

# smart forfour

smart forfour 999cc petrol 'passion', LHD













ADULT OCCUPANT

20171111





**PEDESTRIAN** 

**SAFETY ASSIST** 

CHILD OCCUPANT

# **DETAILS OF TESTED CAR**

# **SPECIFICATIONS**

Tested model	smart forfour 999cc petrol 'passion', LHD
Body type	5 door hatchback
Year of publication	2014
Kerb weight	975kg
VIN from which rating applies	applies to all smart forfour of the specification tested

# **SAFETY EQUIPMENT**

Frontal airbags	Driver (Single Stage), Passenger (Single Stage)
Pre-tensioners	Driver (single), Passenger (single), Rear
Load-limiters	Driver, Passenger, Rear
Knee airbags	Driver
Side airbags	Head (front only), Thorax (front only) (combined thorax/pelvis)
Front head restraints	Passive
Passenger airbag switch	Manual switch
ISOFIX anchorages	Rear outboard seats
Integrated child restraint	None
Active Pedestrian Protection	None,
Seatbelt Reminder	Driver, Passenger, Rear
Electronic Stability Control	ESP, Standard, Always On
Speed Assistance Systems	Driver-set speed limitation, Optional (meeting fitment requirements)
Lane Support	Lane Departure Warning, Optional (not meeting fitment requirements)
Autonomous Braking	None, Not Available
Other	'Side Wind Assist'; 'Rear View Camera' (optional)

Safety equipment is standard across the model range unless stated otherwise



# **ADULT OCCUPANT**

Total 30 pts | 78%

# **CRASH TEST PERFORMANCE**



Driver

Passenger

**SIDE CAR** 

7,6 pts

**SIDE POLE** 

6,2 pts

2,5 pts







Side pole

# **FRONT OFFSET**

HEAD	
Driver airbag contact	stable
Passenger airbag contact	stable
CHEST	
Passenger compartment	stable
Windscreen Pillar rearward	29mm
Steering wheel rearward	none
Steering wheel upward	20mm
Chest contact with steering wheel	none

# **UPPER LEGS, KNEES AND PELVIS**

Stiff structures in dashboard	none
Concentrated loads on knees	none
LOWER LEGS AND FEET	
Footwell Collapse	none
Rearward pedal movement	Clutch - 86mm
Upward pedal movement	Brake - 32mm

#### SIDE

Head protection airbag	Yes	
Chest protection airbag	Yes	

# WHIPLASH PROTECTION

# FRONT, REAR SEATS



Front seats



Rear seats

# **HEAD RESTRAINT**

Seat description	Standard fabric, 2 way manual
Head restraint type	Passive
Front geometric assessment	1,9 pts
TESTS	
- High severity	2,5 pts
- Medium severity	2,4 pts
- Low severity	2,6 pts

0 pts

# **AEB CITY**

System name	Not applicable
Fitment	Not available













# **CHILD OCCUPANT**

Total 38 pts | 77%

# **CRASH TEST PERFORMANCE**

#### **18 MONTH OLD CHILD**

Restraint Römer BabySafe + ISOFIX Base

Facing rearward facing

Installation ISOFIX and Supportleg



PERFORMANCE 12 pts

#### **FRONTAL IMPACT**

Head forward movement	protected
Head acceleration	good
Chest load	good

#### **SIDE IMPACT**

Head containment	protected
Head acceleration	good

#### **3 YEAR OLD CHILD**

Restraint Römer Duo Plus Facing forward facing

Installation ISOFIX and TopTether



PERFORMANCE 8,1 pts

# **FRONTAL IMPACT**

Head forward movement	protected
Head acceleration	good
Chest load	fair

# **SIDE IMPACT**

Head containment	protected
Head acceleration	good

# CHILD SAFETY FEATURES AND CRS INSTALLATION CHECK





Isofix

Safety features score

Installation check score	12 pts
Pass	Install without problem
Partial Fail	Install with care
Fail	Safety critical problem
Exempt	Installation not allowed

SEAT POSITION

6 pts

	FRONT		2nd ROW			3rd ROW		
	CENTER	RIGHT	LEFT	CENTER	RIGHT	LEFT	CENTER	RIGHT
Maxi Cosi Cabriofix (Seatbelt)	N/A	Pass	Pass	N/A	Pass	N/A	N/A	N/A
Römer King Plus (Seatbelt)	N/A	Pass	Pass	N/A	Pass	N/A	N/A	N/A
Römer Duo Plus (ISOFIX)	N/A	Exempt	Pass	N/A	Pass	N/A	N/A	N/A
Römer KidFix (Seatbelt)	N/A	Pass	Pass	N/A	Pass	N/A	N/A	N/A
Maxi Cosi Cabriofix and EasyFix (Seatbelt)	N/A	Pass	Pass	N/A	Pass	N/A	N/A	N/A
Maxi Cosi Cabriofix and EasyFix (ISOFIX)	N/A	Exempt	Pass	N/A	Pass	N/A	N/A	N/A
BeSafe iZi Kid X3 ISOfix (ISOFIX)	N/A	Exempt	Exempt	N/A	Exempt	N/A	N/A	N/A
Maxi Cosi Pearl and Familyfix (ISOFIX)	N/A	Exempt	Pass	N/A	Pass	N/A	N/A	N/A
Römer KidFix (ISOFIX)	N/A	Exempt	Pass	N/A	Pass	N/A	N/A	N/A
Römer BabySafe + ISOFIX Base (ISOFIX)	N/A	Exempt	Pass	N/A	Pass	N/A	N/A	N/A
Römer Duo Plus (ISOFIX)	N/A	Exempt	Pass	N/A	Pass	N/A	N/A	N/A



# SAFETY ASSIST Total 7 pts | 56%

SPEED ASSISTANCE SYSTEM 1,3 pts

Optional (meeting fitment requirements)

Speed Information Not applicable

Speed Assistance (Manual) Pass

ELECTRONIC STABILITY CONTROL (ESC) 3 pts

- ESP Meets requirements

SEATBELT REMINDER 3 pts
- driver and passenger Pass
- rear Pass

LANE SUPPORT SYSTEMS 0 pts

Optional (not meeting fitment requirements)

Lane Departure Warning Not assessed



# PEDESTRIAN Total 24 pts | 65%



# COMMENTS

#### **Adult occupant**

The passenger compartment remained stable in the frontal impact. Dummy readings indicated good protection of the knees and femurs of the driver and passenger. smart showed that a similar level of protection would be provided to occupants of different sizes and to those sat in different positions. The chest compression of the passenger dummy indicated a marginal level of protection for that body region in the frontal test. In the side barrier impact, protection of all body regions was good apart from the chest, protection of which was adequate. However, in the more severe side pole test, dummy readings of rib compressions highlighted weak chest protection, although the other areas remained well protected. The seats and head restraints provided good protection against whiplash injury in the event of a rearend collision.

# **Child occupant**

The forfour scored maximum points for its protection of the 1½ year dummy in the crash tests. Forward movement of the head of the 3 year dummy, sat in a forward-facing restraint, was not excessive but neck tensile forces were high and the loading on the chest was also marginally high. In the side impact, both dummies were properly contained within the protective shells of their restraints, minimising the likelihood of dangerous head contact with parts of the vehicle interior. The 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 about the status of the airbag and the system was rewarded. All of the restraint types for which the car is designed could be properly installed and accommodated in the car.

#### **Pedestrian**

The bumper scored maximum points for the protection it offered to pedestrians' legs, with good results recorded at all test locations. The protection offered by the front edge of the bumper to a pedestrian's pelvis varied from poor to good. The bonnet surface was predominantly adequate or marginal, while poor protection for a pedestrian's head was recorded only on the stiff windscreen pillars.

#### Safety assist

Electronic stability control is standard equipment, as is a seatbelt reminder system for the front and rear seats. A driver-set speed limiter is expected to be fitted to most cars sold in Europe, so it was included in the assessment and met Euro NCAP's requirements for systems of this type. A lane departure warning system is also an option but did not qualify for assessment as most cars will not be equipped with it. An autonomous emergency braking system is not available on the forfour.