

2023 Volvo V90 Cross Country Technical Specifications				
	B5 AWD (250 hp) aut	B6 AWD (300 hp) aut	B4 AWD (197 hp) aut	B5 AWD (235 hp) aut
ENGINE				
Engines	B420T2	B420T	D420T8	D420T2
Type	In-line, 4 cyl. turbocharged	In-line, 4 cyl. supercharged and turbocharged	In-line, 4 cyl. twin turbo diesel	In-line, 4 cyl. twin turbo diesel
Configuration	AWD	AWD	AWD	AWD
Displacement	1969 cm³	1969 cm³	1969 cm³	1969 cm³
Bore	82,0 mm	82,0 mm	82,0 mm	82,0 mm
Stroke	93,2 mm	93,2 mm	93,2 mm	93,2 mm
Engine cylinder block material	Aluminum	Aluminum	Aluminum	Aluminum
Cylinder head material	Aluminum	Aluminum	Aluminum	Aluminum
Compression ratio	10,5:1	9,0:1	15,8:1	15,8:1
Valves, no/cylinder	4 ea.	4 ea.	4 ea.	4 ea.
Camshafts	2 ea.	2 ea.	2 ea.	2 ea.
DOHC / SOHC	DOHC	DOHC	DOHC	DOHC
Engine management system	Gasoline direct injection	Gasoline direct injection	i-Art common rail direct injection	i-Art common rail direct injection
Ignition sequence	1 - 3 - 4 - 2	1 - 3 - 4 - 2	1 - 3 - 4 - 2	1 - 3 - 4 - 2
Engine idling speed	770 rpm ± 75	770 rpm ± 75	825 rpm ± 150	825 rpm ± 150
Fuel, rec. Octane	95–98 RON	95–98 RON	Diesel ¹	Diesel ¹
Max engine speed	6200 rpm	6300 rpm	5000 rpm	5000 rpm
Max output	184 kW (250 hp) / 5400 - 5700 rpm	220 kW (300 hp) / 5400 rpm	145 kW (197 hp) / 4000 rpm	173 kW (235 hp) / 4000 rpm
Max torque	350 / 30 - 80 Nm / rps	420 / 35 - 80 Nm / rps	420 / 29 - 46 Nm / rps	480 / 29 - 38 Nm / rps
Electrical motor max power (kW)	10 kW	10 kW	10 kW	10 kW
Electrical motor max torque (Nm)	40 Nm	40 Nm	40 Nm	40 Nm
¹ According to EN590 Maximum biodiesel (FAME) content 7%				
TRANSMISSION				
Transmissions (AWD)	AWF8G45	AWF8G55	AWF8G45	AWF8G55
First Gear (AWD)	5,057	5,057	5,057	5,057
Second Gear (AWD)	3,070	3,070	3,070	3,070
Third Gear (AWD)	2,050	2,050	2,050	2,050
Fourth Gear (AWD)	1,520	1,520	1,520	1,520
Fifth Gear (AWD)	1,262	1,262	1,262	1,262
Sixth Gear (AWD)	1,000	1,000	1,000	1,000
Seventh Gear (AWD)	0,792	0,792	0,792	0,792
Eighth Gear (AWD)	0,661	0,661	0,661	0,661
Reverse Gear (AWD)	3,992	3,992	3,992	3,992
Automatic Gearbox / final drive (AWD)	3,329	3,329	3,200	3,200
PERFORMANCE				
Performance	Automatic	Automatic	Automatic	Automatic
Gearbox	AWF8G45	AWF8G55	AWF8G45	AWF8G55
Acceleration, 0-100 km/h	7,4 sec	6,4 sec	8,8 sec	7,5 sec
Top speed	180 km/h	180 km/h	180 km/h	180 km/h
WLTP "Low" l/100 km / CO ₂ g/km	11,2 - 11,9 l/100 km / 254 - 269 g/km	11,8 - 13,0 l/100 km / 267 - 295 g/km	7,9 - 8,4 l/100 km / 206 - 220 g/km	7,9 - 8,4 l/100 km / 206 - 220 g/km
WLTP "Medium" l/100 km / CO ₂ g/km	7,5 - 8,2 l/100 km / 170 - 187 g/km	8,1 - 8,6 l/100 km / 183 - 195 g/km	6,2 - 7,0 l/100 km / 163 - 182 g/km	6,2 - 7,0 l/100 km / 163 - 182 g/km
WLTP "High" l/100 km / CO ₂ g/km	6,4 - 7,2 l/100 km / 146 - 163 g/km	6,9 - 7,5 l/100 km / 156 - 169 g/km	5,3 - 5,8 l/100 km / 140 - 152 g/km	5,3 - 5,8 l/100 km / 140 - 152 g/km
WLTP "Extra High" l/100 km / CO ₂ g/km	7,6 - 8,6 l/100 km / 173 - 194 g/km	8,0 - 8,8 l/100 km / 182 - 200 g/km	6,3 - 7,1 l/100 km / 164 - 185 g/km	6,3 - 7,1 l/100 km / 164 - 185 g/km
WLTP Combined l/100 km / CO ₂ g/km	7,7 - 8,5 l/100 km / 175 - 193 g/km	8,2 - 8,9 l/100 km / 185 - 202 g/km	6,2 - 6,8 l/100 km / 162 - 179 g/km	6,2 - 6,8 l/100 km / 162 - 179 g/km
¹ * NEDC figures correlated from WLTP based testing				
MEASUREMENTS AND VOLUMES				
Length	4959 mm	4959 mm	4959 mm	4959 mm
Width (Body width)	1879 mm	1879 mm	1879 mm	1879 mm
Width (fenders)	1903 mm	1903 mm	1903 mm	1903 mm
Width (Including mirrors, folded)	1929 mm	1929 mm	1929 mm	1929 mm
Width (Including mirrors, outer edge)	2052 mm	2052 mm	2052 mm	2052 mm
Height (Including shark fin antenna)	1537 mm	1537 mm	1537 mm	1537 mm
Height with open tailgate/trunklid (H110)	2173 mm	2173 mm	2173 mm	2173 mm
Wheelbase	2941 mm	2941 mm	2941 mm	2941 mm
Track, front (Rim size 17"+18"+19" / 20"+21")	1652 mm / 1655 mm	1652 mm / 1655 mm	1652 mm / 1655 mm	1652 mm / 1655 mm
Track, rear (Rim size 17"+18"+19" / 20"+21")	1643 mm / 1645 mm	1643 mm / 1645 mm	1643 mm / 1645 mm	1643 mm / 1645 mm
Ground clearance (at curb weight + 1 person)	195 mm	195 mm	195 mm	195 mm
Wading capability depth at curb weight (at walking speed)	300 mm	300 mm	300 mm	300 mm
Approach angle (at curb weight)	18,9 degr	18,9 degr	18,9 degr	18,9 degr
Departure angle (at curb weight)	20,8 degr	20,8 degr	20,8 degr	20,8 degr
Breakover angle (at curb weight)	17,7 degr	17,7 degr	17,7 degr	17,7 degr
WEIGHT/MISCELLANEOUS				
Weight (Depending on type of engine, gearbox etc.)	1930 kg - 1982 kg	1930 kg - 1982 kg	1930 kg - 1982 kg	1930 kg - 1982 kg
Total Weight (Depending on type of engine, gearbox etc.)	2450 kg - 2510 kg	2450 kg - 2510 kg	2450 kg - 2510 kg	2450 kg - 2510 kg
Max trailer weight, Unbraked (Max)	750 kg	750 kg	750 kg	750 kg
Max trailer weight, Braked (Max)	2400 kg	2400 kg	2400 kg	2400 kg
Fuel tank, Petrol	71 l ¹ / 60 l /	71 l ¹ / 60 l /	-	-
Fuel tank, Diesel	-	-	71 l ¹ / 60 l /	71 l ¹ / 60 l /
Aerodynamics, (Cd)	0,35 - 0,37	0,35 - 0,37	0,35 - 0,37	0,35 - 0,37
Aerodynamics, (Frontal area)	2,37 m²	2,37 m²	2,37 m²	2,37 m²
Max roof load	100 kg	100 kg	100 kg	100 kg
SCR tank	-	-	11,5 l	11,5 l
¹ = Market codes, 10, 14, 15, 19, 28, 49, 50, 61 / All other				
INTERIOR MEASUREMENTS				
Headroom with panoramic sunroof (front/rear)	959 mm / 957 mm	959 mm / 957 mm	959 mm / 957 mm	959 mm / 957 mm
Headroom without panoramic sunroof (front/rear)	983 mm / 966 mm	983 mm / 966 mm	983 mm / 966 mm	983 mm / 966 mm
Headroom maximum, with panoramic sunroof (front)	1006 mm	1006 mm	1006 mm	1006 mm
Headroom maximum, without panoramic sunroof (front)	1026 mm	1026 mm	1026 mm	1026 mm
Passenger compartment width at shoulder height (front/rear)	1460 mm / 1420 mm	1460 mm / 1420 mm	1460 mm / 1420 mm	1460 mm / 1420 mm
Leg room (front/rear)	1071 mm / 911 mm	1071 mm / 911 mm	1071 mm / 911 mm	1071 mm / 911 mm
Hip room (front/rear)	1432 mm / 1416 mm	1432 mm / 1416 mm	1432 mm / 1416 mm	1432 mm / 1416 mm
Cargo length from the first seatback to the tailgate measured at the top of the first seatback	1812 mm	1812 mm	1812 mm	1812 mm
Cargo length from the first seatback to the tailgate measured at the height of the floor covering	1988 mm	1988 mm	1988 mm	1988 mm
Cargo length from the second seatback to the tailgate measured at the top of the second seatback	890 mm	890 mm	890 mm	890 mm
Cargo length from the second seatback to the tailgate measured at the height of the floor covering	1153 mm	1153 mm	1153 mm	1153 mm
Rear opening height (H202)	704 mm	704 mm	704 mm	704 mm
Rear opening height (car center line) (H201)	759 mm	759 mm	759 mm	759 mm
Luggage floor, height to ground (H253)	680 mm	680 mm	680 mm	680 mm
Cargo floor width, min. (W202) (between wheel housings)	1100 mm	1100 mm	1100 mm	1100 mm
Rear opening width upper, min. (W205)	880 mm	880 mm	880 mm	880 mm
Rear opening width at floor, min. (W207)	1130 mm	1130 mm	1130 mm	1130 mm
Rear opening width maximum (W206)	1162 mm	1162 mm	1162 mm	1162 mm
Largest Luggage volume - First (Largest volume. Load height limited by the head lining. Front limited by vertical plane tangential to the rear side of the front seatback) - Total, including under floor volume	1517 l	1517 l	1517 l	1517 l
Under floor volume, V209 - without rep kit and recess. All-	68 l	68 l	68 l	68 l
Under floor volume, V209 - rep kit. All	24 l	24 l	24 l	24 l
Under floor volume, V209 - spare wheel	22 l	22 l	22 l	22 l
Largest Luggage volume - Second (Second seat up. Load height limited by the headlining. Front limited by vertical plane tangential to the rear side of the second seatback) - Total, including under floor volume	714 l	714 l	714 l	714 l
Open Luggage Compartment - First (Second seat folded. Load height limited to upper edge of the front seatback or lower edge of the rear window) - Total, including under floor volume	904 l	904 l	904 l	904 l
Open Luggage Compartment - Second (Second seat up. Load height limited to the upper edge of the second seatback or second window) - Total, including under floor volume	551 l	551 l	551 l	551 l
CHASSIS				
Suspension front	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar
Suspension rear	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension
Steering	Electric Power Assisted Rack and Pinion Steering	Electric Power Assisted Rack and Pinion Steering	Electric Power Assisted Rack and Pinion Steering	Electric Power Assisted Rack and Pinion Steering
Steering ratio (angle/angle)	16,7	16,7	16,7	16,7
Turning circle (Curb to curb)	11,6 m	11,6 m	11,6 m	11,6 m
Turning circle (Wall to wall)	12,0 m	12,0 m	12,0 m	12,0 m
Turns of steering wheel end to end	2,9 / 3,0	2,9 / 3,0	2,9 / 3,0	2,9 / 3,0
Braking system	Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA)	Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA)	Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA)	Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA)
Brake disc diameter (front) (17" / 18")	322 mm / 345 mm	322 mm / 345 mm	322 mm / 345 mm	322 mm / 345 mm
Brake disc diameter (rear) (17")	320 mm	320 mm	320 mm	320 mm
Brake disc thickness (front) (17" / 18")	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm
Brake disc thickness (rear) (17")	20 mm	20 mm	20 mm	20 mm
Braking distance 100-0 km/h	35 m	35 m	35 m	35 m