

SWITCHES SOLUTIONS FOR AUTOMOTIVE SEATS

Automotive Interior – Comfort Seating and Motion Solutions

The world is changing, and with it, our daily lives. Automotive, as our essential companion, is also impacted by the evolution. It's facing multiple challenges in its usage, usability, impact to our planet, becoming an object of hatred, love or simply a transportation mean.

New mobility and new energies are the final factors to the transformation of the automotive interior.



Amongst other elements within the cockpit, seats are becoming more than just the place you sit to drive.

The quest for lightweighting in auto interior is affecting the seats also but not to the detriment of the functions added to it:

- **Position and Lumbar controls:** seat user settings and seat motors management
Well known for years, it is the seat elements movements, memory, lumbar control, heating, ventilation and massage.
- **Comfort detection:** ability to detect seat element position
Relatively new to the seat structure, it is triggered by the new energy vehicles and the semi-autonomous driving. Those two major trends are driving an increasing need for detect/snap switches in the seats.

In NEV's, the structure has changed to a full flat floor. It allows a re-arrangement of the interior, with configurations like business class seats for passengers. In these configurations, the systems need to know whether the seat is in its upright position, in relax or cargo mode in order to activate/deactivate security like airbags.

The second trend is being brought by the semi-autonomous driving. When in pilot mode, the seat will move to a working/relaxing position and return to a standard position when the manual mode is activated back. Here again, the systems need to know what is the configuration to trigger security systems.

To cover the seat functions, switch solutions have to offer:

- Power handling
- Modularity
- Long travel
- Dust protection
- Silent actuation
- Self diagnosis

AUTOMOTIVE SOLUTIONS

Tactile

KSC

- IP67 with life up to 2 million cycles
- Detect or SPDT versions
- Different sounds and haptics available



KSC

TLS

- Soft sound with half million operations
- 8.6 x 8.4 x 3.95 mm
- 0.9 mm travel



TLS



THP - Power Tact

- High power: DC 30V 15A
- 4.05N force with 60,000 cycles
- 14 x 21x 10.5 mm



THP

SAM - Seat Adjustment

- Dust protected
- Power handling 14V 15A
- 2 or 4 ways modules



SAM

AUTOMOTIVE SOLUTIONS

Snap

All our products can be offered in SPST NO, SPST NC or SPDT configuration

ZMS & ZMSM

- IP68
- Compact size with long electrical life
- Specific lever on demand



ZMS



ZMSM

LCS

- IP67
- Wide variety of levers and actuators
- Long life and high electrical capacity



LCS

ZMW

- IP67 (Except terminal part. Fully IP67 on potted wire versions.)
- Up to 3 mm silent stroke
- Lever option



ZMW

Tactile

KSJ

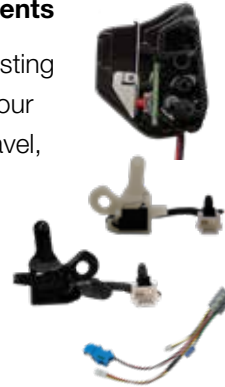
- Multidirectional wide angle actuator
- THT switch for side and top actuation
- Detect version available



KSJ

Purpose Built Developments

- New combination of existing components to reach your specific mix of force, travel, size and sound
- Snap solutions can be customized to fit the frame mechanism



Contact C&K to learn how we can help you with your next design challenge.
C&K - Trusted Brand in Switch Design with a focus on Innovation and Quality

For enquiries, please contact your local C&K representative or send us an email at:
automotive@ckswitches.com