








K12 Series High Performance Key Switches

	Features/Benefits <ul style="list-style-type: none"> • Excellent tactile feel • Wide choice of LED colors, travel and actuator forces • Sealed version available • Designed for low-level switching • Double stroke Long life versions available 	Typical Applications <ul style="list-style-type: none"> • Automotive • Off-Road transportation • Industrial electronics • Computers & network equipment • Medical
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Specification FUNCTION: Momentary DISTANCE BETWEEN BUTTON CENTERS: min. 11mm & 13mm for K12C CONTACT TYPE: SPST, N.O ; N.C TERMINALS: PC pins, tinned MOUNTING: Locating pins; additionally with snap-in housing for K12 P/PL/GO Mechanical SWITCHING TRAVEL: 0,6 mm* PROTECTION CLASS: K12C IP 67 (dust tight, protected against the effects of immersion in water; other versions IP40) * Additional switching travel (with pre-travel) available by request Environmental OPERATING TEMPERATURE: -40°C to 85°C. STORAGE TEMPERATURE: -40°C to 95°C. Process SOLDERABILITY Single wave soldering, compatible with lead free soldering profile Hand soldering, 350°C	Electrical SWITCHING POWER MIN./MAX.: 0.02mW/3 W SWITCHING VOLTAGE MIN./MAX.: 2 V DC / 30 V DC SWITCHING CURRENT MIN./MAX.: 10 mA /100 mA DIELECTRIC STRENGTH: (50 Hz, 1 min): ≥ 500 V OPERATING LIFE: Please refer to the datasheets in the pages below CONTACT RESISTANCE: Initial ≤ 50 mΩ INSULATION RESISTANCE: ≥ 10 ¹⁰ Ω BOUNCE TIME: ≤ 1 ms Operating speed 100 mm/s (3.94/s) Packaging Bulk in boxes of 250 pieces (version C or GO) or 300 pieces (version A, AL, P or PL)
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K12 Product Range

						
Sub-Series	K12A	K12AL	K12P	K12PL	K12C	K12GO
Size (mm) L x W x H	12x12x11	12x12x11	12x12x11	12x12x11	12x12x12	12x12x11
Pole / Throws	SPST	SPST	SPST	SPST	SPST	Double stroke 2 x SPST momentary
Snap-in pegs	Without	Without	With	With	Without	With
IP Rating	IP40	IP40	IP40	IP40	IP67	IP40
Illumination	No	5 color availables	No	5 color availables	No	No

K12 Series

High Performance Key Switches

CAP COLOR

OPTION CODE	COLOR
NONE	Version with LED
BK	Black - no LED
YE	Yellow - no LED
RD	Red - no LED
GY	Gray - no LED

LED COLOR

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

STANDARD LED CODE	COLOR
NONE	Models without LED
LV306	Green
LV327	Yellow
LV315	Orange
LV352	Red
LV302	White
LL4232	Green

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

CONTACT ARRANGEMENT OPTION

- 1R SPST NC (SPECIAL REQUEST FOR NORMALLY CLOSED OPTION)

K12 Series LED versions



Features/Benefits

- Excellent tactile feel
- Wide choice of LED colors, travel and actuator forces
- Designed for low-level switching

Typical Applications

- Automotive
- Off-Road transportation
- Industrial electronics
- Computers & network equipment
- Medical

Specification

FUNCTION: Momentary

DISTANCE BETWEEN BUTTON CENTERS:

min. 11mm

CONTACT TYPE: SPST, N.O

TERMINALS: PC pins, tinned

MOUNTING: Locating pins, and K12PL additionally with snap-in housing

Mechanical

SWITCHING TRAVEL: 0,6 mm*

PROTECTION CLASS: IP40

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

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.

STORAGE TEMPERATURE: -40°C to 95°C.

Process SOLDERABILITY

Single wave soldering, compatible with lead free soldering profile Hand soldering, 350°C.

Electrical

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

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

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

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

OPERATING LIFE:

For all K12 AL/PL versions up to 6N with max. switching power: ≥ 10⁶ operations

CONTACT RESISTANCE: Initial ≤ 50 mΩ

INSULATION RESISTANCE: ≥ 10¹⁰Ω

BOUNCE TIME: ≤ 1 ms Operating speed 100 mm/s (3.94/s)

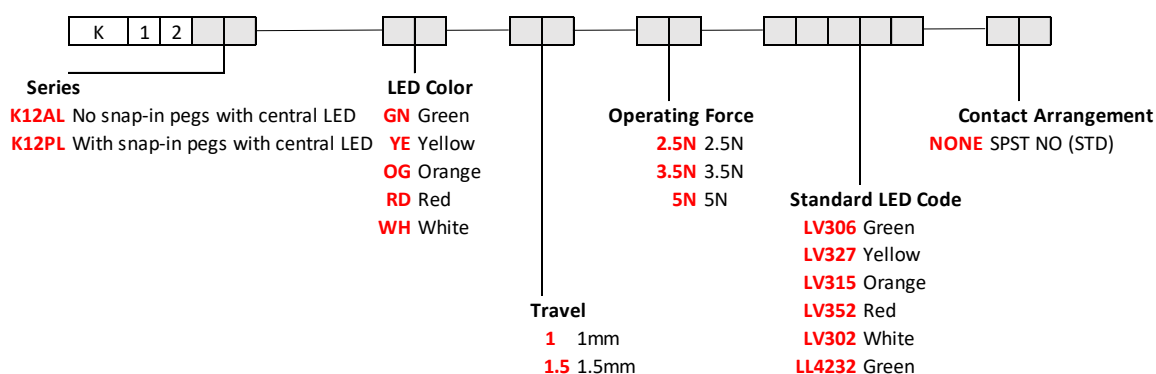
Packaging

Bulk in boxes of 300 pieces

How To Order

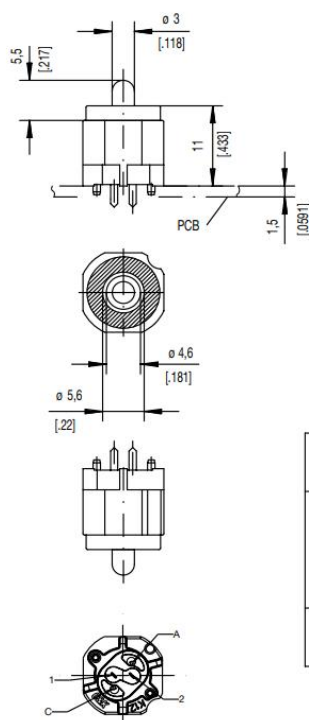
Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.

For any part number different from those listed above, please consult your local representative.

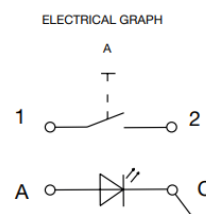
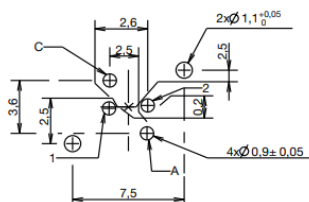


K12 Series LED versions

K12 AL

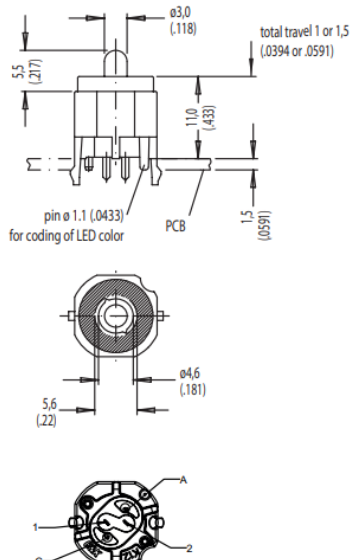


PCB LAYOUT, MOUNTING SIDE

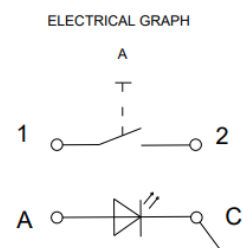
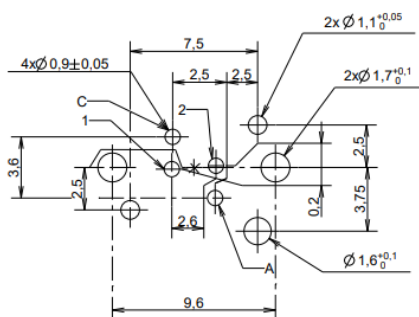


	1,1 ^{+0,05} ₀	2x	2x	center hole		
	0,9 ±0,05		2x	LED	ø0,5 (.020)	Sn
		2x	2x	switch	0,7x0,2 (.028x.081)	Sn
Hole	ø	Without	with LED	Description	Terminal Section	Surface

K12 PL



PCB LAYOUT, MOUNTING SIDE



Hole	Ø	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)	

K12 Series A versions



Features/Benefits

- Excellent tactile feel
- Wide choice of travel and actuator forces
- Designed for low-level switching
- Customization on request
- Normally closed on request

Typical Applications

- Automotive
- Off-Road transportation
- Industrial electronics
- Computers & network equipment
- Medical

Specification

FUNCTION: Momentary

DISTANCE BETWEEN BUTTON CENTERS:
min. 11mm

CONTACT TYPE: SPST, N.O ; N.C

TERMINALS: PC pins, tinned

MOUNTING: Locating pins

Mechanical

SWITCHING TRAVEL: 0,6 mm*

PROTECTION CLASS: IP 40

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

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.

STORAGE TEMPERATURE: -40°C to 95°C.

Process SOLDERABILITY

Single wave soldering, compatible with lead free soldering
profile Hand soldering, 350°C

Electrical

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

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

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

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

OPERATING LIFE:

For all K12A versions up to 6N with max. switching
power: ≥ 10⁶ operations

For all K12A versions from 7N to 20N with max. switching
power: please consult the factory

CONTACT RESISTANCE: Initial ≤ 50 mΩ

INSULATION RESISTANCE: ≥ 10¹⁰Ω

BOUNCE TIME: ≤ 1 ms Operating speed 100 mm/s (3.94/s)

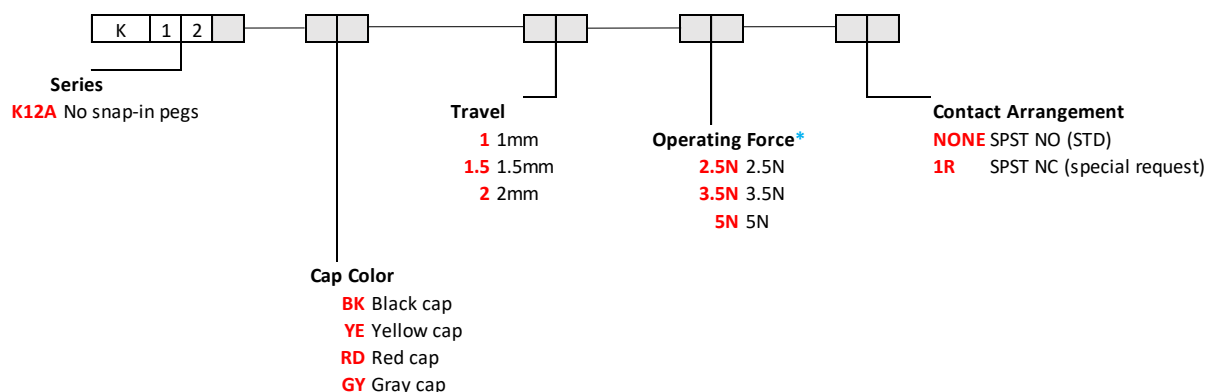
Packaging

Bulk in boxes of 300 pieces

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.

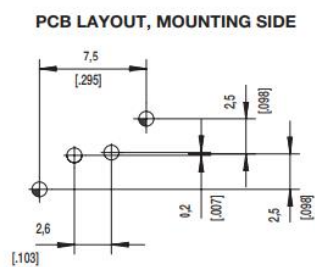
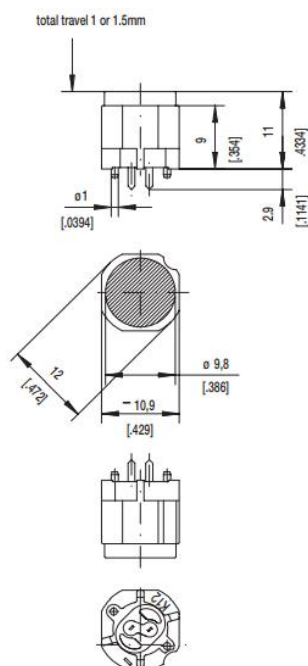
For any part number different from those listed above, please consult your local representative.



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

K12 Series
A versions

K12A WITHOUT SNAP-IN



K12 Series P versions



Features/Benefits

- Excellent tactile feel
- Wide choice of travel actuator forces
- Designed for low-level switching
- Customization on request
- Normally closed on request
- Detect version option

Typical Applications

- Automotive
- Off-Road transportation
- Industrial electronics
- Computers & network equipment
- Medical

Specification

FUNCTION: Momentary

DISTANCE BETWEEN BUTTON CENTERS:
min. 11mm

CONTACT TYPE: SPST, N.O ; N.C

TERMINALS: PC pins, tinned

MOUNTING: Locating pins with snap-in housing

Mechanical

SWITCHING TRAVEL: 0,6 mm*

PROTECTION CLASS: IP40

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

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.

STORAGE TEMPERATURE: -40°C to 95°C.

Process SOLDERABILITY

Single wave soldering, compatible with lead free soldering
profile Hand soldering, 350°C

Electrical

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

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

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

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

OPERATING LIFE:

For all K12P versions up to 6N with max. switching power: ≥ 10⁶ operations

For all K12P versions from 7N to 20N with max. switching power: please consult the factory

CONTACT RESISTANCE: Initial ≤ 50 mΩ

INSULATION RESISTANCE: ≥ 10¹⁰Ω

BOUNCE TIME: ≤ 1 ms Operating speed 100 mm/s (3.94/s)

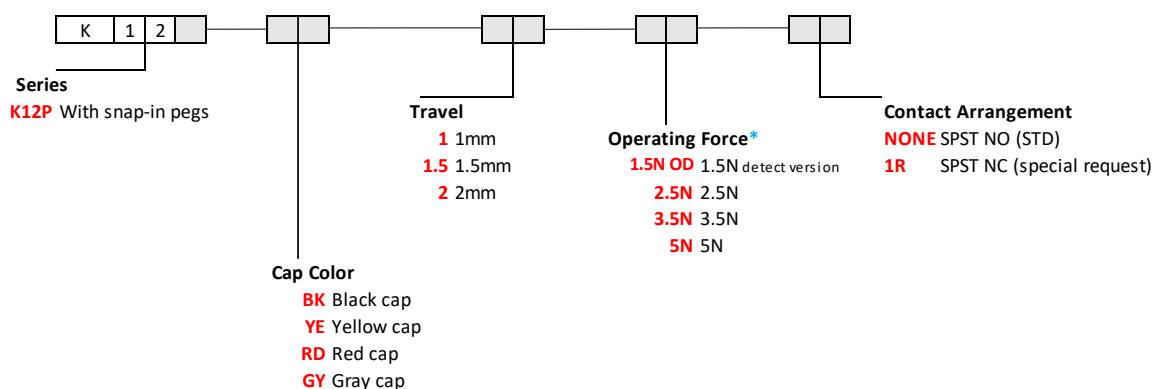
Packaging

Bulk in boxes of 300 pieces

How To Order

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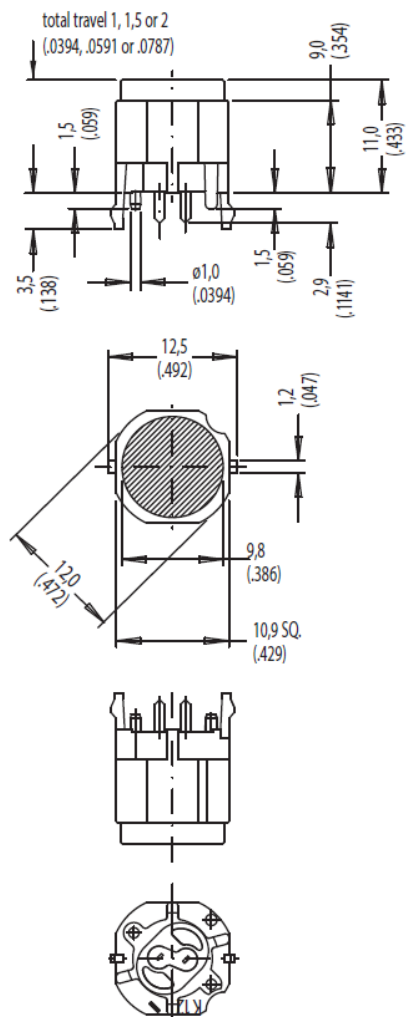
For any part number different from those listed above, please consult your local representative



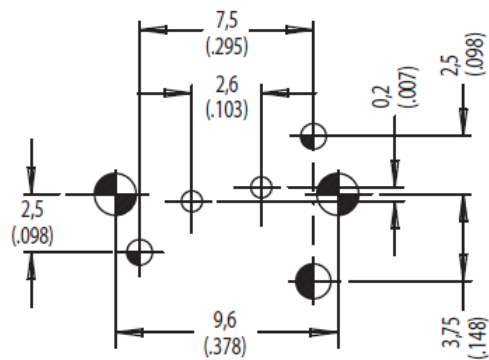
* Additional operating force: 7N; 9N; 20N available on request

K12 Series P versions

K12 P without snap-in



PCB LAYOUT, MOUNTING SIDE



center of actuation area (notice LED)

K12 Series C versions



Features/Benefits

- Excellent tactile feel
- Wide choice of travel and actuator forces
- Sealed version
- Designed for low-level switching

Typical Applications

- Automotive
- Off-Road transportation
- Industrial electronics
- Computers & network equipment
- Medical

Specification

FUNCTION: Momentary
DISTANCE BETWEEN BUTTON CENTERS:
 min. 13mm
CONTACT TYPE: SPST, N.O
TERMINALS: PC pins, tinned
MOUNTING: Locating pins

Mechanical

SWITCHING TRAVEL: 0,6 mm*
PROTECTION CLASS: IP 67 (dust tight, protected against the effects of immersion in water)

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

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.
STORAGE TEMPERATURE: -40°C to 95°C.

Process SOLDERABILITY

Single wave soldering, compatible with lead free soldering profile
 Hand soldering, 350°C

Electrical

SWITCHING POWER MIN./MAX.: 0.02mW/3 W
SWITCHING VOLTAGE MIN./MAX.: 2 V DC / 30 V DC
SWITCHING CURRENT MIN./MAX.: 10 mA /100 mA
DIELECTRIC STRENGTH: (50 Hz, 1 min): ≥ 500 V

OPERATING LIFE:

For all K12C versions up to 9N with max. switching power: ≥ 10⁵ operations

For all K12C versions from 9N to 20N with max. switching power: please consult the factory

CONTACT RESISTANCE: Initial ≤ 50 mΩ

INSULATION RESISTANCE: ≥ 10¹⁰Ω

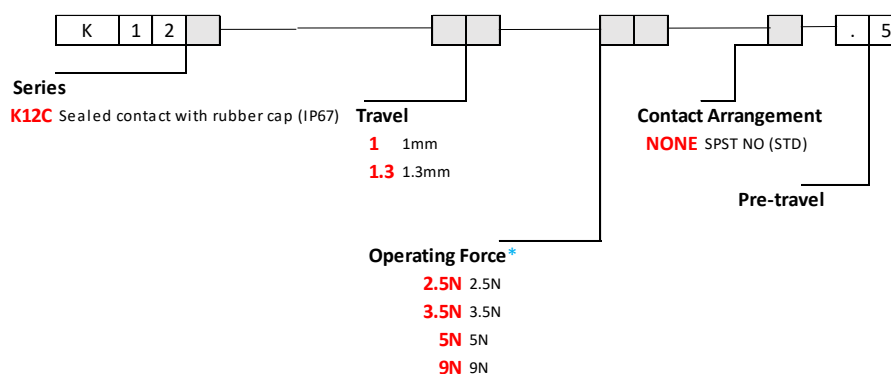
BOUNCE TIME: ≤ 1 ms Operating speed 100 mm/s (3.94/s)

Packaging

Bulk in boxes of 250 pieces

How To Order

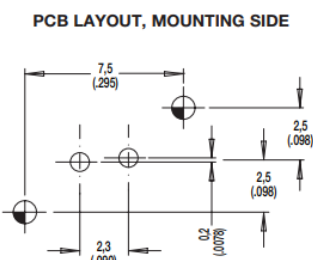
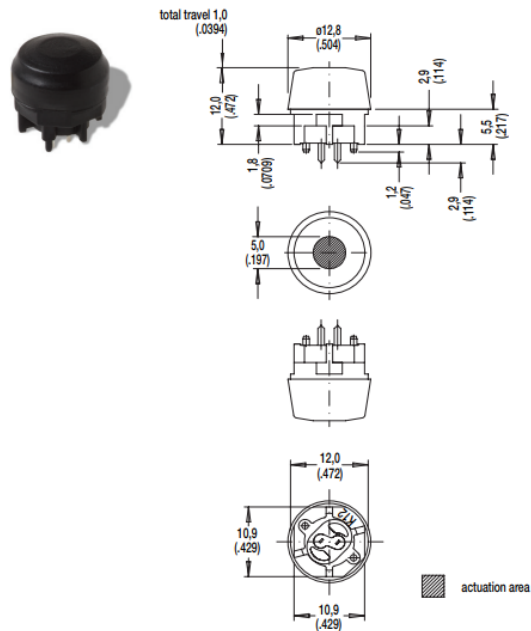
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* Additional operating force: 20N available on request

K12 Series
C versions

K12 C SEALED CONTACT WITH RUBBER CAP (IP67)



SCHEMATIC	
A	R

Hole	Ø	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 Series GO versions



Features/Benefits

- Excellent tactile feel
- Designed for low-level switching
- Double stroke versions
- Long life versions available

Typical Applications

- Automotive
- Off-Road transportation
- Industrial electronics
- Computers & network equipment
- Medical

Specification

FUNCTION: Momentary

DISTANCE BETWEEN BUTTON CENTERS:
min. 11mm

CONTACT TYPE: 2xSPST, N.O

TERMINALS: PC pins, tinned

MOUNTING: Locating pins with snap peg

Mechanical

SWITCHING TRAVEL: 0,6 mm*

PROTECTION CLASS: IP40

Environmental

OPERATING TEMPERATURE: -40°C to 85°C.

STORAGE TEMPERATURE: -40°C to 95°C.

Process SOLDERABILITY

Single wave soldering, compatible with lead free soldering
profile Hand soldering, 350°C

Electrical

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

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

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

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

OPERATING LIFE:

For K12GO with max. switching power:

Standard version ≥ 5 x 10⁴ operations.

Long life version up to 4 x 10⁵: please consult factory

CONTACT RESISTANCE: Initial ≤ 50 mΩ

INSULATION RESISTANCE: ≥ 10¹⁰Ω

BOUNCE TIME: ≤ 1 ms Operating speed 100 mm/s (3.94/s)

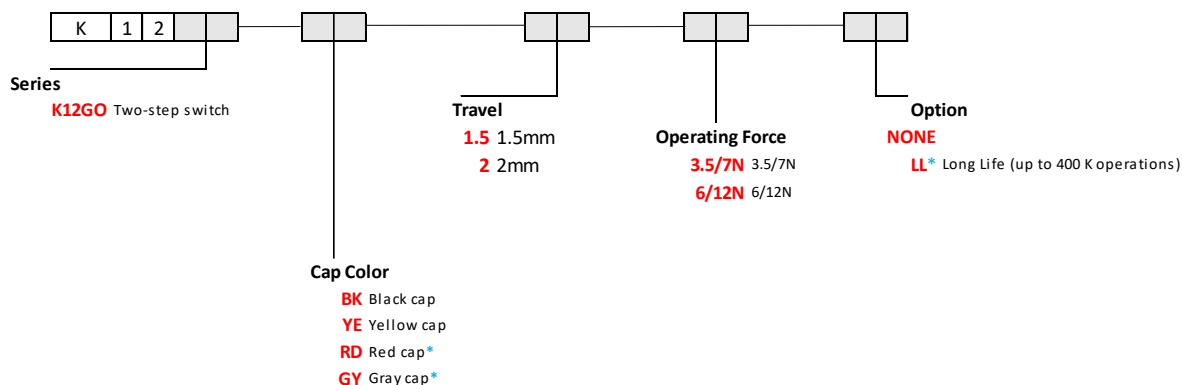
Packaging

Bulk in boxes of 250 pieces

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.

For any part number different from those listed above, please consult your local representative.



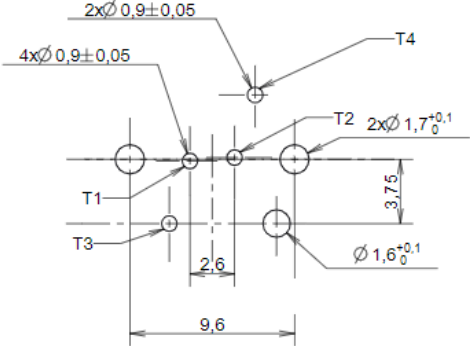
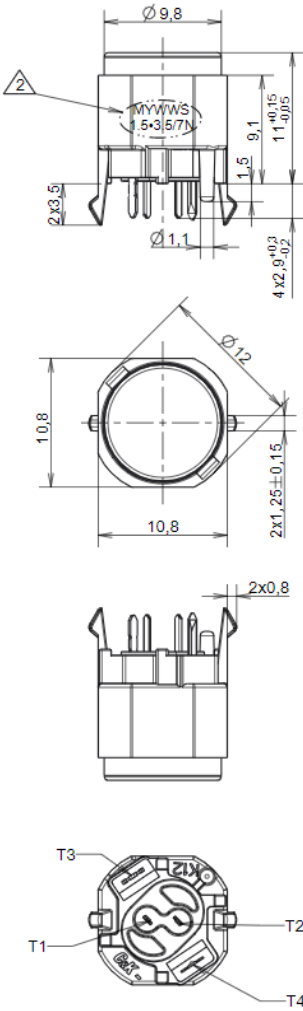
* Please consult factory

K12 Series

GO versions

K12 GO

PCB LAYOUT, MOUNTING SIDE



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