

KSA & KSL MKII Series

High Performance Sealed Tactile Switch



Description

KSA MKII series switch has the highest sealing performance, making it ideal for consumer, automotive and industrial applications that must withstand erosion and harsh environments, such as regular exposure to water. The KSA MKII is also highly responsive due to its excellent tactile feel.

Features & Benefits

- Highest tact switch sealing performance
- Improved sealing through a modification of the crimping technique and to a double overmolding of the terminal
- Totally sealed
- Up to 1M operations
- RoHS compliant and compatible

Specifications

Contact Arrangement	SPST, N.O.
Terminals	PC pins
Sealing	IP67

Electrical Specifications

	Silver	Gold
Maximum Power	1 VA	0.2 VA
Min. / Max. Voltage	1 - 32VDC	
Min. / Max. Current	1 - 50 mA	1 - 10 mA
Dielectric Strength	≥ 250 Vrms	
Contact Resistance	≤ 100 m Ω	
Insulation Resistance	(100 V): $\geq 10^9$ Ω	
Bounce Time	≤ 1 ms	

Environmental Specifications

	Silver	Gold
Operating Temperature	-40°C to 85°C	-40°C to 125°C
Storage Temperature	-40°C to 85°C	-55°C to 125°C

Process

Packaging	Delivered in boxes of 500 pieces (250 pieces for KSL)
Soldering	Wave soldering compatible with lead free soldering profile.

Applications

- Transportation
- Industrial
- Telecommunication networks
- Household appliances
- Heating control systems

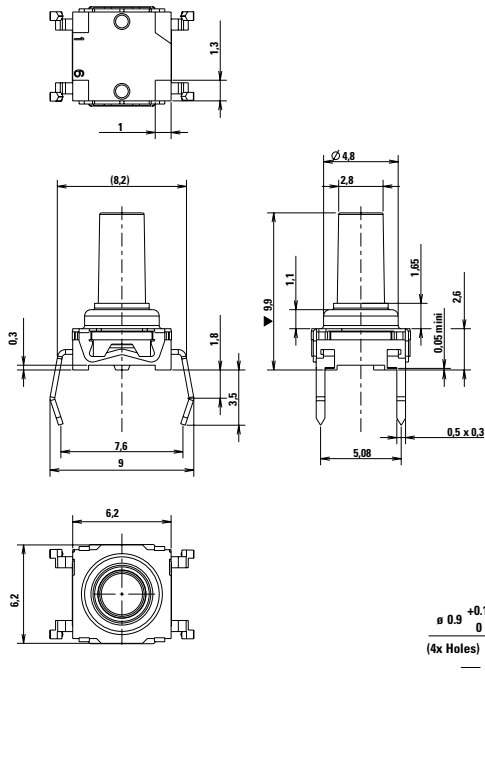
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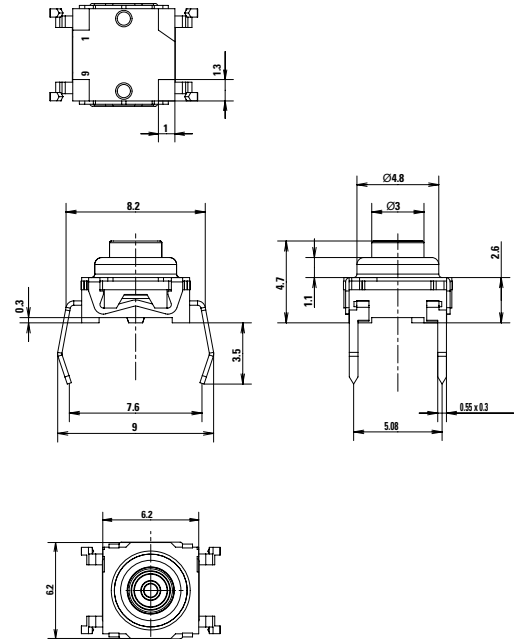
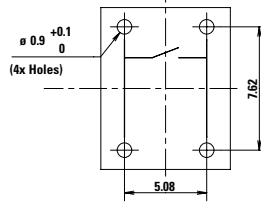


Manual Insertion Dimensions (mm)

KSL



KSA

Recommended PCB
(component side)

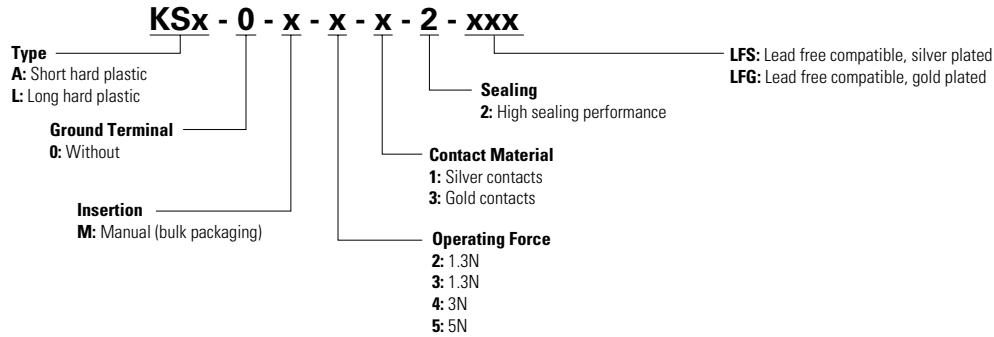
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Ordering Number

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. However, please note that all the combinations of these options are not feasible. For any part number different from those listed above, please consult your local representative.



Mechanical Characteristics

Short Actuator, Manual Insertion

Supply Status	LITTELFUSE Orderable Part Number	Description	Contact & Terminals Plating	Operating Force Fa (Newtons)	Tactile ratio (Min)	Operating Life (Operations)	Electrical Travel (mm)	Orientation & Mounting	Actuator Color
✓	Y33A21215FP	KSA0M212 LFS	Silver	1.325±0.325	Min 20%	100,000	0.5±0.15	M: Thru-hole	Natural
✓	Y33A31215FP	KSA0M312 LFS	Silver	1.325±0.325	Min 21%	100,000	0.5±0.15	M: Thru-hole	Green
✓	Y33A33215FP	KSA0M332 LFG	Gold	1.325±0.325	Min 21%	100,000	0.5±0.15	M: Thru-hole	Red
✓	Y33A41215FP	KSA0M412 LFS	Silver	3±0.75	Min 20%	100,000	0.6±0.25	M: Thru-hole	Blue
✓	Y33A43215FP	KSA0M432 LFG	Gold	3±0.75	Min 20%	100,000	0.6±0.25	M: Thru-hole	Dark grey
✓	Y33A51215FP	KSA0M512 LFS	Silver	5±1.25	Min 25%	100,000	0.7±0.25	M: Thru-hole	Yellow
✓	Y33A53215FP	KSA0M532 LFG	Gold	5±1.25	Min 25%	100,000	0.7±0.25	M: Thru-hole	Orange
✓	Y33A91215FP	KSA0M912 LFS	Silver	3±0.75	Min 20%	500,000	0.6±0.25	M: Thru-hole	Blue

Long Actuator, Manual Insertion

Supply Status	LITTELFUSE Orderable Part Number	Description	Contact & Terminals Plating	Operating Force Fa (Newtons)	Tactile ratio (Min)	Operating Life (Operations)	Electrical Travel (mm)	Orientation & Mounting	Actuator Color
✓	Y33A21235FP	KSL0M212 LFS	Silver	1.4±0.4	Min 20%	100,000	0.5±0.2	M: Thru-hole	Dark grey
✓	Y33A31235FP	KSL0M312 LFS	Silver	1.4±0.4	Min 20%	1,000,000	0.5±0.2	M: Thru-hole	Green
✓	Y33A33235FP	KSL0M332 LFG	Gold	1.4±0.4	Min 20%	1,000,000	0.5±0.2	M: Thru-hole	Red
✓	Y33A41235FP	KSL0M412 LFS	Silver	3±0.75	Min 20%	100,000	0.6±0.2	M: Thru-hole	Blue
✓	Y33A43235FP	KSL0M432 LFG	Gold	3±0.75	Min 20%	100,000	0.6±0.2	M: Thru-hole	Light grey
✓	Y33A51235FP	KSL0M512 LFS	Silver	5.4+1.6/-1.65	Min 20%	100,000	0.7±0.2	M: Thru-hole	Yellow
✓	Y33A53235FP	KSL0M532 LFG	Gold	5.4+1.6/-1.65	Min 20%	100,000	0.7±0.2	M: Thru-hole	Orange

Note: Supply status: ✓ : Available for ordering.

Liability Limitation

This datasheet does not provide enough information for applications that require a certain level of quality or safety such as automotive, medical systems, or safety equipment. Please contact customer service for the contractual specification package.

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.