Volvo XC90

ENGINES
Туре
Configuration
Displacement, cm ³
Bore (mm)
Stroke (mm)
Engine cylinder block material
Cylinder head material
Compression ratio
Valves, no/cylinder
Camshafts
Engine management system
Ignition sequence
Engine idling speed, rpm
Fuel, rec. octane
Max output, kW (hp)/rpm

T5 AWD (B4204T26)
In-line 4-cyl. turbocharged
Transverse, all wheel drive
1969
82.0
93.2
Aluminium
Aluminium
10.8:1
4
2
Gasoline direct injection
1 - 3 - 4 - 2
875±50
95-98 RON
184 (250)/5500
350/1800-4800

[Nm]

Power [kW]

T6 AWD (B4204T29)
In-line 4-cyl. supercharged and turbocharged
Transverse, all wheel drive
1969
82.0
93.2
Aluminium
Aluminium
10.3:1
4
2
Gasoline direct injection
1 - 3 - 4 - 2
875±50
95-98 RON
228 (310)/5700
400/2200-5100

T8 Twin Engine (B4204T34)
In-line 4-cyl. supercharged and turbocharged
Transverse, front wheel drive, rear electric motor
1969
82.0
93.2
Aluminium
Aluminium
10.3:1
4
2
Gasoline direct injection
1 - 3 - 4 - 2
875±50
95-98 RON
223 (303)/6000
400/2200-4800

POWER AND TORQUE →

Manual gearbox/final drive Automatic gearbox/final drive

Acceleration, 0-100 km/h (sec)

FUEL CONSUMPTION (EU) $I/100 \text{ km} / \text{CO}_2 \text{ g/km}$ NEDC Tyre class A Combined *1

NEDC Tyre class B Combined *1

NEDC Tyre class C Combined $^{\star 1}$ WLTP Low 1/100 km / CO₂ g/km

WLTP Medium I/100 km / CO₂ g/km

WLTP Extra High 1/100 km / CO2 g/km

WLTP Combined $1/100 \text{ km} / \text{CO}_2 \text{ g/km}$

*1 NEDC figures correlated from WLTP based testing

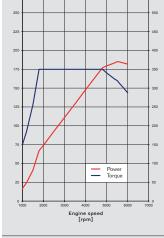
WLTP High I/100 km / CO₂ g/km

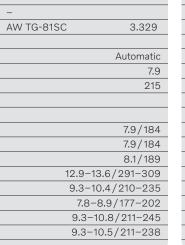
PERFORMANCE

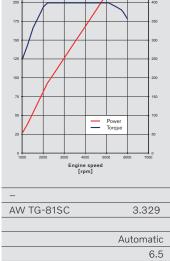
Top speed, km/h

Gearbox

Max torque, Nm/rpm







AW TG-81SC	3.329
	Automatic
	6.5
	230
	8.1/187
	8.1/187
	8.3/192
13.3-	-13.7/301-310
9.7-	10.6/221-239
8.2-	-9.2/185-209
9.8-	11.2/222-255
9.8-	10.8/221-245

ower [kW]	ı					Forqu [Nm 550
250						500
225						450
200						400
175						350
150		-/			\	300
125		_				250
100						201
75	/					150
50			_	Power		100
25			_	Torque		50
1000 20	100 30			000 60	000	7000
		Engine [rp	speed m]			

AW TG-81SD	3.329
	Automatic
	5.8
	230
	2.2/50
	2.2/50
	2.4/55
	_
	_
	_
	_
	2.9-3.4/67-77

Lithium-ion battery

11.6 3.0/4.0/8.0 47-45** 45-41**

Battery type
Battery content, total amount of energy (kwh)
Battery charging time*, at 16A/10A/6A fuse (hours)
Range (Km) (NEDC for hybrids)
Electric Range (WLTP) (Km) (EAER, Combined)
Electrical motor max power (kW/rps)
Electrical motor max torque (Nm/rps)
Driveline max power (hp)
Driveline max power (kw)
Driveline max torque (Nm)
Battery placement

^{65/117} 240/0-50 ~390 (303 + 87) ~288 (223*** + 65) ~640 (400*** + 240) Centrally in the tunnel of the car

^{*} Time pending on e.g. ambient temp

** Only electric driving according to governmental regulations for PHEV

*** In "Hybrid"-, Power"- and "EL-AWD"-mode

ENGINES	
Type	
Configuration	
Displacement, cm ³	
Bore (mm)	
Stroke (mm)	
Engine cylinder block material	
Cylinder head material	
Compression ratio	
Valves, no/cylinder	
Camshafts	
Engine management system	
Ignition sequence	
Engine idling speed, rpm	
Fuel	
Max output, kW (hp)/rpm	
Max torque, Nm/rpm	

B5 AWD (D420T2)
In-line 4-cyl. twin turbo diesel
Transverse, all wheel drive
1969
82.0
93.2
Aluminium
Aluminium
15.8:1
4
2
i-Art common rail direct injection
1 - 3 - 4 - 2
825±150
Diesel*
173 (235)/4000
480/1750-2250

POWER AND TORQUE →

[kW]						[Nm
250						500
225	$\uparrow \setminus$					
225						450
200			$\overline{}$			401
175			$\bot \bot$			351
- 1/		/	1			
150	١,	/	1			301
125	+/		-1			251
			'			
100	/					200
75	<u>'</u>					150
50						100
- ° /				Power Torque		7 10
25				lorque		50
1000	2000 3			00 60	000	7000
		[rp	speed m]			

Manual gearbox/final drive	
Automatic gearbox/final drive	
PERFORMANCE	
Gearbox	
Acceleration, 0-100 km/h (sec)	
Top speed, km/h	
FUEL CONSUMPTION (EU)	
I/100 km / CO ₂ g/km	
NEDC Tyre class A Combined *1	
NEDC Tyre class B Combined *1	
NEDC Tyre class C Combined *1	
WLTP Low 1/100 km / CO ₂ g/km	
WLTP Medium 1/100 km / CO ₂ g/km	
WLTP High 1/100 km / CO ₂ g/km	
WLTP Extra High I/100 km / CO ₂ g/km	
WLTP Combined 1/100 km / CO ₂ g/km	
*1 NEDC figures correlated from WLTP based testing	
Electrical motor max power (kW/rps)	
Electrical motor max torque (Nm/rps)	
Driveline max power (hp)	
Driveline max power (kw)	

AWF8G55	;	3,329
	<u> </u>	
		Automatic
		7.6
		220
5-seat	6-seat	7-seat
5.9/154	n/a	n/a
6.0/158	6.0/159	6.2/162
6.2/162	6.2/162	6.3/166
		n/a
	6.6-7.7	/173-203
* According to E Maximum biod	N590 liesel (FAME) cont	ent 7%
		10/50
		40/0-38
		235 + 14
		173 + 10
		480 + 40

Driveline max torque (Nm)

MEASUREMENTS AND VOLUMES EXTERIOR MEASUREMENTS (CM)

Length	495.3
Width (body width)	192.3
Width (with small wheelarch)	193.1
Width (with large wheelarch)	195.8
Width (incl mirrors folded)	200.8
Width (incl mirrors outer edge)	214.0
Height	177.6
Wheelbase	298.4
Overhang (front/rear)	89.0/107.9
Track, front, (tire (width): 235/275)	166.5/167.3
Track, front, with air suspension (tire (width): 235/275)	166.8/167.6
Track, rear, (tire (width): 235/275)	166.7/167.5
Track, rear, with air suspension (tire (width): 235/275)	167.1/167.9
Ground clearance (standard chassis/with air suspension)	22.3/21.2-25.2

WEIGHTS/MISCELLANEOUS

WEIGHTS/WISCELLANEOUS	
Weight, kg (min-max, depending on setup)	2012-2329
Fuel tank, I (all/B4204T34/"L5&L7")	71/70/60
SCR tank, I (Diesel)	11.7
Max. trailer weight, kg	2400-2700*
Max roof load, kg	100
Approach angle (degr.) (all / 4 seat)	21.4/22.5
Breakover angle (degr.) (all / 4 seat)	21.3/20.3
Departure angle (degr.) (all / 5 seat / 4 seat)	23.3/23.4/22.5
Drag coefficient, Cd	0.33

^{*} Depending on setup

INTERIOR MEASUREMENTS (CM)

Headroom without panoramic sunroof (front/rear) (5 seat)	99.8/99.9
Headroom without panoramic sunroof (front/rear/third row) (6 & 7 se	eat) 99.8/99.7/92.3
Headroom with panoramic sunroof (front/rear) (4 & 5 seat)	98.7/97.9
Headroom with panoramic sunroof (front/rear/third row) (6 & 7 seat)	98.7/97.9/92.3
Headroom maximum, without panoramic sunroof (front) (5 & 6	& 7 seat) 105.1
Headroom maximum, with panoramic sunroof (front) (all)	103.3
Passenger comp width at shoulder height (front/rear) (4 & 5 seat)	146.5/143.5
Passenger comp width at shoulder height	146.5/143.5/119.2
(front/rear/third row) (6 & 7 seat)	
Leg room (front/rear) (4 seat)	103.8/98.9
Leg room (front/rear) (5 seat)	103.8/94.0
Leg room (front/rear/third row) (6 & 7 seat)	103.8/94.0/81.1
Cargo volume, including under floor storage	1886/1868/1816
(V214-1)(litres)(5 seat/6 & 7 seat/6 & 7 seat T8)	
Cargo length from the first seatback to the tailgate measure	ed at:
– the height of the floor covering	204.0
Cargo length from the second seatback to the tailgate mea	sured at:
- the height of the floor covering (5 seat/6 & 7 seat)	122.0/126.0
Cargo height (rear wheel center and car center line)	88.9
Rear opening height (car center line)	81.6
Width of luggage compartment between wheelhouses	113.0

TRANSMISSIONS

8-speed automatic gearbox

Ratio	AW TG-81SC	AW TG-81SD	AWF8G55
First	5.250	5.250	5.057
Second	3.029	3.029	3.070
Third	1.950	1.950	2.050
Fourth	1.457	1.457	1.520
Fifth	1.221	1.221	1.262
Sixth	1.000	1.000	1.000
Seventh	0.809	0.809	0.792
Eighth	0.673	0.673	0.661
Reverse	4.015	4.015	3.992

CHASSIS Suspension

Suspension	front	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension
	rear	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar.
		Onting of Air Communication

Optional Air Suspension
Steering Electric Power Assisted Rack and Pinion Steering

rear

Turning circle, (curb to curb) 11.8 m/12.1 m (tire 235/275)

Braking system

Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA)

Praking distance 100–0 km/h

36 m

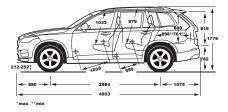
Braking distance, 100–0 km/h

Brake disc diameter front 345 mm/366 mm (all/B4204T35)

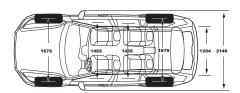
All figures are preliminary. Volvo Cars reserves the right to make changes in the specifications without any notice.

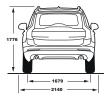
320 mm/340 mm (all/B4204T35)

4-SEAT

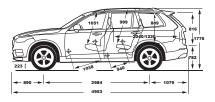


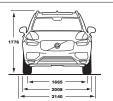


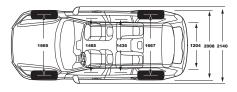


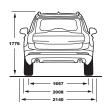


5-SEAT

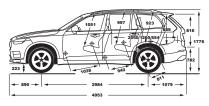




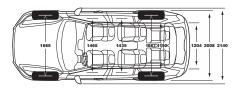




6-SEAT









7-SEAT

