

Crash Test Results

New Car Safety

MERCEDES-BENZ M-CLASS

From Jul 2011 Front+side+head+knee airbags



Offset crash test at 64km/h



ANCAP Occupant Protection
Rated ★★★★★

Occupant Protection Score 36.34 out of 37

Variant: ML350 LHD Eng: 3.5 petrol
Kerb mass 2100 kg Category: SUV - LARGE
Vehicles built: 2011 Tested by Euro NCAP

Important note: The *left-hand-drive* European model was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

Model History and Safety Features

The tested model of Mercedes-Benz M-Class was introduced in Australia during 2011. This ANCAP rating currently applies to variants with a 3.5 litre petrol V6 engine. Further technical information is being sought about other variants.

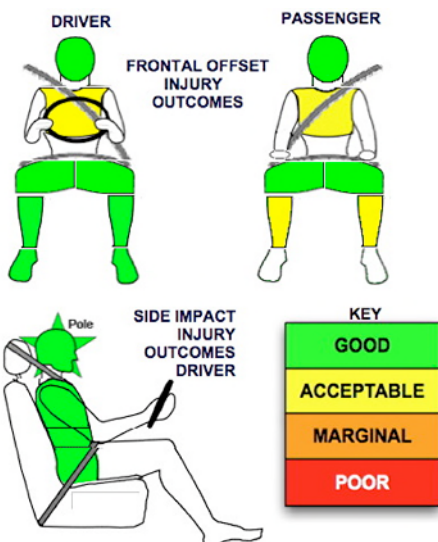
Dual front airbags, side airbags, head-protecting side curtains and a driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to all seats. Pre-SAFE collision preparation system is standard. A reversing camera is available.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash.

OCCUPANT PROTECTION: 5 Stars

The M-Class scored 15.34 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest injury for the driver and passenger and a slight risk of serious leg injury for the passenger.

The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the pole test.



FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.53 pts, upper legs 4 pts, lower legs 3.81 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved forwards by 1mm. The accelerator pedal moved upwards 26 mm. The steering wheel hub moved 27mm forward, 27mm downward and 1 mm sideways. The front ("A") pillar moved 2 mm rearwards. All doors remained closed during the crash. After the crash the all doors could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. The passenger's head was cushioned by the airbag. There were no knee hazards.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.

The side impact test simulates a small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the M-Class. Experience shows that such vehicles can be expected to perform well in this test and the M-Class scored full marks.

The vehicle was eligible for a pole impact test, since it had head-protecting side airbags. The vehicle earned the maximum two points in this test.

PEDESTRIAN PROTECTION: Acceptable

The M Class has an 'active' bonnet. In all areas likely to be struck by the head of an adult, the bonnet provided good protection. In the areas likely to be struck by a child's head, protection was mixed, with areas of good, marginal and poor performance. The protection offered by the front edge of the bonnet to pedestrians was poor.

PEDESTRIAN PROTECTION	Child head impacts	5.42
ACCEPTABLE	Adult head impacts	12
	Upper leg impacts	Zero
	Lower leg impacts	4
	Total (out of 36)	21.42



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ANCAP
Crash testing for safety
AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - MERCEDES-BENZ M-CLASS - From July 2011

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v5.1)		Side Impact Crash Test at 50km/h (v5.1)
	Driver	Passenger	Driver
Head HIC	281	331	22
Acceleration (g for 3ms)	41.4	44.6	18.9
Neck - Shear (kN)	0.63	0.32	-
Tension (kN)	0.79	0.67	-
Extension (Nm)	6.2	7.6	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	25.28	23.57	4.90
Viscous criterion (m/s)	0.10	0.11	0.01
Abdomen - Force (kN)	-	-	0.350
Pelvis - Force (kN)	-	-	0.420
Upper legs Force (kN)			
Left	1.16	1.60	
Right	0.94	0.30	
Knee displ (mm)			
Left	2.20	0.50	
Right	4.20	0.40	
Lower legs Force (kN)			
Left	1.79	2.29	
Right	1.38	2.16	
Index (Upper/Low)			
Left	0.36 /0.28	0.41 /0.43	
Right	0.30 /0.27	0.4/0.23	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 3 (see table below for details)

Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction Left & Right
Lower leg	No deduction
Foot score	Score 4 points

Modifiers - deductions from side impact test scores

Chest	No deduction
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Safety features

These specifications are subject to change. Please check with manufacturer for the latest specifications.



Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution / Brake Assist	S/S/S
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	S	3 point seat belt for all forward-facing seats	S
Side airbags, front seats - head protection	S	Whiplash protection (RCAR protocol)	Pending
Side airbags, rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	S	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Intelligent seat belt reminder - rear seats	S

Key:

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant

ESC required by ANCAP for 5 star rating from 2008