

**BYD** **BYD ATTO 3**  
Adaptive Cruise Control

2024

**NOT RECOMMENDED**



ASSISTANCE  
COMPETENCE

55%

SAFETY  
BACKUP



35%

## SPECIFICATIONS

SYSTEM NAME	Adaptive Cruise Control
Intended Operation Design Domain	<span style="color: green;">●</span> Highway <span style="color: green;">●</span> Inter-Urban <span style="color: red;">✘</span> Urban

● RECOMMENDED
 ✘ NOT RECOMMENDED

### Comments

BYD’s appropriately named ‘Adaptive Cruise Control’ accurately portrays system functionality. The promotional material and the handbook correctly indicate the limitations of the system capabilities. System status information is displayed but there is no head-up display. Sensing that the driver’s hands remain on the steering wheel was not robust, and the car lost points in this area, and for driver monitoring more generally. However, the system balances driver steering input with lane guidance, promoting co-operative driving.

The ATTO 3 uses camera inputs to detect speed limit signs. However, the speed limiter reacted to some temporary and/or conditional speed limits as though they were primary limits, and did not meet Euro NCAP’s requirements. There is no speed adaptation for upcoming road features such as curves and junctions. The ATTO 3 responds to avoid a collision in some of the ACC test scenarios. The driver is supported through the S-Bend, but the car is kept fully in lane only at the lowest test speed. A lane-change assist function is not provided. In case of an unresponsive driver, the ATTO 3 disengages the lane centering function but keeps the adaptive cruise control active. If the radar or camera is blocked the car provides a warning but does not disengage.

**The BYD ATTO 3 provides modest levels of driver engagement and vehicle assistance. However, it is in the area of safety backup and, specifically, the lack of action which is taken in case of an unresponsive driver, that the car performs poorly. Overall, the system is Not Recommended for highway assistance.**

### Disclaimer

When using Assisted Driving Systems (also known as SAE Level 2 systems), a driver’s responsibilities include monitoring the system’s control of speed, braking and steering at all times, strict compliance with traffic rules, and maintaining situational awareness throughout the journey.

Certain situations might negatively influence the system’s performance (e.g. poor weather, faded lane markings, construction zones, exiting a tunnel), resulting in a sudden interruption of the lateral and/or longitudinal support (system disengagement). Moreover, the system may fail to detect certain road users such as motorcyclists not directly in front of the vehicle, or stationary objects.

Appropriate fitness to drive is critical for safe travel, even when using Assisted Driving Systems. Visual distraction (e.g. eyes off the road), impairment (e.g. drowsiness, intoxication) as well as unresponsiveness, poses high risks. It is highly recommended to keep your hands on the steering wheel at all times to ensure immediate reaction when the system disengages.

**ASSISTANCE COMPETENCE**

Total 55%

**DRIVER ENGAGEMENT**

64.9 / 100 PTS

**CONSUMER INFORMATION** 25.0 / 25 PTS

System Name	Adaptive Cruise Control
Marketing Material	Adaptive Cruise Control  Viewed 15 October 2024
Quick Start Guide	
Vehicle Handbook	Viewed 15 October 2024

**SYSTEM STATUS** 14.9 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

**DRIVER MONITORING** 0.0 / 20 PTS

Hands-on Monitoring	
Direct Driver Monitoring	

**DRIVING COLLABORATION** 25.0 / 25 Pts

Increase in Steering Torque	
Override response	
System continues to assist while driver steers to avoid obstacle	

GOOD
  ADEQUATE
  MARGINAL
  WEAK
  POOR

**ASSISTANCE COMPETENCE**

Total 55%

**VEHICLE ASSISTANCE**

55.1 / 100 PTS

**SPEED ASSISTANCE** 8.8 / 25 PTS



SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	Start slowing down after sign
Vehicle response to variable Speed limits	Start slowing down after sign

SPEED LIMIT INFORMATION FUNCTION

General requirements	Not Compliant
Conditional Speed Limits	<span style="display: inline-block; width: 20px; height: 10px; background-color: #804020;"></span>
Road Features	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ff0000;"></span>
Local Hazards	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ff0000;"></span>
System Updates	None

**ADAPTIVE CRUISE CONTROL PERFORMANCE** 21.3 / 40 PTS

SCENARIOS		
Approaching a stationary target	<span style="display: inline-block; width: 20px; height: 10px; background-color: #804020;"></span>	<span style="display: inline-block; width: 20px; height: 10px; background-color: #804020;"></span>
Approaching a slower moving target	<span style="display: inline-block; width: 20px; height: 10px; background-color: #008000;"></span>	<span style="display: inline-block; width: 20px; height: 10px; background-color: #008000;"></span>
Approaching a braking target	<span style="display: inline-block; width: 20px; height: 10px; background-color: #804020;"></span>	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ffcc00;"></span>
Target cutting-in in front	<span style="display: inline-block; width: 20px; height: 10px; background-color: #008000;"></span>	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ff0000;"></span>
Car cutting-out in front to expose target	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ff0000;"></span>	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ff0000;"></span>

UNDERTAKE PREVENTION	
Undertake prevention at speeds over 90 km/h	<span style="display: inline-block; width: 20px; height: 10px; background-color: #ff0000;"></span>




ADAPTIVE CRUISE CONTROL AUTO-RESUME	
Assistance maintained after coming to a full stop	<span style="display: inline-block; width: 20px; height: 10px; background-color: #008000;"></span>
System assistance maintained by	Automatic resume within 5s of stop and driver input required over 5s

GOOD
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  MARGINAL
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 ASSISTANCE COMPETENCE

Total 55%

STEERING ASSISTANCE  25.0 / 35 PTS

SCENARIOS	
80 km/h	 Vehicle stays in lane
100 km/h	 Vehicle directed in 2nd turn
120 km/h	 Vehicle directed in 1st turn

Lane Change Assist	
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 FITTED TO THE VEHICLE     NOT FITTED TO THE VEHICLE

 GOOD     ADEQUATE     MARGINAL     WEAK     POOR

 SAFETY BACKUP

Total 35%

SYSTEM FAILURE  5.8 / 25 PTS















	ENGAGEMENT	WARNING
SENSOR BLOCKED AT START-UP		
Camera	Full blockage after a 5 minute drive	Yes after sensor blocking
Radar	Partial blockage after a 5 minute drive	Yes after sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM INACTIVE		
Camera	Full blockage after a 5 minute drive	Yes after sensor blocking
Radar	After a 5 minute drive	After sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM ACTIVE		
Camera	Full blockage within 2 minutes after blocking	After sensor blocking
Radar	Partial blockage after sensor blocking	After sensor blocking

UNRESPONSIVE DRIVER INTERVENTION  0.0 / 25 PTS

Hands Off Warning Timeline



COLLISION AVOIDANCE  29.2 / 50 PTS

SCENARIOS			
Approaching a stationary target			—
Approaching a slower moving target			—
Approaching a braking target			—
Target cutting-in in front			—
Car cutting-out in front to expose target			—
Approaching the target along the roadside	—	—	

 GOOD
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