

POLESTAR 4



APPLIES TO All variants	BUILT FROM August 2024	RATING CRITERIA 2023-2025
VEHICLE TYPE Medium SUV	ON SALE FROM November 2024	RATING EXPIRES December 2031
ENGINE / MOTOR TYPES Battery Electric	MODEL SERIES N/A	AIRBAGS Dual frontal, side chest, side head, centre



ANCAP
SAFETY

TESTED
2025



The Polestar 4 was introduced in Australia and New Zealand in November 2024. This ANCAP safety rating applies to all variants.

Dual frontal, side chest-protecting and side head-protecting airbags are standard. A centre airbag which provides added protection to front seat occupants in side impact crashes is also standard.

Autonomous emergency braking (Car-to-Car, Vulnerable Road User, Junction & Crossing, Backover and Head-On) as well as a lane support system with lane keep assist (LKA), lane departure warning (LDW) and emergency lane keeping (ELK), and an advanced speed assistance system (SAS) with a speed sign recognition system, are standard.

ASSESSMENT SCORES

 Adult Occupant Protection 92% 37.00 out of 40	 Child Occupant Protection 87% 43.00 out of 49	 Vulnerable Road User Protection 81% 51.62 out of 63	 Safety Assist 79% 14.26 out of 18
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RATING APPLICABILITY*

VARIANT	BODY TYPE	ENGINE / POWERTRAIN	DRIVETRAIN	AUS	NZ
Polestar 4	5 door SUV	Battery Electric Vehicle (BEV)	RWD	✓	✓
Polestar 4	5 door SUV	Battery Electric Vehicle (BEV)	AWD	✓	✓

* Correct at time of publication. Subject to change. Check with manufacturer.



Adult Occupant Protection

92%
37.00 out of 40

FRONTAL OFFSET (MPDB)*
6.79 points out of 8

FULL WIDTH FRONTAL*
7.82 points out of 8

SIDE IMPACT*
6.00 points out of 6

OBLIQUE POLE*
6.00 points out of 6

WHIPLASH PROTECTION
3.73 points out of 4

FAR SIDE IMPACT
4.00 points out of 4

RESCUE & EXTRICATION
2.67 points out of 4

* Scaled scores. Total test scored out of 16.00 points.

The passenger compartment of the Polestar 4 remained stable in the **frontal offset (MPDB)** test. Protection of the driver's lower legs was ADEQUATE, with GOOD protection offered to all other body regions of both the driver and front passenger.

The front structure of the Polestar 4 presented a moderate risk to occupants of an oncoming vehicle in the MPDB test (which evaluates vehicle-to-vehicle compatibility), and a 2.11 point penalty (out of 8.00 points) was applied.

In the **full width frontal** test, protection of the driver dummy was ADEQUATE for the chest and GOOD for all other critical body regions for both the driver and rear passenger.

In the **side impact** test and **oblique pole** test, protection offered to all critical body regions was GOOD and the Polestar 4 scored maximum points in these tests.

The Polestar 4 is equipped with a centre airbag to protect against occupant-to-occupant interaction in side impacts and it provided GOOD protection for the head of both front seat occupants. Prevention of excursion (movement towards the other side of the vehicle) in the **far side impact** tests was assessed as GOOD for the vehicle-to-vehicle impact scenario, and ADEQUATE in the vehicle-to-pole scenario.

A Rescue Sheet, providing information for first responders in the event of a crash is available, and a multi-collision braking system is fitted. It was demonstrated that, if the car entered water, the doors and windows of the Polestar 4 would remain functional for the minimum required time period.

FRONTAL OFFSET (MPDB) TEST - 50km/h



	DRIVER	FRONT PASSENGER
Head / Neck	4.00 pts	4.00 pts
Chest	4.00 pts	4.00 pts
Upper Legs	4.00 pts	4.00 pts
Lower Legs	3.69 pts	4.00 pts
Deductions	Nil	Nil



COMPATIBILITY	
Deductions	-2.11 pts

FULL WIDTH FRONTAL TEST - 50km/h



	DRIVER	REAR PASSENGER
Head	4.00 pts	4.00 pts
Neck	4.00 pts	4.00 pts
Chest	3.28 pts	4.00 pts
Upper Legs	4.00 pts	4.00 pts
Deductions	Nil	Nil

SIDE IMPACT TEST - 60km/h



	DRIVER
Head	4.00 pts
Chest	4.00 pts
Abdomen	4.00 pts
Pelvis	4.00 pts
Deductions	Nil

OBLIQUE POLE TEST - 32km/h



	DRIVER
Head	4.00 pts
Chest	4.00 pts
Abdomen	4.00 pts
Pelvis	4.00 pts
Deductions	Nil



Adult Occupant Protection

92%
37.00 out of 40

FAR SIDE IMPACT TESTS - 60km/h and 32km/h



SIDE IMPACT (60km/h)	DRIVER
Head	4.00 pts
Neck	4.00 pts
Chest & Abdomen	4.00 pts
Pelvis	No penalty



OBLIQUE POLE (32km/h)	DRIVER
Head	4.00 pts
Neck	4.00 pts
Chest & Abdomen	4.00 pts
Pelvis	No penalty



OCCUPANT-TO-OCCUPANT	
Head Contact	No penalty

WHIPLASH PROTECTION TESTS



	DRIVER / FRONT PASSENGER	REAR PASSENGER
Rear Impact	2.73 pts	1.00 pts

RESCUE & EXTRICATION



Rescue Sheet	●	No penalty
Door Opening / Extrication	●	No penalty
Multi-Collision Braking	●	1.00 pt
Advanced eCall	✗	0.67 pt default
Vehicle Submergence		
- Door opening	●	0.50 pt
- Window opening	●	0.50 pt

● FITTED TO TEST CAR AS STANDARD ● NOT FITTED TO TEST CAR BUT AVAILABLE AS AN OPTION ✗ NOT AVAILABLE - N/A



Child Occupant Protection

87%

43.00 out of 49

DYNAMIC TEST (FRONT)
16.00 points out of 16

RESTRAINT INSTALLATION
12.00 points out of 12

DYNAMIC TEST (SIDE)
8.00 points out of 8

ON-BOARD SAFETY FEATURES
7.00 points out of 13

In the **frontal offset** and **side impact** tests, protection of the 10 year and 6 year dummies was GOOD and maximum points were scored in these tests.

The Polestar 4 is fitted with lower ISOFix anchorages on the rear outboard seats and top tether anchorages for all rear seating positions.

A direct child presence detection (CPD) system, which provides an alert when a child may have been left in the vehicle, is fitted to all passenger seats as standard but did not meet ANCAP's requirements so no points have been awarded.

Installation of typical child restraints available in Australia and New Zealand showed all selected child restraints could be accommodated in the rear seating positions, and maximum points were awarded.

FRONTAL OFFSET (MPDB) TEST - 50km/h



6 YEAR OLD

10 YEAR OLD

SIDE IMPACT TEST - 60km/h



10 YEAR OLD

6 YEAR OLD

ON-BOARD SAFETY FEATURES	FRONT PASSENGER	2nd ROW OUTBOARD	2nd ROW CENTRE	3rd ROW OUTBOARD	3rd ROW CENTRE
ISOFIX Anchorages	✗	●	✗	-	-
Top Tether Anchorage	✗	●	●	-	-
Airbag Disabling	✗	-	-	-	-
Child Presence Detection 0.00 pts (out of 4.00pts)	●	●	●	-	-

● FITTED AS STANDARD ✗ NOT AVAILABLE - N/A

CHILD RESTRAINT TYPE ^{^*}		FRONT ROW PASSENGER	2nd ROW			3rd ROW		
BELTED			L	C	R	L	C	R
	Rearward-facing capsule	✗	●	●	●	-	-	-
	Rearward-facing with harness - convertible (Model A)	✗	●	●	●	-	-	-
	Rearward-facing with harness - convertible (Model B)	✗	●	●	●	-	-	-
	Forward-facing with harness - convertible (Model A)	✗	●	●	●	-	-	-
	Forward-facing with harness - convertible (Model B)	✗	●	●	●	-	-	-
	Booster - 4 to 8 years	✗	●	●	●	-	-	-
ISOFIX	Booster - 4 to 10 years	✗	●	●	●	-	-	-
	Rearward-facing capsule	✗	●	-	●	-	-	-
	Rearward-facing with harness - convertible (Model A)	✗	●	-	●	-	-	-
	Rearward-facing with harness - convertible (Model B)	✗	●	-	●	-	-	-
	Forward-facing with harness - convertible (Model A)	✗	●	-	●	-	-	-

● INSTALL WITHOUT PROBLEM ● INSTALL WITH CARE ● CANNOT BE FITTED SAFELY ✗ INSTALLATION NOT ALLOWED - N/A

GOOD ADEQUATE MARGINAL WEAK POOR NOT TESTED

NOTE: The child restraints fitted to vehicles tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. The Child Restraint Evaluation Program (CREP) provides an independent assessment on the safety of Australasian child restraints - see www.childcarseats.com.au.
* Installation of each child restraint is assessed separately in each position. Installation of multiple restraints has not been assessed and may not be possible.
^ The list of child restraints has been selected to provide a general indication of the rated vehicle's ability to accommodate various CRS types. ANCAP does not endorse or recommend any one CRS brand or model, nor does it rate the safety of child restraints.



Vulnerable Road User Protection

81%

51.62 out of 63

HEAD PROTECTION (Adult, Child, Cyclist)
11.00 points out of 18

PELVIS PROTECTION
3.50 points out of 4.5

FEMUR PROTECTION
4.30 points out of 4.5

KNEE & TIBIA PROTECTION
9.00 points out of 9

AEB PEDESTRIAN (Forward)
5.88 points out of 7

AEB PEDESTRIAN (Backover)
1.50 points out of 2

AEB CYCLIST
8.43 points out of 9

AEB MOTORCYCLE
6.00 points out of 6

LSS MOTORCYCLE
2.00 points out of 3

In **pedestrian impact** tests, the bonnet and windscreen of the Polestar 4 provided GOOD or ADEQUATE protection to the head of a struck pedestrian over most of its surface, with MARGINAL and POOR results recorded on the stiff windscreen pillars and the rear and front edge of the bonnet surface.

Protection of the pelvis was mixed, with areas of GOOD to WEAK performance, while protection of the femur was GOOD and ADEQUATE and protection of the lower leg was GOOD.

The autonomous emergency braking (AEB) system is capable of detecting and reacting to vulnerable road users such as pedestrians, cyclists and motorcyclists.

Testing of this system showed GOOD performance in **AEB pedestrian** test scenarios, including turning scenarios, with collisions avoided or mitigated in most tests. Performance in reverse (**AEB Backover**) scenarios was ADEQUATE.

GOOD performance was seen in **AEB cyclist** test scenarios with collisions avoided or mitigated at all test speeds, including turning scenarios. The vehicle provides information to the occupants when a bicycle is approaching from behind (**cyclist anti-dooring**). A warning is also provided, but is not sufficiently early to qualify for scoring.

GOOD performance was seen in the **AEB motorcyclist** tests, including in turning scenarios, and in some **emergency lane keeping** scenarios.

PEDESTRIAN & CYCLIST IMPACT TESTS



AUTONOMOUS EMERGENCY BRAKING (Cyclist, Pedestrian & Motorcycle)

System Name	Collision Mitigation Support Front
Type	Autonomous emergency braking with forward collision warning
Operational From	5-90 km/h

AEB CYCLIST TEST SCENARIOS (forward)	Cyclist traveling along road (25%)	Cyclist crossing from kerb (obstructed)	Cyclist traveling along road (50%)	Cyclist crossing (nearside)	Cyclist crossing (farside)	Cyclist crossing side road, car turning (nearside)	Cyclist crossing side road, car turning (farside)
	DAY	DAY	DAY	DAY	DAY	DAY	DAY
PERFORMANCE	GOOD						

CYCLIST DOORING

Information (driver door)	●
Warning (driver door)	✗
Retention (driver door)	✗
Warning or retention (all other doors)	✗

● PASS ✗ FAIL - N/A

GOOD ADEQUATE MARGINAL WEAK POOR / NOT TESTED DUE TO NO PERFORMANCE PREDICTED NOT TESTED



Vulnerable Road User Protection

81%

51.62 out of 63

AEB PEDESTRIAN TEST SCENARIOS (reverse)	Child / Adult standing behind reversing vehicle (25% offset)	Adult / Child standing behind reversing vehicle (50% offset)	Child / Adult standing behind reversing vehicle (75% offset)	Adult / Child walking behind reversing vehicle (50% offset)
	DAY	DAY	DAY	DAY
4km/h				
8km/h				
PERFORMANCE	ADEQUATE			

AEB PEDESTRIAN TEST SCENARIOS (forward)	Adult walking along road		Adult crossing towards kerb (50%)		Adult crossing from kerb (25%)		Adult crossing from kerb (75%)		Child running (obstructed)		Adult crossing side road (farside), car turning		Adult crossing side road (nearside), car turning	
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT
PERFORMANCE														
	GOOD													

AEB MOTORCYCLE TEST SCENARIOS (forward)	Driving towards a stationary motorcycle			Driving towards a braking motorcycle (25% offset)			Turning across the path of an oncoming motorcycle		
	100% OFFSET			12m HEADWAY			TARGET MOTORCYCLE SPEED		
				40m HEADWAY			30km/h	45km/h	60km/h
AEB (10-50km/h)									
FCW (30-80km/h)									
PERFORMANCE	GOOD						GOOD		

LANE SUPPORT SYSTEMS (Car-to-Motorcycle)

System Name	Lane Keeping Aid
Operational From	60-180 km/h

EMERGENCY LANE KEEPING (ELK) TEST SCENARIOS Car-to-Motorcycle	Oncoming motorcycle	Overtaking motorcycle (EMT at 60km/h)		Overtaking motorcycle (EMT at 80km/h)	
		UNINTENTIONAL	INTENTIONAL	UNINTENTIONAL	INTENTIONAL
PERFORMANCE					
	ADEQUATE				



Safety Assist

79%
14.26 out of 18

SEAT BELT REMINDERS
1.00 points out of 1

DRIVER MONITORING
0.00 points out of 2

SPEED ASSISTANCE SYSTEMS
2.19 points out of 3

AEB / AES (Car-to-Car)
3.64 points out of 4

AEB / AES (Junction & Crossing)
3.68 points out of 4

AEB / AES (Head-On)
1.00 points out of 1

LANE SUPPORT SYSTEMS
2.75 points out of 3

The Polestar 4 is fitted with an autonomous emergency braking system capable of functioning at highway speeds, and a lane support system (LSS) with lane keep assist (LKA) and emergency lane keeping (ELK) functionality.

Tests of the **AEB (Car-to-Car)** system showed **GOOD** performance with collisions avoided or mitigated in all test scenarios, including in **AEB Junction** and many **AEB Crossing** scenarios, where the test vehicle can autonomously brake to avoid crashes when turning across or into the path of an oncoming vehicle. The **AEB Head-On** system was shown to mitigate frontal crashes in the specified test scenarios, with **GOOD** performance.

Tests of **lane support system** functionality showed **GOOD** performance, including in the more critical emergency lane keeping test scenarios,

A speed assistance system (SAS) with speed limit information function (SLIF) and intelligent adaptive cruise control (iACC) is standard, informing the driver of the local speed limit and automatically changing the speed accordingly.

A seatbelt reminder system with occupancy detection is fitted to all seating positions. A driver drowsiness monitor system is fitted as standard, however it does not function at lower speeds so no points have been awarded.

AUTONOMOUS EMERGENCY BRAKING (Car-to-Car)

System Name	Collision Mitigation Support Front
Type	Autonomous emergency braking with forward collision warning
Operational From	5-150 km/h



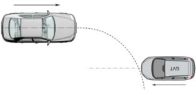
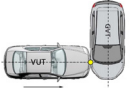


Safety Assist

79%

14.26 out of 18

AUTONOMOUS EMERGENCY BRAKING (Car-to-Car Junction, Crossing and Head-On)

		JUNCTION ASSIST Turning across the path of an oncoming vehicle			CROSSING (T-BONE) Crossing the path of another vehicle				
TARGET VEHICLE SPEED		30km/h	45km/h	60km/h	20km/h	30km/h	40km/h	50km/h	60km/h
									
TEST VEHICLE SPEED	Start from stop	-	-	-					
	10km/h				-	-	-	-	-
	15km/h				-	-	-	-	-
	20km/h								
	30km/h	-	-	-					
	40km/h	-	-	-					
	50km/h	-	-	-					
	60km/h	-	-	-					
PERFORMANCE		GOOD			GOOD				

				HEAD-ON	
				In the path of oncoming vehicle	
		TARGET VEHICLE SPEED		50km/h	70km/h
TEST VEHICLE SPEED	Travelling straight	50km/h			-
		70km/h		-	
	Lane change	50km/h			-
		70km/h		-	
PERFORMANCE				GOOD	

LANE SUPPORT SYSTEMS (Car-to-Car)

System Name	Lane Keeping Aid
Operational From	60-180 km/h

		Dashed line	Solid line
LANE KEEP ASSIST (LKA) TEST SCENARIOS Car-to-Car			
PERFORMANCE			GOOD

		Oncoming vehicle	Overtaking vehicle (GVT at 72km/h)		Overtaking vehicle (GVT at 80km/h)	Road edge		Solid line	
			UNINTENTIONAL	INTENTIONAL	UNINTENTIONAL	INTENTIONAL			
EMERGENCY LANE KEEPING (ELK) TEST SCENARIOS Car-to-Car									
PERFORMANCE									



Safety Assist

79%

14.26 out of 18

OCCUPANT STATUS

WARNING TYPE	DRIVER	FRONT PASSENGER	REAR PASSENGERS
Occupant Detection	-	●	●
Seat Belt Reminder (Visual)	●	●	●
Seat Belt Reminder (Audible)	●	●	●

DRIVER MONITORING

	WARNING	INTERVENTION
Distraction	●	×
Fatigue	●	×
Unresponsive Driver	-	×

SPEED ASSISTANCE SYSTEMS (SAS)

FEATURE	
Speed Limit Information Function (SLIF)	Camera only
Manual Speed Limiter	×
Intelligent Adaptive Cruise Control (iACC)	●
Intelligent Speed Limitation (ISL)	×

HUMAN MACHINE INTERFACE (HMI)

FEATURE	
AEB: Supplementary Warning	●
AEB: Restraint activation / dynamic retractors / emergency steering support	×
Lane Departure Warning (LDW)	●
Blind Spot Monitoring (BSM): Car-to-Car & Car-to-Motorcycle	●

SAFETY FEATURES & TECHNOLOGIES

SAFETY FEATURE / TECHNOLOGY*	AUS	NZ
Seat belt pre-tensioners (front seats)	●	●
Seat belt pre-tensioners (rear outboard seats) - 2nd row	●	●
Seat belt pre-tensioners (rear centre seat) - 2nd row	✗	✗
Seat belt pre-tensioners (rear outboard seats) - 3rd row	-	-
Seat belt pre-tensioners (rear centre seat) - 3rd row	-	-
Intelligent seat belt reminder (driver)	●	●
Intelligent seat belt reminder (front passenger)	●	●
Intelligent seat belt reminder (2nd row seats)	●	●
Intelligent seat belt reminder (3rd row seats)	-	-
Airbag - dual frontal (driver & front passenger)	●	●
Airbags - side, chest protection (front seats)	●	●
Airbags - side, chest protection (2nd row seats)	✗	✗
Airbags - side, chest protection (3rd row seats)	-	-
Airbags - side, head protection (front seats)	●	●
Airbags - side, head protection (2nd row seats)	●	●
Airbags - side, head protection (3rd row seats)	-	-
Airbag - centre	●	●
Airbag - knee (driver)	✗	✗
Airbag - knee (front passenger)	✗	✗
Airbag - pedestrian (external)	✗	✗
Airbag disabling switch - automatic (front passenger)	✗	✗
Airbag disabling switch - manual (front passenger)	✗	✗
Autonomous emergency braking (AEB) - Car-to-Car	●	●
Autonomous emergency braking (AEB) - Vulnerable Road User		
- AEB Pedestrian	●	●
- AEB Backover	●	●
- AEB Cyclist	●	●
- AEB Motorcycle	●	●
Autonomous emergency braking (AEB) - Junction		
- AEB Junction (Car)	●	●
- AEB Junction (Pedestrian)	●	●
- AEB Junction (Cyclist)	●	●
- AEB Junction (Motorcycle)	●	●
Autonomous emergency braking (AEB) - Crossing	●	●
Automatic emergency call (eCall)	●	●
Blind spot monitor (BSM)	●	●
Child presence detection / alert	●	●
Cyclist dooring detection / alert	●	●
Driver monitoring system - Indirect	✗	✗
Driver monitoring system - Direct	●	●
Forward collision warning (FCW)	●	●
Lane departure warning (LDW)	●	●
Lane keep assist (LKA)		
- LKA (Car-to-Car)	●	●
- LKA (Car-to-Motorcycle)	●	●
Secondary / multi-collision brake	●	●
Speed assistance - intelligent adaptive cruise control (iACC)	●	●
Speed assistance - auto / intelligent speed limiter	✗	✗
Speed assistance - manual speed limiter	✗	✗
Speed assistance - speed sign recognition & warning	●	●
Vehicle-to-infrastructure communication (V2I)	✗	✗
Vehicle-to-vehicle communication (V2V)	✗	✗

● STANDARD ● AVAILABLE ON HIGHER VARIANTS ● OPTIONAL ✗ NOT AVAILABLE - NOT APPLICABLE

* Correct at time of publication. Subject to change. Check with manufacturer.

TESTED MAKE / MODEL
Polestar 4, Long Range Single
Motor, LHD

TESTED VEHICLE ENGINE
Battery Electric (BEV)

RATING UPDATED
n/a

TESTED BODY TYPE
5 door SUV

RATING PUBLISHED
July 2025