTING SIDE



actuation area

SCHEMATIC	
K12G	K12GL
1/1	1/1
2/1	2/1

Hole	Ø	Without LED	With LED	Description	Terminal Section	Surface
●	1,7 (.069)	2x	2x	snap-in		
●	1,6 (.062)	1x	1x	code		
◆	0,9 (.035)	2x	2x	2 LED		Sn
		2x	2x	LED	m0.5 (.020)	Sn
		2x	2x	switch 2	0.7 x 0.3 (.028 x .012)	Sn
		2x	2x	switch 1	0.7 x 0.2 (.028 x .081)	Sn

CAP COLOR 

OPTION CODE	COLOR
NONE	Version with LED
BK	Black

LED COLOR  (Black, White, Red, Green, Blue, Yellow, Orange, Purple, Cyan, Magenta)

OPTION CODE	COLOR
NONE	Models without LED
GN	Green
YE	Yellow
OG	Orange
RD	Red
WH	White
BU	Blue

STANDARD LED CODE	COLOR
NONE	Models without LED
L306	Green
L327	Yellow
L315	Orange
L352	Red
L302	White
L328	Blue

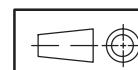
TRAVEL



1 1 mm
1.5 1.5 mm
2 2 mm

OPERATING FORCE

OPTION CODE	OPERATING FORCE
1.5N OD	1.5 N, 150g without snap-point
2.5N	2.5 N, 250g
3.5N	3.5 N, 350g
5N	5 N, 500g
3.5/7N	3.5/7 N, 350/700g
6/12N	6/12 N, 600-1200g



First Angle Projection

Dimensions are shown: mm (inch)
Specifications and dimensions subject to change