

Crash Tests

New Car Safety

MERCEDES BENZ A-CLASS

1999 on

Dual front & side airbags

Overall Evaluation



Overall score

27.26 out of 34

Variant: A140, LHD.
Kerb weight: 1070 kg
Vehicles built: Jun 1998

Engine: 4 Cyl. 1.4 litre.
Category: SMALL CAR
Tested by EuroNCAP

***Important note:** The *left-hand-drive* European A140 variant was tested by EuroNCAP. Australian specifications may vary and therefore models sold in Australia might provide different levels of protection to those described on this page.

Safety features

Dual front and side airbags are standard equipment in Australia (side airbags are not standard in all European countries).

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pretensioners are fitted to front and rear (outboard) seat belts to reduce slack in the event of a severe crash. Adjustable head restraints are provided for all seating positions.

OVERALL EVALUATION : 4 Stars

The MERCEDES BENZ A-CLASS performed well in the offset crash test (score 11.26 out of 16). The passenger compartment held its shape well. The driver and passenger were protected by airbags.

The vehicle performed exceptionally well in the side impact crash with a full 16 points.

FRONTAL OFFSET CRASH TEST

The passenger compartment held its shape very well in the offset crash test. Intrusion into the passenger compartment was well controlled. The brake pedal moved rearwards by 11cm. The width of the driver's doorway shortened by 3cm. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

The driver's head was well protected by the airbag, although the airbag was close to bottoming out late in the crash. The passenger airbag also worked well.

SIDE IMPACT CRASH TEST

Intrusion was well controlled. The EuroNCAP test was marred by both the driver and rear doors opening during the crash. Subsequently the manufacturer modified the design and a retest, by EuroNCAP, of an A-Class without side airbags showed that the problem had been overcome.

The driver was very well protected in the side impact. However, the EuroNCAP report noted that the side airbag appeared to do little to contribute to this protection.



Offset crash test at 64km/h

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn eligible vehicles an extra two points, giving a maximum possible overall score of 34 points.

INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
Head HIC	451.2	383.5	171.2
Acceleration (g for 3ms)	48.83	48.69	61.77
Neck - Shear (kN)	0.48	0.49	-
Tension (kN)	0.78	1.05	-
Extension (Nm)	8.92	7.97	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	26.85	23.02	21.02
Viscous criterion (m/s)	0.38	0.12	0.16
Abdomen - Force (kN)	-	-	0.9
Pelvis - Force (kN)	-	-	1.35
Upper legs Force (kN)	Left 0.18 Right 1.86	0.11 0.33	
Knee displ (mm)	Left 4.19 Right 3.26	0.06 0.24	
Lower legs Force (kN)	Left 4.91 Right 4.35	1.44 0.24	
Index (Upper/Low)	Left 0.86/0.82 Right 0.6/0.4	0.36/0.14 0.4/	

Modifiers for offset test scores

Head	No penalties
Chest	No penalties
Upper leg penalty L & R	Variable & conc. loading 2 pt
Foot score	Brake pedal movement 3.76 score

PEDESTRIAN RATING:

Not rated by EuroNCAP



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