

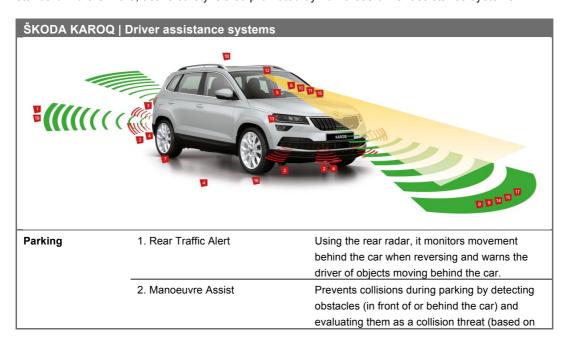
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# Driver assistance systems and safety: pioneering technology from higher vehicle segments

- > Radar-based Adaptive Cruise Control (ACC)
- > Front Assist including the City Emergency Brake with Predictive Pedestrian Protection
- > Blind Spot Detect and Rear Traffic Alert
- > Lane Assist keeps the vehicle in lane
- > Traffic Jam Assist makes driving in congestion easier
- > Driver Alert warns in case of fatigue
- > Camera-based Traffic Sign Recognition
- > Exemplary passive safety with up to nine airbags

The ŠKODA KAROQ features a wide range of driver assistance systems that are normally found in higher vehicle segments and, alongside comfort, put active safety above all else. The systems provide pedestrian protection and keep the compact SUV at a safe distance from the car in front. They make it easier for the driver to change lanes and stay in lane, help the driver to park, and make them aware of important traffic signs. In addition to its solid body structure, an exemplary level of passive safety is also provided by the comprehensive equipment offering with restraint systems including up to nine airbags.

The vehicle's advanced chassis technology and modern stability systems ensure driving characteristics that are as safe as they are comfortable. For example, both the front-wheel-drive and all-wheel-drive variants are equipped with Electronic Stability Control (ESC), which features an extensive range of functions to enable safe driving on any surface and in any weather conditions as standard. Furthermore, active safety is also promoted by numerous driver assistance systems.





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		the speed and direction of the car's movement), in which case it automatically applies the brakes and stops the vehicle.
	3. Rear-view camera	A camera mounted in the tailgate handle monitors the area behind the car – it is activated automatically when reverse gear is engaged, and the infotainment screen displays the space behind the car with lines for guidance.  Specification: visibility angle 150° (H) x 108° (V); resolution (colour CMOS) 648 (H) x 488 (V)
	4. Park Assist	resolution (colour CMOS) 648 (H) x 488 (V)  The system for automatic parking can execute the following manoeuvres:  • parallel parking  • exiting a parallel parking space  • forward perpendicular parking  • reverse perpendicular parking  It has 12 sensors around the car for automatic parking, and can be complemented by a rearview camera.
Driver Information	5. Driver Alert	Using the driver's steering characteristics, <b>Driver Alert</b> detects deviations from their normal behaviour and thereby a reduction in their concentration. The system analyses the steering characteristics for 15 minutes after the engine has been started and saves the information as the basis for a signal. During this analysis phase, a minimum speed of 65 km/h must be maintained. A significant deviation from the characteristic steering behaviour indicates driver fatigue. A visual warning on the instrument cluster prompts the driver to take a break.
	6. Traffic Sign Recognition	The camera-based <b>Traffic Sign Recognition</b> detects the most common traffic signs and displays them as a pictogram on the digital instrument panel and/or on the navigation system. The same applies for the current speed limit and restrictions on overtaking.
Driving	7. Hill-Hold Control	Hill-Hold Control allows the driver to pull away on a slope without the risk of rolling backwards.  The handbrake does not need to be used.
	8. Traffic Jam Assist	Traffic Jam Assist makes it easier to drive the car in traffic. This system provides greater safety and comfort in traffic jams and stop-and-go traffic. Traffic Jam Assist works in combination with the Adaptive Cruise Control and Lane Assist systems. ACC and Lane Assist 'fuse



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		together' to form Traffic Jam Assist. Here, Lane Assist comes with adaptive lane guidance which helps the vehicle to stay in lane at speeds below 60 km/h. When ACC is active at the same time, steering, braking and acceleration are carried out automatically, even in traffic jams. The driver's hands must be on the steering wheel for this to work.
	9. Adaptive Cruise Control	Radar-based <b>Adaptive Cruise Control (ACC)</b> maintains the desired distance from the car in front, meaning that the system can reduce the speed of the car or discretely apply its brakes prior to a potential collision. Besides the speed, the driver can also progressively configure the distance and how dynamically ACC is to work.
	10. Lane Assist	At speeds above 65 km/h, Lane Assist helps the driver by using a camera in the rear-view mirror mount. If the compact SUV approaches a road marking without using the indicators, the system helps the driver to stay in lane by initiating a subtle corrective steering manoeuvre.
Lights	11. High Beam Assist  12. Light Assist	Automatically turns the full beam on and off depending on the current lighting conditions and traffic situation.  As a practical device which makes it easier to
	(Coming Home, Leaving Home, Tunnel Light, Day Light, Light and Rain)	control the car's lighting, Light Assist enables the following functions:
		<ul> <li>The Coming Home and Leaving Home functions ensure that the car's immediate surroundings are lit for a defined period of time so that its occupants can safely get in and out.</li> <li>The Tunnel Light switches on the headlights while driving if the intensity of the outside lights decreases abruptly.</li> <li>The Day Light function turns the daytime running lights on after switching on the ignition.</li> <li>The Light and Rain function turns the lights on when the windscreen wipers are activated.</li> </ul>
	13. AFS	Adapts the lighting in front of the vehicle to various driving situations by changing the geometry of the headlight beam.



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Safety	14. Front Assist with Predictive Pedestrian Protection and City Emergency Brake function	The standard Front Assist feature including City Emergency Brake with Predictive Pedestrian Protection uses a radar sensor. The radar captures a large area and also works reliably when visibility is poor. Should the system sense that a collision is imminent, it warns the driver in stages. If necessary, it can initiate automated braking up to an emergency stop. City Emergency Brake is active up to 34 km/h. The standard Predictive Pedestrian Protection feature complements Front Assist: it initiates an emergency stop at speeds between 10 and 60 km/h if a pedestrian dangerously attempts to cross the path of the car. At speeds exceeding 40 km/h, an additional collision warning is emitted.
	15. Emergency Assist	Reduces the risk of an incident if the driver is not feeling well. If Lane Assist detects that the driver does not have their hands on the steering wheel even after a warning has been emitted, Emergency Assist is activated and brings the car to a standstill while keeping it in lane and activating the hazard warning lights.
	16. Multi-Collision Brake	Prevents any further uncontrolled movement of the car after a collision by braking, thus reducing the possibility of a further collision. At the same time, the hazard warning lights flash and the brake lights remain permanently on.
	17. Crew Protect Assist	Secures the space around the front seats to proactively protect the driver and front passenger in the event of a collision:  • by tensioning the front seatbelts  • by closing the electrically operated side windows (if open) to leave an opening of 55 mm  • by closing the electrically operated panoramic sliding roof (if fitted).  If the vehicle is equipped with front radar (Front Assist), Crew Protect Assist can predict the possibility of a crisis situation (by monitoring the traffic) and thus prepare for a larger number of potential situations.
	18. Speedlimiter	Limits the maximum speed of the vehicle.  Drivers can set a top speed of between 30 and 210 km/h and keep their eyes on the road.  Unlike cruise control, which maintains a set speed, the Speedlimiter function allows the



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	driver to travel at any speed up to, but not exceed, the predefined value. For safety reasons, this feature is temporarily disabled during full acceleration (when the accelerator pedal is fully depressed).
19. Blind Spot Detect	Two radar sensors in the rear bumper monitor the area behind the car and, by turning on an LED light in the wing mirror, alert the driver to a vehicle in the blind spot.

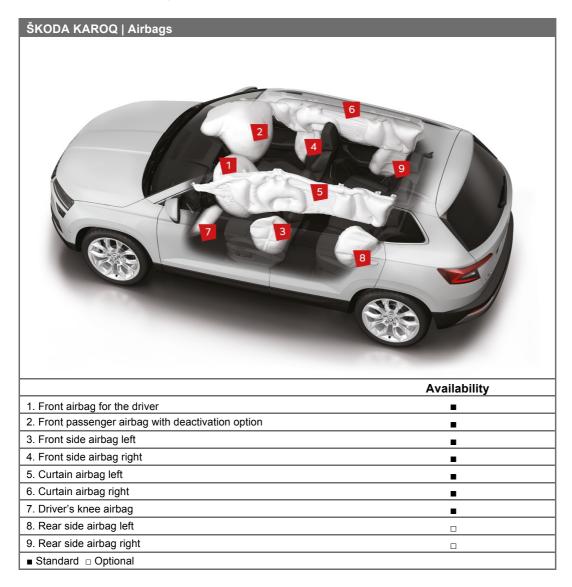


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#### **Excellent passive safety**

The compact SUV wows with a high degree of static and dynamic torsional stiffness, sophisticated manufacturing precision, a high level of comfort and impressive crash safety. ŠKODA has used high- and ultra-high-strength steel in many areas of the bodywork such as the longitudinal beams. The robust body structure with its generous crumple zones and the extremely strong passenger compartment both contribute to the high level of passive safety.

The ŠKODA KAROQ is equipped with seven standard airbags and two optional airbags, which all work in perfect harmony with the three-point seat belts (with height adjustment and belt tensioners in the front) to ensure the highest level of protection.





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#### **Further information**

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#### **ŠKODA AUTO**

- > is one of the longest-established car manufacturers in the world. The company was founded in 1895 during the pioneering days of the automobile. Today, the company's headquarters remain in Mladá Boleslav.
- currently offers the following model series: CITIGO, FABIA, RAPID, OCTAVIA, KAROQ, KODIAQ and SUPERB.
- delivered more than 1 million vehicles to customers worldwide in 2016.
- has been part of Volkswagen Group since 1991, one of the most successful vehicle manufacturers in the world. ŠKODA, in association with the Group, independently manufactures and develops vehicles as well as components such as engines and gear transmissions.
- operates at three locations in the Czech Republic; produces in China, Russia, Slovakia, Algeria and India mainly through Group partnerships, as well as in Ukraine and Kazakhstan with local partners.
- employs over 30,000 people globally and is active in more than 100 markets.