

Mercedes-Benz C-class

Featuring C220 Automatic



THE C-CLASS IS A MERCEDES-BENZ counterpart to the Ford Mondeo and other upper-medium-sector saloons. The fact that it costs significantly more can't alter its size. Perhaps superior engineering and build quality are the most popular justifications, although the cachet of the name and image is nearer the truth.

In its 1.8-litre guise, devoid of all those tempting expensive options, the C's price is, in fact, not too exorbitant. It's the temptation to go for more power and items such as a sunroof, metallic paint, a split/fold back seat and a radio (standard features on mainstream cheaper counterparts) that plays havoc with your cheque book. Nevertheless, even the basic C180 Classic (at £18,000 currently) comes with ABS, power steering, a driver's airbag, electric door mirrors and a first aid kit.

We were sorry that our C220 Automatic had the no-cost option Esprit trim pack – you get jazzy cloth on the seats, plus lowered and stiffened suspension. The effects are unconvincing on a saloon that contrives to exude Mercedes' innate conservatism of approach.

The conventional suspension settings produce a more absorbent ride with very little loss of grip or poise through the bends.

In fact, the C is at its best as a slightly sedate saloon that's neither overtly sporting nor soggy and insensitive to the demands of the keener, more involved driver. It plays it right down the middle and produces a versatile compromise that merits serious praise.

It's the same in matters of performance and economy: 30–70mph in 9½sec from an automatic that also achieves 31–32mpg overall is good going, but the power unit and the transmission fail to establish any new levels of excellence. This engine is inaudible at tickover, but becomes progressively more rorty as it works harder. At 70mph plus it's not as unobtrusive and silky as a Rover 600 or even the smaller C180 version, which admittedly lacks its variable valve timing – a significant contributor to this 2.2-litre version's efficiency.

The automatic transmission is competent, but it lacks the extra sophistication of some counterparts. It's less sensitive to part-throttle downchanges and is

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PERFORMANCE

Acceleration in time in seconds

STANDING START	0-30mph	3.4	0-60mph	9.2	1/4 mile	17.3
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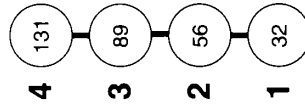
mph	30	40	50	60	70
THROUGH THE RATIOS		2.0	3.9	6.2	9.6

20 mph	30	40	50	60	70
SPEED RANGES USING KICKDOWN		4.1	4.2		6.7

Maximum speeds

(using accelerator kickdown/manual hold)

REVS PER MINUTE	1st/2nd	3rd	4th	mph
	5725/5800	5750	5650	



FUEL CONSUMPTION

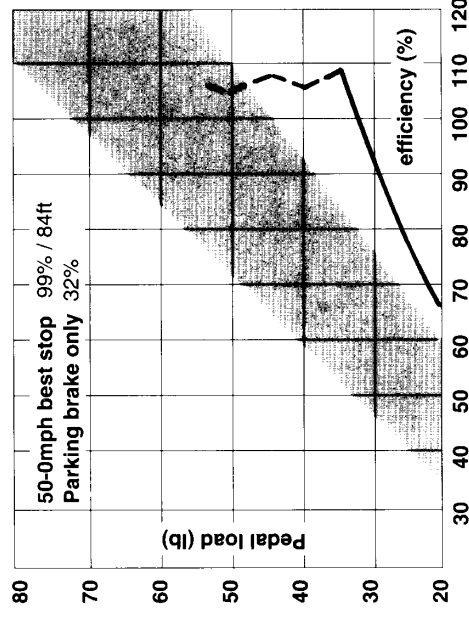
Fuel grade for tests: unleaded Premium, 95 octane

Normal range	mpg
Hard driving, heavy traffic	25
Short journeys in the suburbs	NA
Motorway – 70mph cruising	33
Brisk driving, mixed roads	31
Gentle driving, rural roads	37
Typical mpg overall	31 1/2
Realistic tank range*	58 litres/400 miles

*based on fuel gauge/warning lamp and filling station experience

SAFETY

Brakes (with ABS) How pedal loads affect braking



Braking efficiency shown as a percentage of gravity (ie 100% = 1.0g) Ideally the braking curve should be a gentle sweep and lie within the shaded zone of this graph. If it's above, the brakes are too heavy; if it's below, they are too light – although this is more acceptable on cars with ABS. When the curve becomes broken, the ABS is operating.

Fade test How hard use affects braking (ideal brakes show no change)

Pedal load needed for 75% stop (lb)	At start of test	After constant use	After severe use
	23	24	33

Safety features

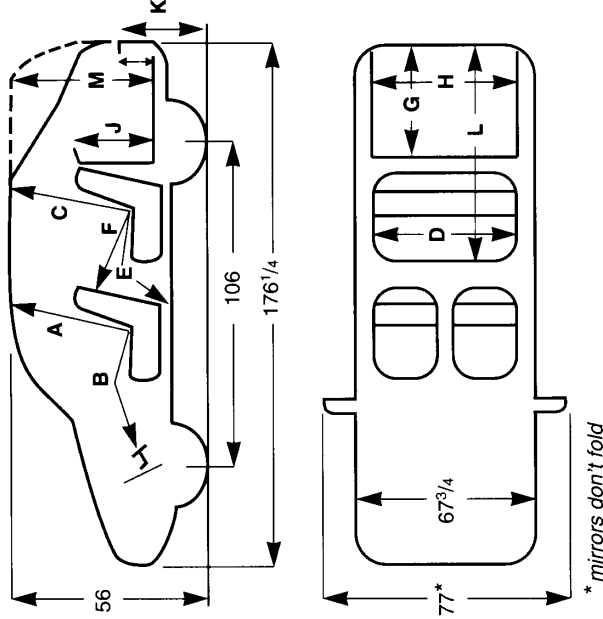
Assessed on their effectiveness and convenience (the more black blobs the better)

Seatbelts	front	rear	locking
Head restraints	front	rear	central locking?
Interior	safety padding	driver's airbag?	remote control?
Fuel	anti-spillage measures	comprehensive and convenient	engine immobilised?

standard on test car factory fitted option not available

MEASUREMENTS

Dimensions (inches)



Inside (inches)

A Front headroom	35 1/2-37	G Load length	41
B Front legroom (min - max)	38-47 1/2	H Load floor width (min - max)	35 1/2-56
C Rear headroom	36 1/2	J Load height	18
D Back seat width (between armrests)	51	K Sill height (inner/outer)	5/25 1/2
E Typical rear * legroom	40	L Load length †	65
F Typical rear * kneeroom	28	M Load height (to tailgate hinge)	NA

† optional folding seat

* "Typical" represents the mean measurement behind the driver's seat set at 39in legroom and the passenger's seat set at 41in

more sudden on the overrun, in response to the somewhat clumsy manual control. A downchange into first gear is effectively not available beyond 15mph; the torque converter doesn't fully lock up at cruising speeds, either.

The driving position offers massive legroom and a clever ratchet cranks the cushion up or down. Snags at the helm (apart from the fixed steering wheel position) are a heavy, offset accelerator, some serious blind spots caused by thick front and rear pillars, and seats that provide correct anatomical support, but are just too hard on top for cushioned comfort on longer runs. The foot-operated parking brake remained an unpopular feature on test, but is less troublesome in the automatic with its mandatory P slot – you can't remove the key unless you select Park. The headlamps have an interior beam trimmer and the single "jumping" wiper covers the glass extremely effectively, although it has only a single intermittent frequency.

Compared with the 190, the C accommodates rear passengers and luggage much more convincingly. Relocating the fuel tank to a safe place underneath means better load length and the practicality of a tilting rear seatback, to accept longer items – but why isn't this a standard feature?

Thanks to release catches inside the boot, security isn't compromised. Incidentally, we like the independently lockable boot keyhole that can also be used to trigger the central locking. A lower boot sill and better rear legroom are other significant improvements compared with the 190. It's really comfortable now – a super taxi, in fact.

The heater gives good rear footwell warmth and has the luxury of separate temperature controls, side-to-side. Our car didn't maintain the selected level of heat, however, and the fan was a trifle noisy beyond the slowest setting. We like the retention of ambient air outlets in the fascia centre – you can stoke up the footwell flow without promoting stuffiness.

Mercedes-Benz is unhappy about deadlocks, apparently (due to the risk of entrapment), but its desirable cars therefore need an alarm with interior sensors even more. Only key-operated central locking and a perimetric alarm (covering all doors and lids) come as standard; there's also a starter immobiliser.

Safety-conscious interior padding looks extremely

impressive, except for two details: the hard metal associated with the parking brake pedal and some protruding, spiteful-looking clips for the sun visors. The ABS brakes work impeccably and, within the traction limitations imposed by the retention of rear-wheel drive, the car's cornering stability reveals no nasty tricks.

Living with a Mercedes-Benz inevitably involves higher insurance (Group 13) and parts costs, although the servicing schedule (now at 9000-mile intervals), involves only five visits, totalling 6.9 hours in three years/38,000 miles. The ownership experience is ambivalent in some respects – integrity of build is readily apparent when you peer underneath, inspect the door fits and finish, or notice the absence of rattles and wind noise. Yet there's only a 12-month warranty, with some small-print exclusions resulting from non-dealer servicing. Depreciation on the highly regarded 190E has remained modest, suffering no more loss of value than a Cavalier two-litre GLi and others that have been over-supplied and over-discounted in recent times.

VERDICT

Shunning any sense of change for the sake of it, this new mid-range Merc desires to impress, not by an ostentatious display of gadgets or elongated styling, but by scrupulous attention to technical detail and build quality. It's reassuring to live with and (heaven forbid) reassuring in a crash, with standard ABS provided to help the driver avoid the accident in the first place.

It's also much improved as a family car – it offers the expected room that the 190 lacked behind the front seats. Its road manners, engine and transmission are impeccably competent, but because ordinary volume-produced offerings have improved so much over the last decade, the C-class now runs with the pack rather than ahead of it, in dynamic terms.

So, with a relatively high asking price and a long list of desirable options beyond that price, (some you wouldn't wish to do without), it all comes down to money – and status. Keep to the basics, avoid too many options and you could find that overall ownership costs looking surprisingly reasonable in three years' time.

HOW THEY COMPARE	Engine cap/power (cc/bhp)	Max speed (mph)	30–70mph through gears (sec)	30–70mph in 5th/4th gears (sec)	Fuel economy (mpg)	Brakes best stop (%g/lb)	Maximum legroom – front (in)	Typical leg/kneeroom – rear (in)	Steering turns/circle (ft)	Overall length (in)
Mercedes-Benz C220 Automatic	2199/150	131	9.6	NA	31½	109/35*	47½	40/28	3.4/33¼ (p)	176¼
Mercedes-Benz 190E 2.6 Automatic†	2599/166	130	8.6	NA	26½	98/40*	46½	37½/27	3.5/32½ (p)	174
Toyota Camry 2.2GLi (manual)	2164/134	124	9.7	22.0/15.5	32½	105/60*	43	41½/29¼	3.1/36 (p)	186
Ford Mondeo 2.0 Ghia (manual)	1989/136	122	9.5	22.8/15.1	30	101/35*	43	40/28	3.0/34 (p)	176½
Rover 623SLi (manual)	2259/158	130	8.8	20.5/14.7	32	94/27*	44½	38/27½	3.1/38½ (p)	183
Volvo 850GLT 2.5 10-valve (automatic)	2435/140	121	10.1	NA	27½	100/45*	43½	41¼/30	3.2/34½ (p)	183½
BMW 520i (manual)	1991/150	131	9.3	25.2/18.7	30	103/40	43¼	38½/28½	3.5/36 (p)	185¾
†previous (now superseded) model						* with ABS			(p) power assisted	

Good features . . . and gripes

- | | |
|---|--|
| Pollen filter and recirculation button on heater | • • Single column stalk isn't as good as two |
| Full-sized spare wheel, cleverly secured by an oddments container | • • No head-up display for automatic gear selector |
| Standard warning triangle and first aid kit | • • Intrusive centre tunnel in rear compartment |
| Excellent turning circle . . . | but terrible rear quarter vision |
| Buffet-free, superbly sealed sunroof . . . | but it costs a whopping £925 extra! |
| Soft quilted finish to screen pillars and header rail | • • but the sun visor clips are spiteful |



TECHNICAL SPECIFICATION

ENGINE

Type and size front-mounted, longitudinal 4 in line; water-cooled. 89.9mm bore x 86.6mm stroke = 2199cc. Iron block and alloy head; 5 main bearings

Compression ratio 10.0:1

Valve gear chain-driven twin overhead camshafts actuating four valves per cylinder, with variable valve timing (controlled by electro-hydraulics) on inlet valves

Fuel system multi-point electronic fuel injection, three-way exhaust catalyser and lambda sensor. 62-litre (13.2-gallon) fuel tank with low-level warning lamp. Fuel required: unleaded Premium, 95 octane minimum

Ignition system fully programmed electronic, integrated with fuel system

Maximum power 150bhp at 5500rpm

Maximum torque 155 lb ft at 4000rpm

TRANSMISSION

Gearbox 5-speed manual standard; optional

4-speed automatic on test car. Epicyclic type with hydrokinetic torque converter. Ratios: first 4.25, second 2.41, third 1.49, top 1.0 and reverse 5.67:1

Final drive 3.07:1, to rear wheels

Mph per 1000rpm (theoretical) 23.4 in top, 15.7 in 3rd

Rpm at 70mph 3040 in top gear (observed)

CHASSIS

Suspension front: independent by double wishbones, coil springs and an anti-roll bar.

Rear: independent five-link (transverse) system with coil springs and an anti-roll bar.

Dampers: telescopic all round, gas-filled rears

Steering power-assisted recirculating-ball type with 3.4 turns between full locks. Turning circles average 33¹/₄ft between kerbs, with 51ft circle for one turn of the wheel

Wheels 6¹/₂J steel with 195/65R15 91V tyres (Michelin Pilot HX on test car, with alloy wheels option)

Brakes ventilated discs front, solid discs rear, with vacuum servo and electronic ABS anti-lock control