

# Crash Tests

## New Car Safety

### Volkswagen Polo

03/2010 on 07/2014 - Frontal+Side+Head

#### Overall Evaluation



#### Overall Score

Variant: 5 door hatch only

**34.96 out of 37**

Engine: 1.2 litre  
Category: Light Car

The left-hand-drive European model with combo side airbags 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 Volkswagen Polo was introduced in Australia and New Zealand during 2010.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front seats.

Pretensioners 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 (lap) seat belt.

#### Overall Evaluation: 5

5 Stars. The Polo scored 14.98 out of 16 in the offset crash test. The passenger compartment held its shape very well. There was a slight risk of serious chest and leg injury for the driver.

The vehicle scored 15.98 out of 16 in the side impact crash test. A further two points were scored in the optional pole test.

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.98 pts, upper legs 3 pts, lower legs 4 pts.

The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 27 mm. The clutch pedal moved downwards 32mm. The steering wheel hub moved 17mm forward, 1mm downward and 2 mm sideways. The front ("A") pillar did not move noticeably rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort. The airbag cushioned the head of the driver and contact was stable. Steering column components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag.

#### Side Impact Crash Test

Body region scores out of 4 points each: Head 4 pts, chest 3.98 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points. The side curtains on the Australasian Polos can be expected to provide comparable front occupant protection to the combo side airbags used in the Euro NCAP test.

#### Pedestrian rating (v4.2)



The bumper provided mixed protection for pedestrians' legs. The front edge of the bonnet was marginal to poor. The centre of the bonnet offered good protection to a child's head but poorer protection towards the edges. In most areas likely to be struck by an adult's head, poor protection was provided.

|                    |      |
|--------------------|------|
| Child head impacts | 7.73 |
| Adult head impacts | 0.74 |
| Upper leg impacts  | 2.43 |
| Lower leg impacts  | 4    |
| Total (out of 36)  | 14.9 |

Offset crash test at 64km/hr



#### Injury Measurements

| Refer to the information sheet 'How the tests are done' | Offset Crash Test at 64km/h (v4.2) |             | Side Impact Crash Test aa 50km/h (v4.2) Driver |
|---|------------------------------------|-------------|--|
|   | Driver                             | Passn       |  |
| Head  |                                    |             |  |
| - HIC   | 237                                | 290         | 59   |
| - Acceleration (g for 3ms)                              | 38.7                               | 42.6        | 28.8   |
| Neck  |                                    |             |  |
| - Shear (kN)  | 0.27                               | 0.37        |  |
| - Tension (kN)  | 1.09                               | 0.52        |  |
| - Extension (Nm)  | 22.3                               | 7.3         |  |
| Chest   |                                    |             |  |
| - Acceleration (g for 3ms)                              |                                    |             |  |
| - Compression (mm)                                      | 22.16                              | 13.37       | 22.09  |
| - Viscous Criterion (m/s)                               | 0.08                               | 0.05        | 0.21   |
| Abdomen   |                                    |             |  |
| - Force (kN)  |                                    |             | 0.77   |
| Pelvis  |                                    |             |  |
| - Force (kN)  |                                    |             | 1.79   |
| Upper Legs Force (kN)                                   |                                    |             |  |
| - Left  | 0.57                               | 2.8         |  |
| - Right   | 1.18                               | 0.9         |  |
| Knee Displacement (kN)                                  |                                    |             |  |
| - Left  | 0                                  | 0.1         |  |
| - Right   | 0.9                                | 0           |  |
| Lower Legs Force (kN)                                   |                                    |             |  |
| - Left  | 1.38                               | 0.99        |  |
| - Right   | 1.6                                | 1.24        |  |
| Index (Upper   Lower)                                   |                                    |             |  |
| - Left  | 0.36   0.23                        | 0.2   0.14  |  |
| - Right   | 0.22   0.15                        | 0.27   0.13 |  |

#### Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: 2

#### Modifiers for offset test scores

Head

No deduction

Chest

No deduction

Upper leg Variable loading

0.5 pt deduct L & 1 pt R

Lower leg

No deduction

Foot score

4 points

Structure

#### Modifiers for side impact test scores

Head

No deduction

Chest

Upper leg

Lower leg

Foot score

Structure



Version 1, Published on: 25/05/2010  
Published by  
New Car Assessment Program  
PO Box 1555  
Canberra ACT Australia 2601