

[Engine & Cooling](#)
[Fuel](#)
[Ignition](#)
[Electrical](#)
[Running gear](#)
[Torque settings](#)
[Capacities](#)
[Notes & Illustrations](#)


Automotive Technical DATA BOOK

Click on one of the buttons above to view data for this car. To return to this screen and make another choice, click anywhere on the data screen.

[MENU](#)
[HELP](#)

Engine and cooling system 728i E38 1996 to 1997

Type	M52 B28 DOHC 24V 142kW	
Capacity (cm ³) / number of cylinders	2793 / 6	
Compression ratio / pressure	bar	10.2 / ≥10.0
Oil pressure	bar	≥0.5 / 4.0
Oil temperature	°C	80
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order	1-5-3-6-2-4	
No 1 cylinder position	-	
Thermostat opening temperature	°C	92
Radiator cap pressure	bar	-

Fuel system 728i E38 1996 to 1997

Idle speed - manual [auto]	rpm	750±50
Fast idle speed - manual [auto]	rpm	-
CO @ idle speed [3000 rpm] - see page VI	%	0.5±0.3
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO ₂ @ idle speed [3000 rpm] - see page VI	%	-
O ₂ @ idle speed [3000 rpm] - see page VI	%	-
Carburettor / fuel injection	_ Bosch	
Type / ref	MS 41.0 DME Motronic MPI	
Main jet / needle	-	
Injection pressure	bar	-
Pump pressure	bar	3.5
Octane rating	RON	95[U]

Ignition system 728i E38 1996 to 1997

Type	DME Motronic	
Ignition coil	-	
Primary resistance	ohms	0.37 to 0.5
Ballast resistor	ohms	-
Voltage - Tmnl 15(+) to earth	V	-
Distributor	-	
Points gap (air gap)	mm	-
Dwell angle	° (%)	-
Condenser capacity	µF	-
Rotation	-	
Ignition timing - basic [static	° Crankshaft @ rpm	-
V = Vacuum NV = No Vacuum	-	
Total ignition advance	° Crankshaft @ rpm	-
	° Crankshaft @ rpm	-
	° Crankshaft @ rpm	-
Centrifugal check.	° Crankshaft @ rpm	-
	° Crankshaft @ rpm	-
	° Crankshaft @ rpm	-
Vacuum range check	mbar	-
Maximum vacuum advance	° Crankshaft	-
Spark plugs	Bosch	
Type	F7LDCR	
Electrode gap	mm	0.7

Electrical system 728i E38 1996 to 1997

Battery	V / CC / RC	12 / 80Ah
Alternator voltage / full load current / engine rpm	14.3 / 140 / _	
Starter motor current / voltage - cranking	A / V	-
- locked	A / V	-

Running gear 728i E38 1996 to 1997

Brakes -		
Front (min. friction material thickness)	mm	3.0
Rear (min. friction material thickness)	mm	3.0

Tyres		
Saloon	Size	215/65x16
Estate / Van	Size	-
Pressure - front / rear - Saloon	bar	Refer to vehicle
- Estate / Van	bar	-

Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	[0°14'±10']
Camber		-0°13'±30'
Castor		6°06'±30'
King pin inclination	-	

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	[0°18'±10']
Camber		-1°30'±20'

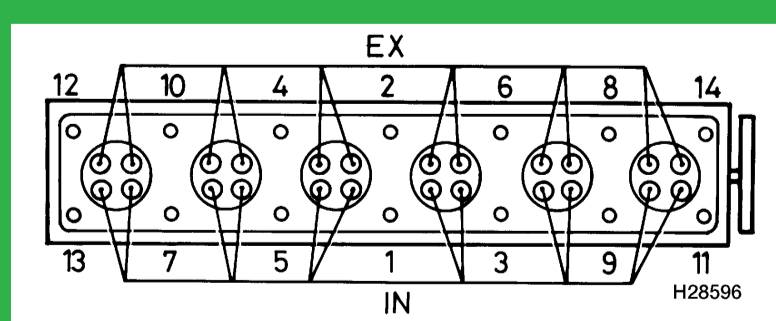
Torque wrench settings 728i E38 1996 to 1997

Cylinder head - stage 1	Nm	40
- stage 2	Nm	+90°
Cylinder head - stage 3	Nm	+90°
- stage 4	Nm	-
Big-end bearings	Nm	5, 20+70°
Main bearings	Nm	20+70°
Clutch cover	Nm	24
Flywheel [driveplate]	Nm	105
Front hubs	Nm	-
Rear hubs	Nm	300
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	-

Capacities 728i E38 1996 to 1997

Engine oil & filter	litres	6.5
Gearbox - 4-speed [5-speed]	litres	1.2
Automatic transmission - refill	litres	3.3
Final drive	litres	1.2
Cooling system	litres	10.5
Fuel tank	litres	85

Notes and Illustrations



2793 cm³ 24V