

# Crash Tests

## New Car Safety

### Mercedes-Benz M-Class

03/2008 on 01/0001 - Frontal+Side+Head+Knee

#### Overall Evaluation



#### Overall Score

Variant: ML320 CDI LHD

**33.97 out of 37**

Engine: 3 litre diesel  
Category: Large SUV

The diesel 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 M-Class was introduced in Australia during 2008. Knee airbags, as fitted to the tested vehicle, are standard for the 2009 Model Year (supplied in Australia from September 2008).

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front seats. PRE-SAFE is standard but was disengaged for the crash tests. 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 the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

#### Overall Evaluation: 5

5 stars. The M-Class scored 13.97 out of 16 in the offset crash test. The passenger compartment held its shape very well. There was a slight risk of serious chest and leg injury for both the driver and passenger.

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

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.99 pts, upper legs 4 pts, lower legs 2.98 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 57 mm. The steering wheel hub moved 71mm forward, 31mm downward and 4 mm sideways. The front ("A") pillar moved 22 mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

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

#### 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 vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

#### Pedestrian rating (v4.2)



The bumper and bonnet leading edge offered only poor leg protection. The bonnet top was also rated as predominantly poor for the protection offered to a child's head.

Child head impacts	0.69
Adult head impacts	5.43
Upper leg impacts	Zero
Lower leg impacts	Zero
Total (out of 36)	6.12

Offset crash test at 64km/hr



#### Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test aa 50km/h (v4.2) Driver
	Driver	Passn	
Head			
- HIC	355	290	3
- Acceleration (g for 3ms)	44.4	43.7	6.9
Neck			
- Shear (kN)	0.75	0.38	
- Tension (kN)	1.3	0.71	
- Extension (Nm)	4	5.7	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	29.05	23.07	7.9
- Viscous Criterion (m/s)	0.17	0.17	0.01
Abdomen			
- Force (kN)			0.15
Pelvis			
- Force (kN)			0.81
Upper Legs Force (kN)			
- Left	1.81	0.91	
- Right	1.92	1.12	
Knee Displacement (kN)			
- Left	5	0	
- Right	3.2	0	
Lower Legs Force (kN)			
- Left	2.18	2.38	
- Right	3.02	2.41	
Index (Upper   Lower)			
- Left	0.34   0.29	0.61   0.39	
- Right	0.42   0.34	0.63   0.24	

#### Bonus points (maximum 5)

Pole Test: 2 pts

Seat Belt Reminders: 2

#### Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	4 pts
Structure	

#### Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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