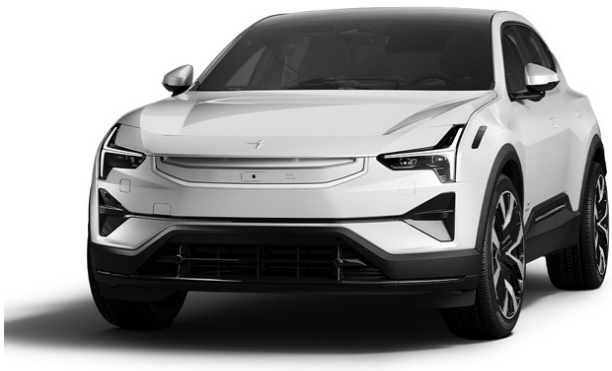
Polestar 3

Standard Safety Equipment

2025



Adult Occupant

90%

Child Occupant

93%

Vulnerable Road Users

79%

Safety Assist

83%

SPECIFICATION

Tested Model	Polestar 3 Longe range Dual motor Plus Pilot
Body Type	- 5 door SUV
Year Of Publication	2025
Kerb Weight	2565kg
VIN From Which Rating Applies	- all Polestar 3s
Class	Executive Car

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	–
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	●	✖	–
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✖
Side pelvis airbag	●	●	✖
Centre Airbag	●	●	–

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	–	○	●
Integrated CRS	–	✖	✖
Airbag cut-off switch	–	●	–
Child presence detection	●	●	●
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

OTHER SYSTEMS	
Active Bonnet	●
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
Cyclist Dooring Prevention	●
AEB Motorcyclist	●
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●
Fatigue / Distraction Detection	●

Note: Other equipment may be available on the vehicle but was not considered in the test year.

● Fitted to the vehicle as standard ○ Fitted to the vehicle as part of the safety pack

○ Not fitted to the test vehicle but available as option or as part of the safety pack ✖ Not available — Not applicable

ADULT OCCUPANT

Total 36.0 Pts / 90%

GOOD ADEQUATE MARGINAL WEAK POOR

Frontal Impact 13.1 / 16 Pts

Mobile Progressive Deformable Barrier

Full Width Rigid Barrier

Lateral Impact 16.0 / 16 Pts

Side Mobile Barrier

Side Pole

Far-Side Excursion

Occupant Interaction

Rear Impact 4.0 / 4 Pts

Rear Seat

Front Seat

ADULT OCCUPANT

Total 36.0 Pts / 90%

GOOD ADEQUATE MARGINAL WEAK POOR

Rescue and Extrication	3.0 / 4 Pts
Rescue Sheet	Available, ISO compliant
Advanced eCall	Available
Multi Collision Brake	Available
Submergence Check	Compliant

Comments

The passenger compartment of the Polestar 3 remained stable in the frontal offset test. Dummy readings indicated good protection of the knees and femurs of both front seat occupants. Polestar showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the Polestar 3 would be a somewhat aggressive impact partner in a frontal collision. In the full-width rigid barrier test, protection was good for all critical body regions of the driver and at least adequate for the rear seat passenger. In both the side barrier test and the more severe side pole impact, good protection was provided to all critical parts of the body and full points were scored. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was found to be adequate. The Polestar 3 has a countermeasure to mitigate against occupant-to-occupant injuries in such impacts. The centre airbag performed well in Euro NCAP's tests with dummy readings indicating good protection for both the driver and passenger. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats also indicated good whiplash protection. The car has an advanced eCall system which alerts the emergency services in the event of a crash, and a system to prevent secondary impacts after the car has been in a collision. Polestar demonstrated that the doors and windows would be openable to allow occupants to escape in the event of vehicle submergence.

CHILD OCCUPANT

Total 46.0 Pts / 93%

GOOD ADEQUATE MARGINAL WEAK POOR

Crash Test Performance based on 6 & 10 year old children 24.0 / 24 Pts

Frontal Impact	16 Pts

Lateral Impact	8 Pts

Restraint for 6 year old child: *Britax Römer KIDFIX i-Size*
Restraint for 10 year old child: *Volvo Booster cushion*

Safety Features 10.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	○	●	✖
i-Size	✖	●	✖
Integrated CRS	✖	✖	✖
Top tether	✖	●	✖
Child Presence Detection	●	●	●

● Fitted to test car as standard ○ Not on test car but available as option ✖ Not available

CRS Installation Check 12.0 / 12 Pts

i-Size	Seat Position				
	Front		2nd row		
			Left	center	Right
	–	✖	●	–	●

● Easy ● Difficult ● Safety critical ✖ Not allowed

Airbag ON Rearward facing restraint installation not allowed Airbag OFF

CHILD OCCUPANT

Total 46.0 Pts / 93%

Isofix	Seat Position				
	Front		2nd row		
	Airbag ON	Airbag OFF	Left	center	Right
	–	✖	●	–	●
	✖	–	●	–	●
	–	✖	●	–	●
	–	✖	●	–	●
	–	✖	●	–	●
	✖	–	●	–	●

● Easy ● Difficult ● Safety critical ✖ Not allowed

Airbag ON Rearward facing restraint installation not allowed Airbag OFF

Seatbelt Attached	Seat Position				
	Front		2nd row		
	Airbag ON	Airbag OFF	Left	center	Right
	✖	●	●	●	●
	●	✖	●	●	●
	●	✖	●	●	●
	●	✖	●	●	●
	●	✖	●	●	●
	✖	●	●	●	●

● Easy ● Difficult ● Safety critical ✖ Not allowed

Airbag ON Rearward facing restraint installation not allowed Airbag OFF

CHILD OCCUPANT

Total 46.0 Pts / 93%

Comments

In both the frontal offset test and the side barrier test, protection of all critical parts of the body was good for both the 6 and 10 year dummies, and the Polestar 3 scored full points in this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. The Polestar 3 is equipped with a direct 'child presence detection' system, which prevents the car from being locked if a child is detected. All of the child restraint types for which the Polestar 3 is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 50.1 Pts / 79%

GOOD | ADEQUATE | MARGINAL | WEAK | POOR

VRU Impact Protection

23.5 / 36 Pts

Pedestrian & Cyclist Head	14.0 Pts
Pelvis	1.5 Pts
Femur	2.0 Pts
Knee & Tibia	6.0 Pts

VRU Impact Mitigation

26.7 / 27 Pts

System Name	Forward & Rear Collision Warning and Mitigation / Exit Assist
Type	Auto-Brake with Forward Collision Warning
Operational From	1 km/h

PERFORMANCE |

AEB Pedestrian

8.9 / 9 Pts

Scenario	Day time	Night time
Car reversing into adult or child		–
Adult crossing a road into which a car is turning		–
Adult crossing the road		
Child running from behind parked vehicles		
Adult along the roadside		

– Currently not tested

AEB Cyclist

8.0 / 8 Pts

Scenario	Day time
Approaching cyclist crossing from behind parked vehicles	
Turning across path of an oncoming cyclist	
Approaching a crossing cyclist	
Approaching a cyclist along the roadside	

VULNERABLE ROAD USERS

Total 50.1 Pts / 79%

GOOD ADEQUATE MARGINAL WEAK POOR

Cyclist Dooring Prevention

0.8 / 1 Pts

Scenario	
Dooring a passing cyclist	warning, all side doors"

AEB Motorcyclist

6.0 / 6 Pts

Scenario	Autobrake function only	Driver reacts to warning
Approaching a stationary motorcyclist		
Approaching a braking motorcyclist		
Turn across the path of an oncoming motorcyclist		–

– Currently not tested

Lane Support Motorcyclist

3.0 / 3 Pts

Scenario	Day time
Changing lane across the path of an oncoming motorcyclist	
Changing lane across the path of an overtaking motorcyclist	

Comments

The Polestar 3 has an ‘active’ bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the surface of the bonnet to provide greater clearance to hard structures underneath. Polestar demonstrated that the system worked robustly for various pedestrian statures and over a range of speeds and, accordingly, the car was tested with the bonnet in the raised ‘deployed’ position. Protection of the head of a struck pedestrian good at almost all test points on the bonnet, and adequate on the windscreen with some poor results recorded on the stiff windscreen pillars. Protection of the pelvis, the femur and the knee and tibia was mixed, with good protection at some test locations and poor protection at others. The autonomous emergency braking (AEB) system of the Polestar can respond to vulnerable road users as well as to other vehicles. The system’s response to pedestrians was good in all test scenarios, including protection of those to the rear of the car. The system’s performance in tests of its reaction to cyclists was also good , including its protection against ‘dooring’, where a door is suddenly opened in the path of a cyclist approaching from behind. Performance of the AEB system was good in tests of its response to motorcyclists, with maximum points being scored.

SAFETY ASSIST

Total 15.1 Pts / 83%

GOOD ADEQUATE MARGINAL WEAK POOR

Speed Assistance

2.0 / 3 Pts

System Name	Road Sign Information
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	Intelligent Speed Limiter not default ON (accurate to 5km/h)

Occupant Status Monitoring

2.9 / 3 Pts

Seatbelt Reminder

1.0 / 1 Pts

Applies To	Front and rear seats		
Warning	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Visual	●	●	●
Audible	●	●	●
Occupant Detection	–	●	●

● Pass ● Fail – Not available

Driver Monitoring

1.9 / 2 Pts

System Name	Driver Monitoring System
Type	Direct eye monitoring
Operational From	10 km/h
Fatigue	Drowsiness, Microsleep and Sleep
Distraction	Long & Short Distraction and Phone Use
Impairment	Unresponsive Driver

SAFETY ASSIST

Total 15.1 Pts / 83%

Lane Support

3.0 / 3 Pts

System Name	Lane Departure Prevention
Type	LKA and ELK
Operational From	40 km/h
PERFORMANCE	
Emergency Lane Keeping	GOOD
Lane Keep Assist	GOOD
Human Machine Interface	GOOD

AEB Car-to-Car

7.2 / 9 Pts

System Name	Forward Collision Avoidance
Type	Autonomous emergency braking and forward collision warning
Operational From	1 km/h
Sensor Used	camera and radar

Scenario	Autobrake function only	Driver reacts to warning
Approaching a car crossing a junction		
Approaching a car head-on		–
Turning across the path of an oncoming car		–
Approaching a stationary car		
Approaching a slower moving car		–
Approaching a braking car		–

– Currently not tested

SAFETY ASSIST

Total 15.1 Pts / 83%

Comments

Overall, the performance of the autonomous emergency braking (AEB) system was good in tests of its reaction to other vehicles, with impacts being avoided in most tests. A seatbelt reminder system is fitted as standard to the front and rear seats. The car has a direct driver status monitoring system as standard, detecting driver fatigue and several types of distraction. The lane support system gently corrects the vehicle's path if it is drifting out of lane and also intervenes in some more critical situations. The speed assistance system identifies the local speed limit. The driver can choose to allow the limiter to be set automatically by the system.

RATING VALIDITY

Variants of Model Range

Body Type	Engine & Transmission	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	E400V7	Long Range Dual Motor Performance Pack	4 x 4	✓	✓
5 door SUV	E400V30	Long Range Dual Motor *	4 x 4	✓	✓
5 door SUV	E400V1	Long Range Single Motor	4 x 2	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome	
April 2025	Rating Published	2025 ★ ★ ★ ★ ★	✓