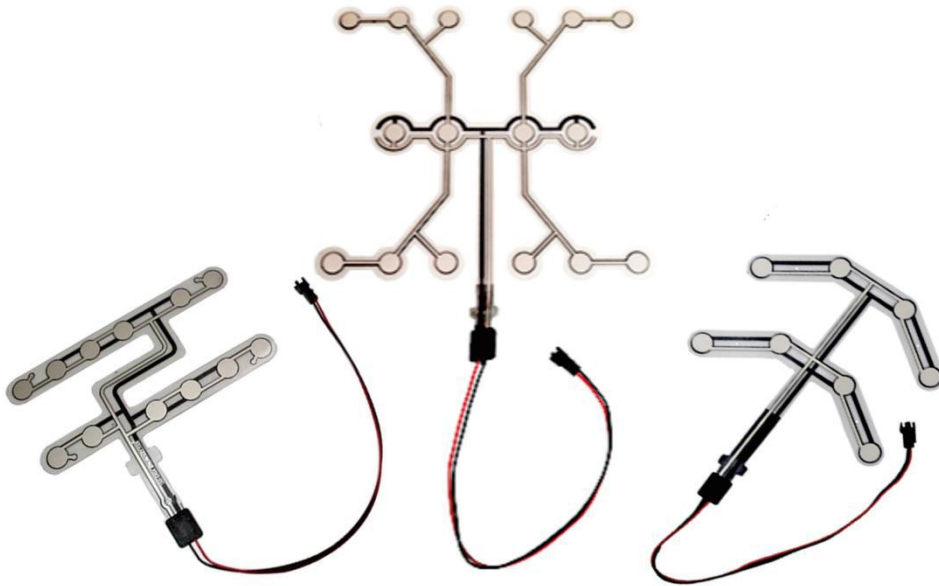


Car Seat Occupancy Sensor Catalogue

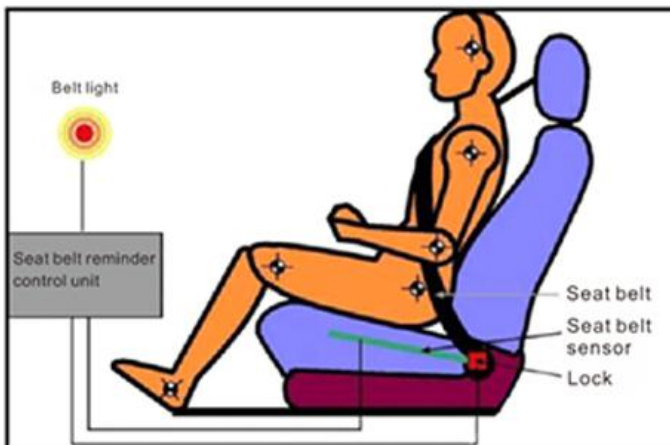
Factory-made seat pressure sensor mats and custom occupant detection solutions



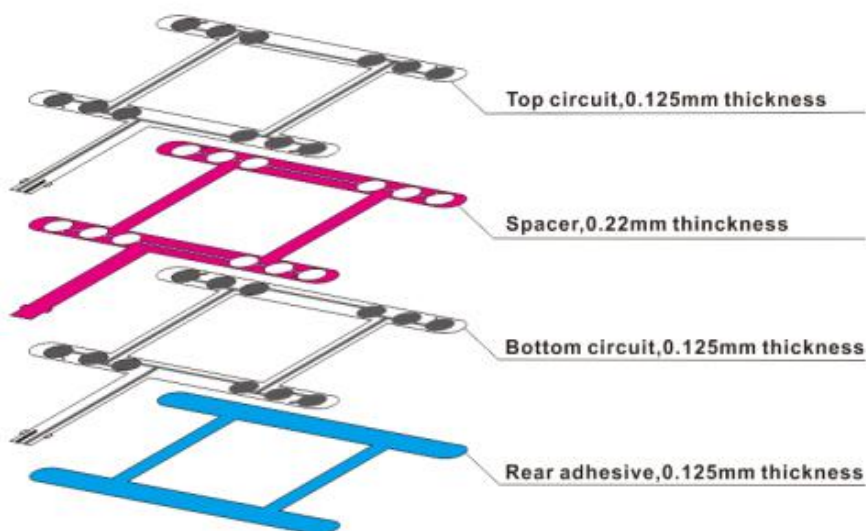
Product overview

JASPER car seat occupancy sensors are thin-film pressure/contact sensor mats designed for seat occupant detection, seat belt reminder systems, airbag sensing logic, taxi meters, driver monitoring and related vehicle safety applications. Conductive contact points are distributed across the active seating area and generate a stable trigger signal when external pressure is applied. As the factory manufacturer, JASPER supports standard models and custom sensor layouts for different seat structures, trigger weights, lead lengths and connector requirements.

System diagram



Product Structure



Installation

(1) Select a sensor shape and size that matches the seat structure. Keep the active contact points away from deep seat grooves (see Chart 1), otherwise sensitivity and long-term performance may be affected.

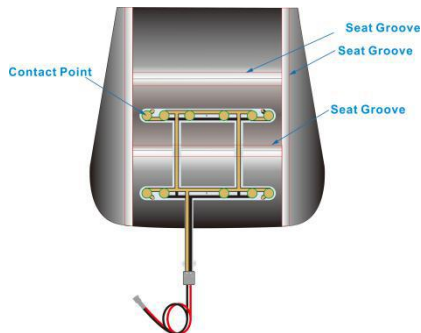


Chart 1

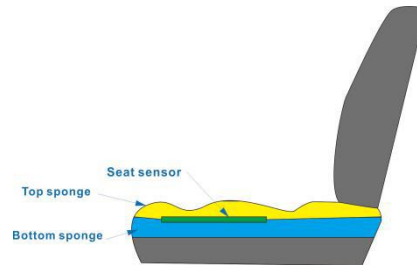


Chart 2

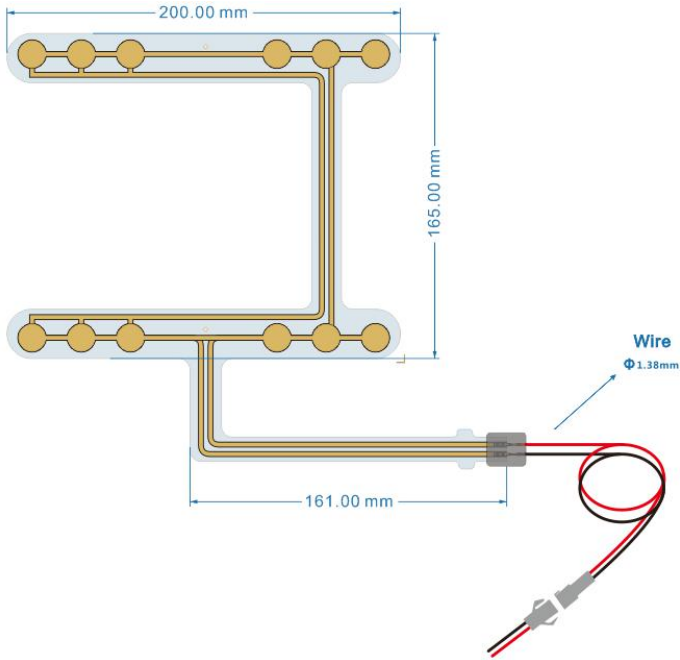
(2) Choose a sensor size that fits the cushion area. A sensor that is too large may be difficult to install, while a sensor that is too small may leave a detection blind area.

(3) The thickness and hardness of the foam above the sensor strongly affect sensitivity (see Chart 2). A typical foam thickness of 2-3 cm with medium hardness is recommended. The support surface below the sensor also affects trigger force. Adjusting foam thickness, foam hardness and support structure helps achieve the required trigger force and response.

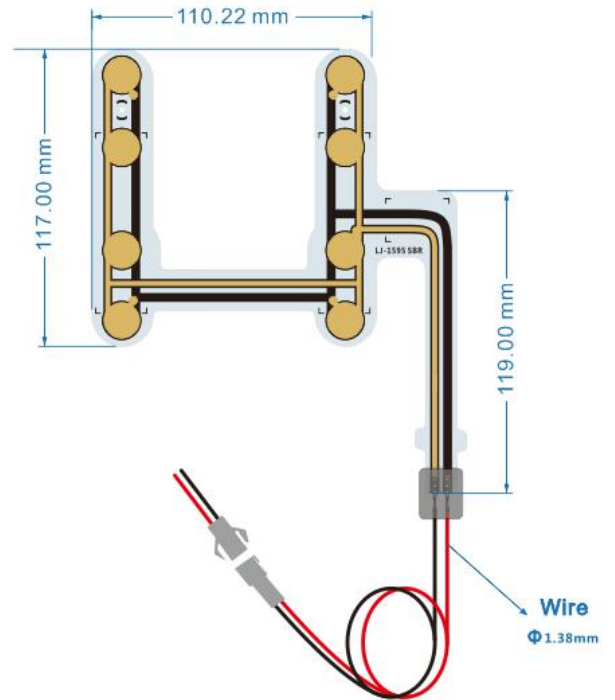
Specification

Size	Customized	Working temperature	-30 to 80 deg C
Single point working weight	150g-180g	Insulation impedance	20 Mohm
Trigger weight	30kg and above	Static resistance	>10 Mohm
Working voltage	<50V DC	Trigger resistance	0-150 ohm
Working current	<100mA	Durability	>1,000K cycles
Response time	10 ms		

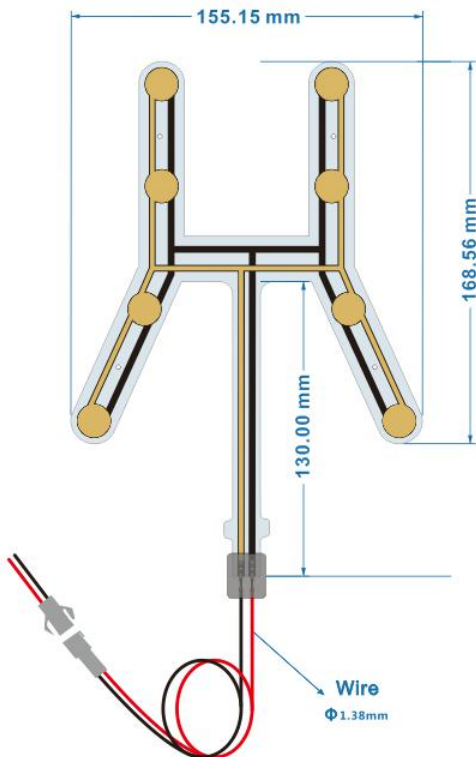
F-1543(200*165mm)



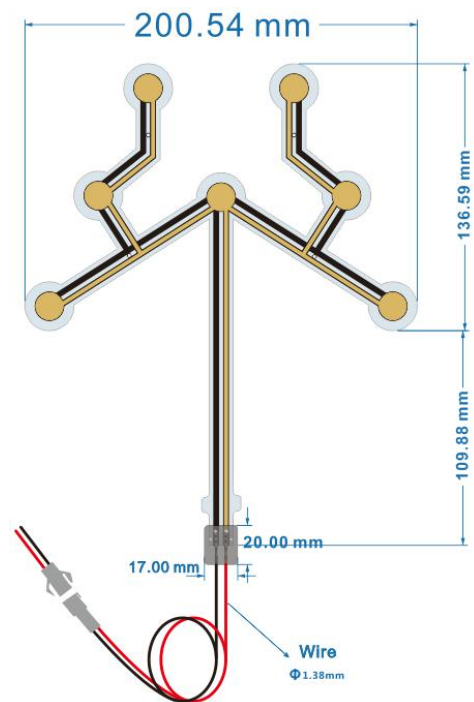
F-1595 (110.22*117mm)



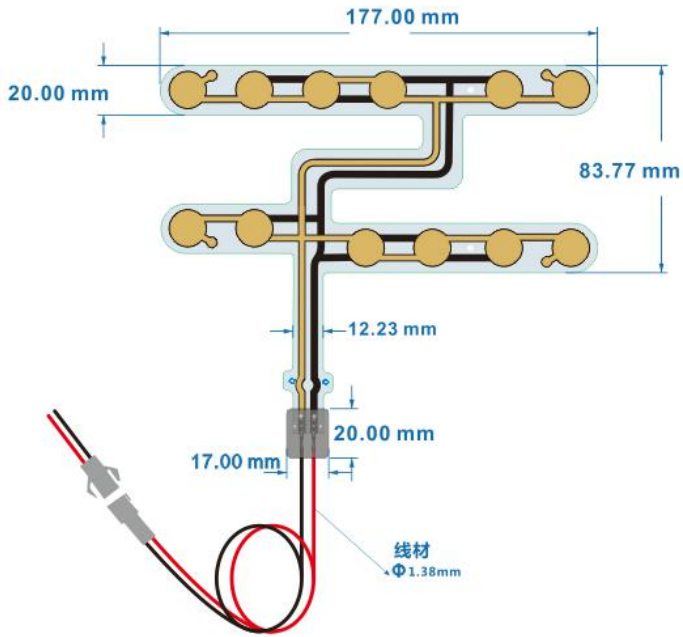
F-1354(168.56*155.15mm)



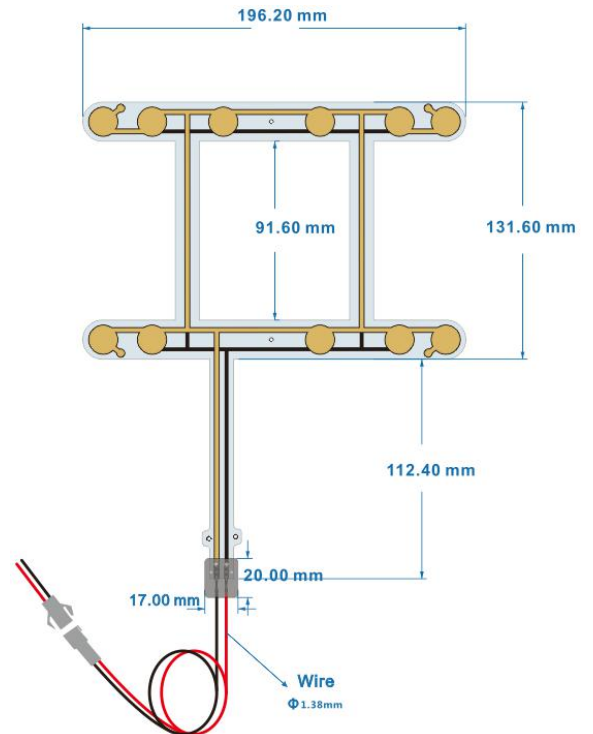
F-1631(200.54*136.59mm)



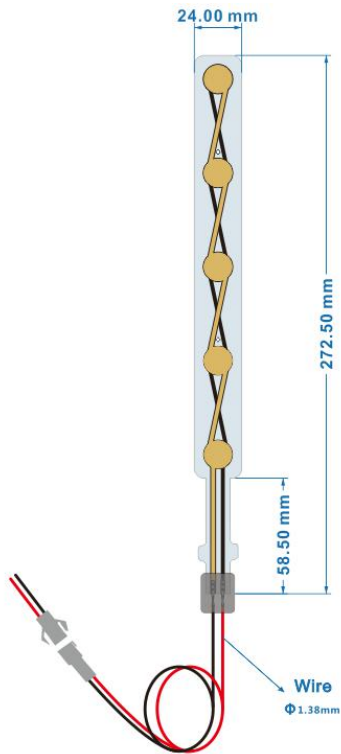
F-1491(83.77*177mm)



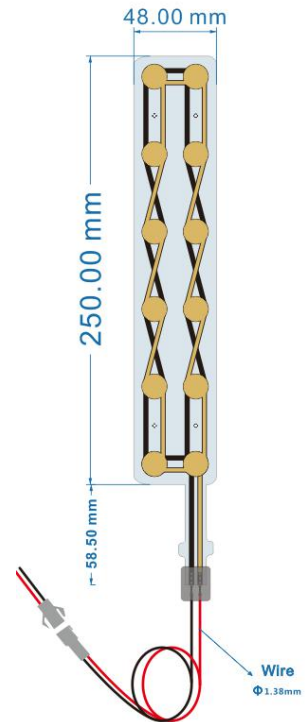
F-1425 (196.2*131.6mm)



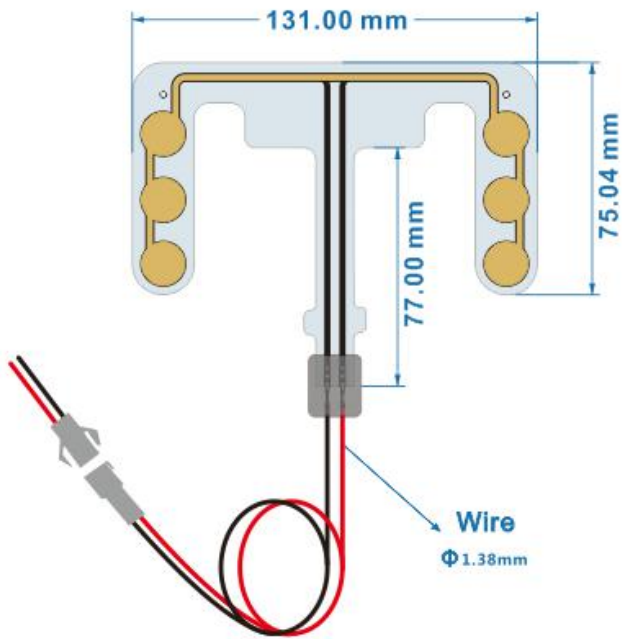
F-1521(272.5*24mm)



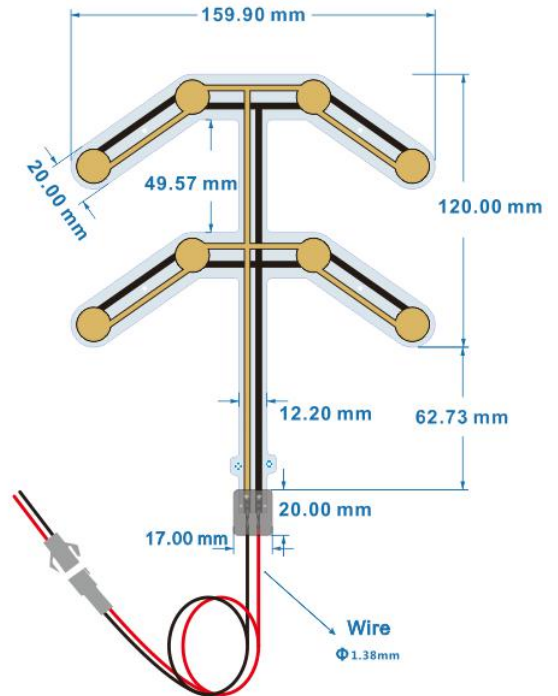
F-1685(250*48mm)



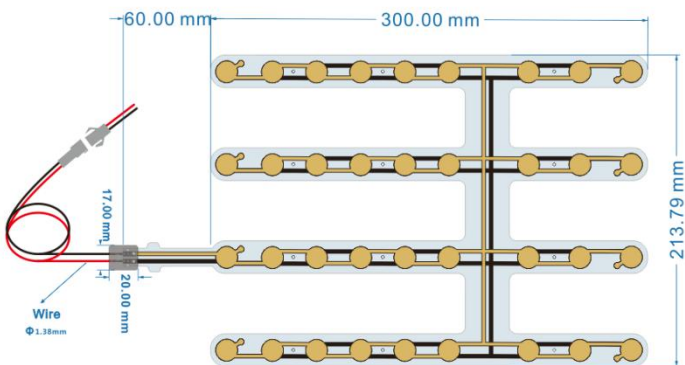
F-1536 (131*75.04mm)



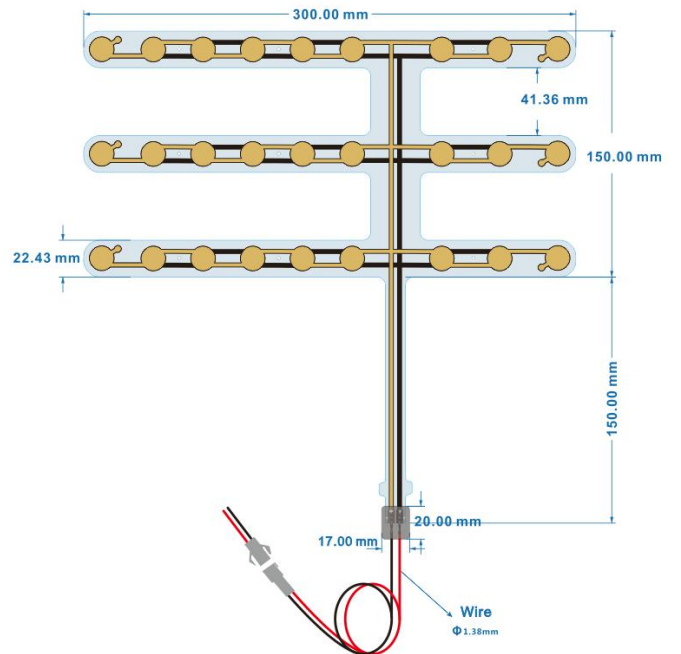
F-1421(159.9*120mm)



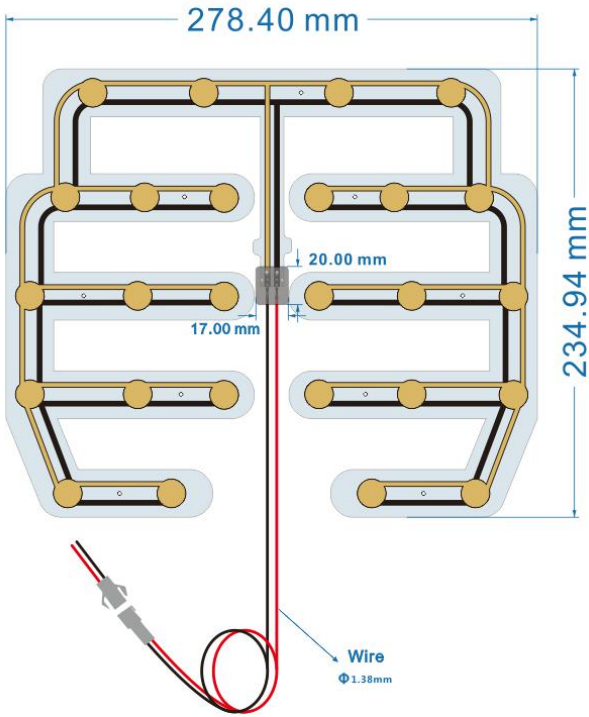
F-1629(300*213.79mm)



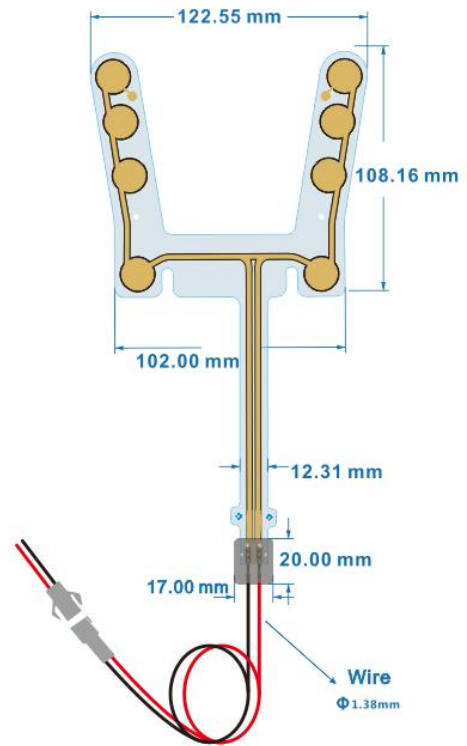
F-1365 (300*150mm)



F-1676 (278.4*234.94mm)



F-1358(122.55*108.16mm)



Optional Connector

BS01	BS02	BS03	BS04	BS05	BS06
					

Custom-made

JASPER accepts custom seat sensor projects for different vehicle seats, cushion structures and detection requirements. For a fast engineering review, please provide the information below:

- (1) working size and shape of the sensor
- (2) trigger weight or force range
- (3) lead length and routing direction
- (4) connector type or mating connector reference

If your application has special requirements, contact our engineering team and we will recommend a suitable sensor structure and production solution.