**smart fortwo passion coupe**


**Engine**
- Type/layout: Aluminum block, aluminum head, I-3 transverse
- Valvetrain: DOHC 4-valve/cyl, chain drive
- Bore x stroke: 2.85 x 3.22 in. / 71.9 x 81.8 mm
- Displacement: 61.0 cu.in./1000 cc
- Compression ratio: 10.5:1
- Horsepower (SAE): 70 bhp @ 5800 rpm
- Torque: 68 lb-ft @ 4500 rpm
- Fuel injection: Elect. sequential port
- Recommended fuel: Premium unleaded

**Transmission**
- Type: 5-speed paddle-shift manual
- Gear ratio: Overall ratio (Rpm): 1st = 3.31:1, 14.98:1 (6500), 2nd = 1.91:1, 8.66:1 (6500), 3rd = 1.26:1, 5.70:1 (6500), 4th = 0.94:1, 4.27:1 (6500), 5th = 0.71:1, 3.20:1 (4500), 90**: 4.53:1

**Performance**
- Acceleration:
  - 0−100 mph: 3.6
  - 0−500 ft: 10.3
  - 0−900 ft: 15.0
  - 0−1320 ft (¼ mile): n 19.2 @ 70.5 mph

- Breakdown:
  - Minimum stopping distance: From 60 mph = 130 ft
  - From 80 mph = 230 ft
  - Total swept area = na
  - Swept area/ton = na

- Fuel economy:
  - EPA city/highway: 32/40 mpg
  - Average: est 32.0 mpg
  - Cruise range: est 245 miles
  - Fuel capacity: 8.7 gal.

**Handling**
- Lateral acceleration*: 0.72g
- Balance: Moderate understeer
- Slalom speed**: 57.6 mph
- Balance: Moderate understeer
- Lateral tire contact: Average • 200-ft skidpad: ** 700-ft slalom: 100-ft spacing.

**Interior Noise**
- Idle in neutral: 49 dBa
- Maximum in 1st gear: 75 dBa
- Constant 50 mph: 70 dBa
- Constant 70 mph: 74 dBa

**Test Conditions**
- Temperature: 66°F
- Humidity: 22%
- Elevation: 395 ft
- Wind: Calm
- Location: Irvine, California

- **Test Notes:**
  - Braking: For best acceleration, put the transmission in manual and power-brake to 2800 rpm. Once you’re moving, initiate the 1→2 shift at 5200 rpm to avoid the limiter, then follow the upshift arrow on the dash for subsequent gears.
  - Handling: The floor-mounted brake pedal has an awkward pivot point during initial travel. The pads have a lot of bite but aggressive ABS braking sends pulsations through the chassis and causes mild yaw moments.
  - Interior Noise: Driving the fortwo hard is an exercise in patience. Quickest speeds through the slalom were achieved by keeping the car right at the limit of ESP intervention. Once the ESP kicks in, the smart understeers aggressively.