# Crash Tests

# New Car Safety

# **VW POLO (LHD)**

Front+side airbags 2002 on

# Overall Evaluation



| Overall score | 27.75 out of 37 |
|---------------|-----------------|
|               |                 |

Variant:5 DR HATCH Eng:1.2 litre.

Kerb weight: 1060 kg Category: SMALL CAR Vehicles built: 2002 Test by Euro NCAP

Important note: The left-hand-drive European model was tested by EuroNCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page. Side airbags are not currently available on the base model in Australia but are optional in New Zealand.

### **Model History and Safety Features**

The tested model of Volkswagen Polo was introduced in Australia in July 2002.

Dual front airbags are standard in Australia. Side airbags are standard on all models in Europe but they are only available on the Elite variant in Australia. Curtain side airbags are optional in Europe but are not available in Australia. ABS brakes are standard.

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. 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 seat belt.

# **OVERALL EVALUATION: 4 Stars**

The Polo scored 11.75 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver.

The vehicle scored 16 out of 16 in the side impact crash test.

## FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 3.11pts, upper legs 2pts, lower legs 2.64pts.

The passenger compartment held its shape well in the offset crash test. The clutch pedal moved rearwards by 134mm and upwards 40mm. The steering wheel hub moved rearwards 6mm, upwards 39mm and sideways mm. The front ("A") pillar moved 9mm rearwards. The width of the driver's doorway shortened by 8mm. 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. Vehicle components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the

#### SIDE IMPACT CRASH TEST

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

The base model was not eligible for an optional pole test since it did not have head-protecting side airbags. However, in Europe head-protecting curtains are optional and the manufacturer decided to go ahead with the pole test. The European vehicle



Offset crash test at 64km/h

earned a further two points in this test but it does not apply to Australian vehicles.

# **INJURY MEASUREMENTS**

| Refer to the information<br>sheet "How the test are<br>done" | Offset Crash Test<br>at 64km/h |           | Side<br>Impact<br>Crash<br>Test at<br>50km/h |
|--|--------------------------------|-----------|--|
|  | Driver                         | Passn     | Driver                                       |
| Head HIC   | 384.06                         |           | 78.35  |
| Acceleration (g for 3ms                                      |                                | 43.95     | 40.84  |
| Neck - Shear (kN)  | 0.43                           | 0.57      | -  |
| Tension (kN)   | 0.55                           | 0.42      | -  |
| Extension (Nm)   | 20.58                          | 19.79     | -  |
| Chest Accln (g for 3ms                                       |                                | -         | -  |
| Compression (mm)   | 28.23                          | 22.75     | 21.35  |
| Viscous criterion (m/s)                                      | 0.07                           | 0.05      | 0.14   |
| Abdomen - Force (kN)   | -                              | -         | 0.83   |
| Pelvis - Force (kN)  | -                              | -         | 2.21   |
| Upper legs Force Left  | 0.75                           | 1.02      |  |
| (kN) Righ  | t 1.22                         | 0.76      |  |
| Knee displ (mm) Left   | 5.43                           | 0.69      |  |
| Righ   | t 2.15                         | 0.25      |  |
| Lower legs Force Left  | 2.13                           | 2.17      |  |
| (kN) Righ  | t 2.04                         | 2.3       |  |
| Index (Upper/Low) Left                                       | 0.28/0.55                      | 0.24/0.24 |  |
| Righ   | 0.18/0.26                      | 0.31/0.4  |  |

#### **Bonus points (maximum 5)**

Pole Test: Not eligible Seat belt reminders: Not eligible

# **Modifiers for offset test scores**

No deduction Head Chest No deduction 2 pt deduction L & R Upper leg Variable & conc. loading Lower leg No deduction Foot score Clutch rearward displ. Score 2.64 points

# Pedestrian rating (v4.0)



6.11 points out of 36 (%)

Child head impacts 1.11pts; adult head impacts 5pts; upper leg Opts and lower leg impacts Opts.



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