

# Crash Tests

## New Car Safety

### BMW 1 Series

01/2004 on 01/2011 - Frontal+Side+Head

#### Overall Evaluation



**Overall Score**  
Variant: 116i 5 DR Hatch

**33.37 out of 37**  
Engine: 2L  
Category: Small Car

The 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 BMW 1 Series was introduced in Australia during 2004. Dual front airbags, side airbags and head-protecting inflatable side tubes are standard equipment. ABS brakes and electronic stability control are also standard. Advanced seat belt reminders are fitted to both front seats. 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. Pre-tensioners 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 seat belt.

#### Overall Evaluation: 5

The BMW 1SERIES(E) scored 13.77 out of 16 in the offset crash test. There was a slight risk of serious chest and leg injury for the driver and passenger. The vehicle scored 15.6 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver. A further 2 points were scored in the optional pole test.

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4pts, chest 2.84pts, upper legs 4pts, lower legs 2.93pts.

The passenger compartment held its shape very well in the offset crash test. The accelerator pedal moved rearwards by 53mm. The steering wheel hub moved forwards 1mm, upwards 18mm and sideways 12mm. The front ("A") pillar moved 28mm rearwards. The width of the driver's doorway shortened by 26mm. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. Knee protection was good.

#### Side Impact Crash Test

Body region scores out of 4 points each: Head 4pts, chest 3.6pts, abdomen 4pts, pelvis 4pts.

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 (v4.1)



2.11 points out of 36.

Child head impacts 2.11pts; adult head impacts zero pts; upper leg zero pts and lower leg impacts zero pts.

Offset crash test at 64km/hr



#### Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test aa 50km/h (v1111) Driver
	Driver	Passn	
Head			
- HIC	170	161	88
- Acceleration (g for 3ms)	35.9	32.7	29.7
Neck			
- Shear (kN)	0.53	0.42	
- Tension (kN)	1.18	0.88	
- Extension (Nm)	11.92	8.37	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	30.1	22.16	24
- Viscous Criterion (m/s)	0.14	0.05	0.32
Abdomen			
- Force (kN)			0.58
Pelvis			
- Force (kN)			2.18
Upper Legs Force (kN)			
- Left	1.13	0.41	
- Right	0.44	0.76	
Knee Displacement (kN)			
- Left			
- Right		0.34	
Lower Legs Force (kN)			
- Left	3.3	1.83	
- Right	1.35	2.43	
Index (Upper   Lower)			
- Left	0.36   0.64	0.37   0.15	
- Right	0.35   0.41	0.43   0.33	

#### Bonus points (maximum 5)

Pole Test: 2pts

Seat Belt Reminders: 2pts

#### Modifiers for offset test scores

Head

No deduction

Chest

No deduction

Upper leg

No deduction

Lower leg

No deduction

Foot score

Score 4 points

Structure

#### Modifiers for side impact test scores

Head

Chest

Upper leg

Lower leg

Foot score

Structure



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