EURO NCAP
FOR SAFER CARS

BYD DOLPHIN
Standard Safety Equipment

2023 ★★★★★

Adult Occupant

89%

Child Occupant

87%

Vulnerable Road Users

85%

Safety Assist

79%

SPECIFICATION

Tested Model	BYD DOLPHIN, LHD
Body Type	- 5 door hatchback
Year Of Publication	2023
Kerb Weight	1658kg
VIN From Which Rating Applies	- all DOLPHINs
Class	Small Family Car

Version 180324

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	—
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✖	✖	—
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✖
Side pelvis airbag	●	●	✖
Centre Airbag	●	✖	—

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

SAFETY EQUIPMENT (NEXT)

OTHER SYSTEMS	
Active Bonnet	✖
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
Cyclist Dooring Prevention	●
AEB Motorcyclist	●
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●
Fatigue / Distraction Detection	●

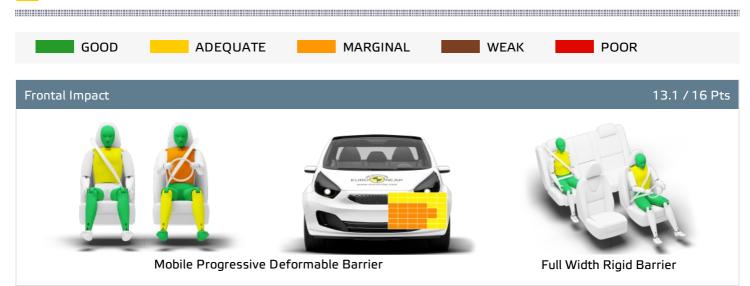**Note: Other equipment may be available on the vehicle but was not considered in the test year.**

● 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
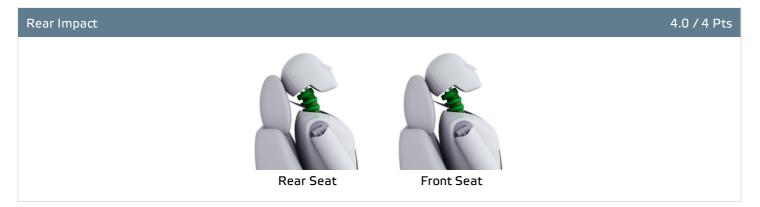
ADULT OCCUPANT

Total 35.8 Pts / 89%

GOOD	ADEQUATE	MARGINAL	WEAK	POOR

Frontal Impact — 13.1 / 16 Pts

Mobile Progressive Deformable Barrier

Full Width Rigid Barrier

Lateral Impact — 15.7 / 16 Pts

Side Mobile Barrier

Side Pole

Far-Side Excursion

Occupant Interaction

Rear Impact — 4.0 / 4 Pts

Rear Seat

Front Seat

ADULT OCCUPANT

Total 35.8 Pts / 89%

GOOD	ADEQUATE	MARGINAL	WEAK	POOR

Rescue and Extrication	3.0 / 4 Pts
Rescue Sheet	Available, ISO compliant [PDF]
Advanced eCall	Available
Multi Collision Brake	Available
Submergence Check	Compliant

Comments

The passenger compartment of the DOLPHIN remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. BYD showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Protection of the driver's chest was rated as marginal, based on dummy readings of compression. Otherwise, protection of all critical body areas was good or adequate for the front passenger and driver. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the DOLPHIN would be a benign impact partner in a frontal collision. In the full-width rigid barrier test, protection of all critical body areas was good or adequate for both the driver and the rear passenger. In the side barrier test, protection of all critical body areas was good and the DOLPHIN scored maximum points in this part of the assessment. In the more severe side pole impact, protection was good or adequate for all critical parts of the body. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was adequate. The DOLPHIN has a counter-measure to mitigate against occupant to occupant injuries in such impacts and this performed well in Euro NCAP's test. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats also indicated good whiplash protection.   The DOLPHIN has an advanced eCall system which alerts the emergency services in the event of a crash.   The car also has a system which applies the brakes after an impact, to avoid secondary collisions. BYD demonstrated that if the car entered water the doors, if locked, could be opened within two minutes of power being lost and that electric windows would remain functional long enough to allow occupants to escape.

CHILD OCCUPANT

Total 43.0 Pts / 87%

	GOOD		ADEQUATE		MARGINAL		WEAK		POOR

Crash Test Performance based on 6 & 10 year old children

24.0 / 24 Pts

Frontal Impact	16 Pts

Lateral Impact	8 Pts

Restraint for 6 year old child: *Britax Kidfix i-Size*
Restraint for 10 year old child: *Graco Booster Basic*

Safety Features

7.0 / 13 Pts

	Front Passenger	2nd row outbound	2nd row center
Isofix	🟢	🟢	❌
i-Size	🟢	🟢	❌
Integrated CRS	❌	❌	❌
Top tether	🟢	🟢	❌
Child Presence Detection	🟢	🟢	🟢

🟢 Fitted to test car as standard   ⭕ Not on test car but available as option   ❌ Not available

CRS Installation Check

12.0 / 12 Pts

i-Size	Seat Position				
	Front		2nd row		
	🚫 (Airbag ON)	Airbag OFF	Left	center	Right
(i-Size seat)	🟢	🟢	🟢	❌	🟢

🟢 Easy   🟠 Difficult   🔴 Safety critical   ❌ Not allowed

🚫 Airbag ON   Rearward facing restraint installation not allowed   Airbag OFF

Version 180324

CHILD OCCUPANT

Total 43.0 Pts / 87%

Isofix	Seat Position				
	Front		2nd row		
	🚫 Airbag ON	Airbag OFF	Left	center	Right
(rearward facing seat)	🟢	🟢	🟢	❌	🟢
(rearward facing seat)	❌	🟢	🟢	❌	🟢
(rearward facing seat)	🟢	🟢	🟢	❌	🟢
(forward facing seat)	🟢	🟢	🟢	❌	🟢
(booster seat)	🟢	🟢	🟢	❌	🟢
(booster seat)	❌	🟢	🟢	❌	🟢

🟢 Easy   🟠 Difficult   🔴 Safety critical   ❌ Not allowed

🚫 Airbag ON   Rearward facing restraint installation not allowed   Airbag OFF

Seatbelt Attached	Seat Position				
	Front		2nd row		
	🚫 Airbag ON	Airbag OFF	Left	center	Right
(rearward facing seat)	❌	🟢	🟢	🟢	🟢
(rearward facing seat)	🟢	🟢	🟢	🟢	🟢
(rearward facing seat)	🟢	🟢	🟢	🟢	🟢
(forward facing seat)	🟢	🟢	🟢	🟢	🟢
(booster seat)	🟢	🟢	🟢	🟢	🟢
(booster seat)	❌	🟢	🟢	🟢	🟢

🟢 Easy   🟠 Difficult   🔴 Safety critical   ❌ Not allowed

🚫 Airbag ON   Rearward facing restraint installation not allowed   Airbag OFF

CHILD OCCUPANT

Total 43.0 Pts / 87%

Comments

In both the frontal offset and side barrier tests, good protection was provided to all critical body areas for both child dummies, and the BYD DOLPHIN scored maximum points in this part of the assessment. 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. The DOLPHIN is equipped with 'child presence detection', a system which issues a warning when it recognises that a child or infant has been left in the car. However, the system did not meet Euro NCAP's requirements and was not rewarded. All of the child restraint types for which the DOLPHIN is designed could be properly installed and accommodated in the car.

🚶 VULNERABLE ROAD USERS   Total 53.9 Pts / 85%

| GOOD | ADEQUATE | MARGINAL | WEAK | POOR |

VRU Impact Protection   29.4 / 36 Pts

Pedestrian & Cyclist Head	11.4 Pts
Pelvis	4.5 Pts
Femur	4.5 Pts
Knee & Tibia	9.0 Pts

VRU Impact Mitigation   24.5 / 27 Pts

System Name	Autonomous Emergency Brake
Type	Auto-Brake with Forward Collision Warning
Operational From	4 km/h

PERFORMANCE |

AEB Pedestrian   7.4 / 9 Pts

Scenario	Day time	Night time
Car reversing into adult or child	ADEQUATE	—
Adult crossing a road into which a car is turning	GOOD	—
Adult crossing the road	GOOD	GOOD
Child running from behind parked vehicles	ADEQUATE	ADEQUATE
Adult along the roadside	GOOD	GOOD

— Currently not tested

AEB Cyclist   7.8 / 8 Pts

Scenario	Day time
Approaching cyclist crossing from behind parked parked vehicles	GOOD
Turning across path of an oncoming cyclist	GOOD
Approaching a crossing cyclist	GOOD
Approaching a cyclist along the roadside	GOOD

Version 180324

VULNERABLE ROAD USERS

Total 53.9 Pts / 85%

| GOOD | ADEQUATE | MARGINAL | WEAK | POOR |

Cyclist Dooring Prevention

0.3 / 1 Pts

Scenario	
Dooring a passing cyclist	warning"

AEB Motorcyclist

6.0 / 6 Pts

Scenario	Autobrake function only	Driver reacts to warning
Approaching a stationary motorcyclist	🟩	🟩
Approaching a braking motorcyclist	🟩	🟩
Turn across the path of an oncoming motorcyclist	🟩	—

— Currently not tested

Lane Support Motorcyclist

3.0 / 3 Pts

Scenario	Day time
Changing lane across the path of an oncoming motorcyclist	🟩
Changing lane across the path of an overtaking motorcyclist	🟩

Comments

Protection of the head of a struck pedestrian or cyclist was predominantly good or adequate, with poor results recorded only on the stiff windscreen pillars. Protection of the pelvis, femur, knee and tibia was at good at all test locations and the DOLPHIN scored maximum points in this part of the assessment. The autonomous emergency braking (AEB) system of the BYD can respond to vulnerable road users as well as to other vehicles. The system performed well in tests of its response to pedestrians. The system scored highly in tests of its reaction to cyclists, including dooring, in which the car prevents or warns against door opening if a cyclist is approaching from behind. Similarly, the AEB system performed well in all tests of its response to motorcyclists and scored full points.

📶 SAFETY ASSIST

Total 14.4 Pts / 79%

| GOOD | ADEQUATE | MARGINAL | WEAK | POOR |

Speed Assistance

2.7 / 3 Pts

System Name	Traffic Sign Recgonition
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	Intelligent ACC (accurate to 5km/h)

Occupant Status Monitoring

1.3 / 3 Pts

> #### Seatbelt Reminder

1.0 / 1 Pts

Applies To	Front and rear seats		
Warning	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Visual	🟢	🟢	🟢
Audible	🟢	🟢	🟢
Occupant Detection	—	🟢	🟢

🟢 Pass   🔴 Fail   — Not available

> #### Driver Monitoring

0.3 / 2 Pts

System Name	Driver Attention Warning
Type	Indirect monitoring
Operational From	65 km/h
Fatigue	Drowsiness

📶 SAFETY ASSIST

Total 14.4 Pts / 79%

Lane Support

3.0 / 3 Pts

System Name	Lane Departure Assist and Emergency Lane Keeping Assist
Operational From	50 km/h
PERFORMANCE	
Emergency Lane Keeping	GOOD
Lane Keep Assist	GOOD
Human Machine Interface	GOOD

AEB Car-to-Car

7.5 / 9 Pts

System Name	Autonomous Emergency Brake
Type	Autonomous emergency braking and forward collision warning
Operational From	4 km/h
Sensor Used	camera and radar

Scenario	Autobrake function only	Driver reacts to warning
Approaching a car crossing a junction	🟨	🟨
Approaching a car head-on	🟩	—
Turning across the path of an oncoming car	🟩	—
Approaching a stationary car	🟩	🟩
Approaching a slower moving car	🟩	—
Approaching a braking car	🟩	—

— Currently not tested

SAFETY ASSIST

Total 14.4 Pts / 79%

Comments

Overall, the autonomous emergency braking (AEB) system of the BYD DOLPHIN performed well in tests of its reaction to other vehicles, including in the head-on test scenarios. A seatbelt reminder system is fitted as standard to the front and rear seats but the driver status monitoring system did not score highly, detecting only driver drowsiness. The lane support system gently corrects the vehicle's path if it is drifting out of lane and also intervenes in some more critical situations. An update in March 2024 is intended to make the lane support system more usable for drivers. The score in Euro NCAP's tests would be slightly reduced for this part of the assessment but the star rating would be unaffected. The speed assistance system identifies the local speed limit, and the driver can choose to allow the limiter to be set automatically by the system.

RATING VALIDITY

Variants of Model Range

Body Type	Engine & Transmission	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door hatchback	Electric	Design*	4 x 2	✔	✔
5 door hatchback	Electric	Comfort	4 x 2	✔	✔
5 door hatchback	Electric	Boost	4 x 2	✔	✔
5 door hatchback	Electric	Active	4 x 2	✔	✔

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome	
October 2023	Rating Published	2023 ★ ★ ★ ★ ★	✔
March 2024	Software update	2023 ★ ★ ★ ★ ★	✔