



BMW 5 Series
Standard Safety Equipment

2017



Adult Occupant



91%

Child Occupant



85%

VRU Impact Protection



81%

Safety Assist



59%

SPECIFICATION

Tested Model	BMW 520d, LHD
Body Type	- 4 door saloon
Year Of Publication	2017
Kerb Weight	1560kg
VIN From Which Rating Applies	- all 4 cylinder BMW 5 Series
Class	Executive

✗ Rating Expired

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	✘
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	●	✘	✘
SIDE CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	●	●	✘
CHILD PROTECTION			
Isofix/i-Size	—	✘	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	—	✗	●
Integrated CRS	—	✗	✗
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

OTHER SYSTEMS	
Active Bonnet (Hood)	●
AEB Pedestrian	●
AEB City	●
AEB Inter-Urban	●
Speed Assistance System	●
Lane Assist System	○

Note: Other equipment may be available on the vehicle but was not considered in the test year.

- Fitted to the vehicle as standard ○ Fitted to the vehicle as part of the safety pack
- Not fitted to the test vehicle but available as option or as part of the safety pack ✗ Not available — Not applicable

ADULT OCCUPANT

Total 34.8 Pts / 91%

GOOD ADEQUATE MARGINAL WEAK POOR

Frontal Offset Deformable Barrier 6.3 Pts

Passenger Driver

Frontal Full Width 7 Pts

Rear Passenger Driver

Whiplash Rear Impact 2.7 Pts

Front seat Rear seat

Lateral Impact 15.8 Pts

Car Pole

AEB City 3.0

Performance: ■ Good



ADULT OCCUPANT

Total 34.8 Pts / 91%



GOOD



ADEQUATE



MARGINAL



WEAK



POOR



ADULT OCCUPANT

Total 34.8 Pts / 91%

Comments

The passenger compartment of the 5 Series remained stable in the offset frontal impact. Dummy readings indicated good protection of the knees and femurs of the driver and passenger. BMW demonstrated that, for the passenger's side, a similar level of protection would be provided to occupants of different sizes and to those sat in different positions. On the driver's side, incorrect deployment of the knee airbag in the full-width test led to penalties for this body region in both frontal impact tests. In the full-width frontal test, the knee airbag did not deploy quickly enough to get between the right knee and the dashboard. Although dummy readings for both legs were good, protection of the knee/femur/pelvis region was penalised. BMW stated that the airbag deployment seen in Euro NCAP's test was anomalous and had not been observed in their development tests. Protection of the neck of the driver and the chest of the rear passenger was rated as marginal. In the side barrier test, maximum points were scored, with good protection of all critical body regions. Even in the more severe side pole test, protection was good, apart from the chest, protection of which was adequate. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric assessment of the rear seats indicated good protection there too. The 5 Series has, as standard, an autonomous emergency braking system which operates at the low speeds, typical of city driving, at which many whiplash injuries are caused. The system scored maximum points in Euro NCAP's tests, with complete avoidance of collision at all test speeds.

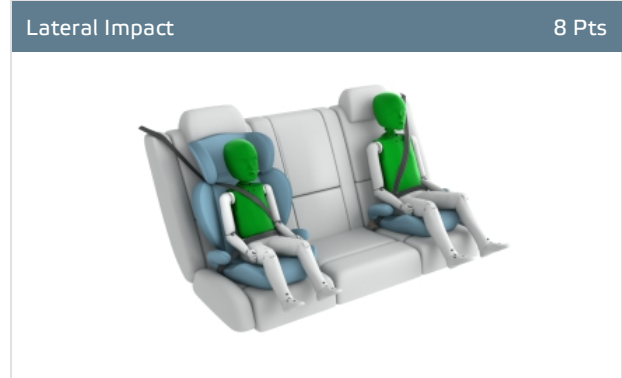
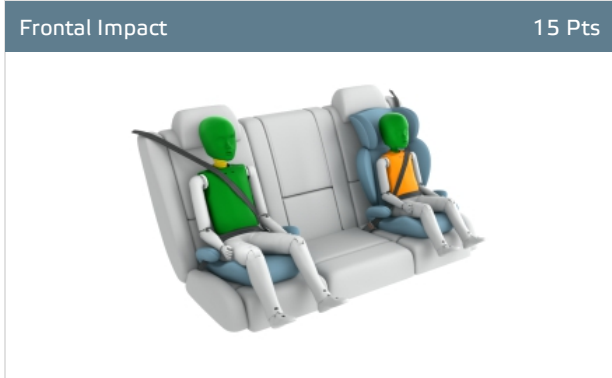
CHILD OCCUPANT

Total 42.0 Pts / 85%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Crash Test Performance based on 6 & 10 year old children

23.0 Pts



Restraint for 6 year old child: *Britax Römer KidFix XP*
 Restraint for 10 year old child: *Graco Junior*

Safety Features

7.0 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	✘	●	✘
i-Size	✘	●	✘
Integrated CRS	✘	✘	✘

Fitted to test car as standard
 Not on test car but available as option
 Not available

CRS Installation Check

12.0 Pts

● Install without problem ● Install with care ● Safety critical problem ✗ Installation not allowed

■ i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)



Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)



BeSafe iZi Kid X2 i-Size (iSize)



■ ISOFIX CRS

Maxi Cosi Cabriofix & FamilyFix (ISOFIX)



BeSafe iZi Kid X4 ISOfix (ISOFIX)




Britax Römer Duo Plus (ISOFIX)



Britax Römer KidFix XP (ISOFIX)



 CHILD OCCUPANT

Total 42.0 Pts / 85%

■ Universal Belted CRS

Maxi Cosi CabrioFix (Belt)



Maxi Cosi CabrioFix & EasyBase2 (Belt)



Britax Römer King II LS (Belt)



Britax Römer KidFix XP (Belt)



Comments

In the frontal offset test, protection of both the both dummies was good or adequate except for the chest of the 6 year dummy which was rated as marginal based on chest decelerations. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. All of the restraint types for which the 5 Series is designed could be properly installed and accommodated in the car.

CHILD OCCUPANT

Total 42.0 Pts / 85%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)	—	●	—	●
Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)	—	●	—	●
BeSafe iZi Kid X2 i-Size (iSize)	—	●	—	●
Maxi Cosi Cabriofix & FamilyFix (ISOFIX)	—	●	—	●
BeSafe iZi Kid X4 ISOfix (ISOFIX)	—	●	—	●
Britax Römer Duo Plus (ISOFIX)	—	●	—	●
Britax Römer KidFix XP (ISOFIX)	—	●	—	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyBase2 (Belt)	●	●	✘	●
Britax Römer King II LS (Belt)	●	●	●	●
Britax Römer KidFix XP (Belt)	●	●	●	●

● Easy ● Difficult ● Safety critical ✘ Not allowed — Not available


Comments

In the frontal offset test, protection of both the both dummies was good or adequate except for the chest of the 6 year dummy which was rated as marginal based on chest decelerations. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. All of the restraint types for which the 5 Series is designed could be properly installed and accommodated in the car.

VRU IMPACT PROTECTION

Total 34.1 Pts / 81%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

VRU Impact Protection	28.7 Pts						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Head Impact</td> <td style="text-align: right; padding: 5px;">22.7 Pts</td> </tr> <tr> <td style="padding: 5px;">Pelvis Impact</td> <td style="text-align: right; padding: 5px;">0.0 Pts</td> </tr> <tr> <td style="padding: 5px;">Leg Impact</td> <td style="text-align: right; padding: 5px;">6.0 Pts</td> </tr> </table>	Head Impact	22.7 Pts	Pelvis Impact	0.0 Pts	Leg Impact	6.0 Pts
Head Impact	22.7 Pts						
Pelvis Impact	0.0 Pts						
Leg Impact	6.0 Pts						

AEB Pedestrian		5.3 Pts
System Name	Person Warning with City Light Braking Function	
Type	Auto-Brake	
Operational From	10 km/h	
Additional Information	Defaults on for every journey; operates in low ambient light	

PERFORMANCE 		
	Autobrake Function	
	Avoidance	Mitigation
Running Adult crossing from Farside	Collision avoided up to 45 km/h	Impact mitigated up to 60 km/h
Walking Adult crossing from Nearside -25%	Collision avoided up to 45 km/h	Impact mitigated up to 60 km/h
Walking Adult crossing from Nearside -75%	Collision avoided up to 40 km/h	Impact mitigated up to 60 km/h
Running Child from behind parked vehicles	Collision avoided up to 35 km/h	Impact mitigated up to 50 km/h

Comments

The 5 Series has an 'active' bonnet. Sensors detect when a pedestrian has been struck and actuators lift the bonnet, providing greater clearance between its top surface and hard structures in the engine bay. BMW demonstrated that the system worked for a variety of pedestrian statures and over a range of speeds so tests were conducted with the bonnet in the raised position. Good or adequate protection was provided at all over the entire bonnet surface. The bumper also provided good protection and scored maximum points in tests of its protection of pedestrians' legs. However, protection of the pelvis area was poor at all test locations. The autonomous braking system is able to detect pedestrians as well other vehicles and performed well in Euro NCAP's tests of this functionality, with collisions being avoided or mitigated at most test speeds.

SAFETY ASSIST

Total 7.1 Pts / 59%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Speed Assistance

1.5 Pts

System Name	Manual Speed Limiter
Speed Limit Information Function	N/A
Warning Function	Manually set
Speed Limitation Function	Manually set (accurate to 5km/h)

Seatbelt Reminder

3.0 Pts

Applies To	All seats		
	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●

● Pass
 ● Fail
 — Not available

Lane Support

0 Pts

SAFETY ASSIST

Total 7.1 Pts / 59%

AEB Inter-Urban

2.6 Pts

System Name	Front-End Collision Warning with Light Braking Function	
Type	Forward Collision Warning with Auto-Brake	
Operational From	30 km/h	
Additional Information	Default On	
PERFORMANCE		
	Autobrake Function Only	Driver reacts to warning
Operational Speed	30-80 km/h	30-80 km/h
Approaching a stationary car	See AEB City	Crash avoided up to 80km/h.
Approaching a slower moving car	Crash avoided up to 70km/h.	Crash avoided up to 80km/h.
FOLLOWING A CAR AT SHORT DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Mitigation	Mitigation
FOLLOWING A CAR AT LONG DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Avoidance	Avoidance

Comments

The standard-fit autonomous emergency braking system showed good performance in tests of its functionality at highway speeds. Collision was avoided in almost all circumstances and mitigated in others. A driver-set speed assistance system allows the driver to limit the maximum speed of the vehicle as appropriate, and a seatbelt reminder is provided for all seating positions.

RATING VALIDITY

Variants of Model Range

Body Type	Engine & Transmission	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
4 door saloon	4 cylinder diesel	518d, 520d*	4x2	✓	✓
5 door estate	4 cylinder diesel	518d, 520d	4x2	✓	✓
4 door saloon	4 cylinder petrol	520i	4x2	✓	✓
5 door estate	4 cylinder petrol	520i	4x2	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
April 2017	Rating Published	2017 ★★★★★ ✓
March 2018	Annual Review	2017 ★★★★★ ✓
April 2019	Annual Review	2017 ★★★★★ ✓

Euro NCAP © BMW 5 Series April 2017 15/15