2022 Volvo V90 Specifications

	B4 (197 hp) aut	B5 (250 hp) aut	B6 AWD (300 hp) aut	Recharge T6 AWD (340 hp) aut	Recharge T8 AWD (390 hp) aut	B4 (197 hp) aut	B4 AWD (197 hp) aut	B5 AWD (235 hp) aut
Engine								
Engines	B420T6	B420T2	B420T	B4204T46	B4204T34	D420T8	D420T8	D420T2
Type	In-line, 4 cyl. turbocharged	In-line, 4 cyl. turbocharged	In-line, 4 cyl. supercharged and turbocharged	In-line, 4 cyl. supercharged and turbocharged	In-line, 4 cyl. supercharged and turbocharged	In-line 4 cyl. twin turbo diesel	In-line 4 cyl. twin turbo diesel	In-line 4 cyl. twin turbo diesel
Configuration	FWD	FWD	AWD	AWD	AWD	FWD	AWD	AWD
Displacement	1969 cm^3	1969 cm^3	1969 cm^3	1969 cm^3	1969 cm^3	1969 cm^3	1969 cm^3	1969 cm^3
Bore	82,0 mm	82,0 mm	82,0 mm	82,0 mm	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	93,2 mm	93,2 mm	93,2 mm	93,2 mm
Engine cylinder block material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Cylinder head material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Compression ratio	10,5:1	10,5:1	9,0:1	10,3:1	10,3:1	15,8:1	15,8:1	15,8:1
Valves, no/cylinder	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.
Camshafts	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.
DOHC / SOHC	DOHC	DOHC	DOHC	DOHC	DOHC	DOHC	DOHC	DOHC
Engine management system	Gasoline direct injection	Gasoline direct injection	Gasoline direct injection	Gasoline direct injection	Gasoline direct injection	i-Art common rail 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	1 - 3 - 4 - 2	1 - 3 - 4 - 2	1 - 3 - 4 - 2	1 - 3 - 4 - 2
Engine idling speed	770 rpm ± 50	770 rpm ± 50	770 rpm ± 50	850 rpm ± 50	850 rpm ± 50	825 rpm ± 150	825 rpm ± 150	825 rpm ± 150
Fuel, rec. Octane	95–98 RON	95–98 RON	95–98 RON	95–98 RON	95–98 RON	Diesel [1]	Diesel [1]	Diesel [1]
Max engine speed	6200 rpm	6200 rpm	6300 rpm	6000 rpm	6000 rpm	5000 rpm	5000 rpm	5000 rpm
Max output	145 kW (197 hp) / 4800 - 5400 rpm	184 kW (250 hp) / 5400 - 5700 rpm	220 kW (300 hp) / 5400 rpm	186 kW (253 hp) / 5500 rpm	223 kW (303 hp) / 6000 rpm	145 kW (197 hp) / 4000 rpm	145 kW (197 hp) / 4000 rpm	173 kW (235 hp) / 4000 rpm
Max torque	300 / 25 - 70 Nm / rps	350 / 30 - 80 Nm / rps	420 / 35 - 80 Nm / rps	350 / 28 - 83 Nm / rps	400 / 37 - 80 Nm / rps	420 / 29 - 46 Nm / rps	420 / 29 - 46 Nm / rps	480 / 29 - 38 Nm / rps
Battery type	-	-	-	Lithium-ion battery	Lithium-ion battery	-	-	-
Battery content, total amount of energy (kWh)	-	-	-	11,6	11,6	-	-	-
Battery charging time***, at 16A / 10A / 6A fuse (hours) [2]	-	-	-	3,0 / 4,0 / 8,0	3,0 / 4,0 / 8,0	-	-	-
Battery placement	-	-	-	Centrally in the tunnel of the car	Centrally in the tunnel of the car	-	-	-
Electrical motor max power (kW)	10 kW	10 kW	10 kW	65 kW	65 kW	10 kW	10 kW	10 kW
Electrical motor max torque (Nm)	40 Nm	40 Nm	40 Nm	240 Nm	240 Nm	40 Nm	40 Nm	40 Nm
Driveline max power (kW)	-	-	-	65 kW + 186 kW** [3]	65 kW + 223 kW** [3]	-	-	-
Driveline max torque (Nm)	-	-	-	240 Nm + 350 Nm** [3]	240 Nm + 400 Nm** [3]	-	-	-
[1] According to EN590 Maximum biodiesel (FAME) content 7%								
[2] *** Up to								
[3] **) Up to								
Transmissions								
Transmissions	AWF8G45	AWF8G45	-	-	-	AWF8G45	-	-
First Gear	5,057	5,057	-	-	-	5,057	-	-
Second Gear	3,070	3,070	-	-	-	3,070	-	-
Third Gear	2,050	2,050	-	-	-	2,050	-	-
Fourth Gear	1,520	1,520	-	-	-	1,520	-	-
Fifth Gear	1,262	1,262	-	-	-	1,262	-	-
Sixth Gear	1,000	1,000	-	-	-	1,000	-	-
Seventh Gear	0,792	0,792	-	-	-	0,792	-	-
Eighth Gear	0,661	0,661	-	-	-	0,661	-	-
Reverse Gear	3,992	3,992	-	-	-	3,992	-	-
Automatic Gearbox/final drive	3,200	3,200	-	-	-	3,075	-	-
Transmissions (AWD)	-	-	AWF8G55	AW TG-81SD	AW TG-81SD	-	AWF8G45	AWF8G55
First Gear (AWD)	-	-	5,057	5,250	5,250	-	5,057	5,057
Second Gear (AWD)	-	-	3,070	3,029	3,029	-	3,070	3,070
Third Gear (AWD)	-	-	2,050	1,950	1,950	-	2,050	2,050
Fourth Gear (AWD)	-	-	1,520	1,457	1,457	-	1,520	1,520
Fifth Gear (AWD)	-	-	1,262	1,221	1,221	-	1,262	1,262
Sixth Gear (AWD)	-	-	1,000	1,000	1,000	-	1,000	1,000
Seventh Gear (AWD)	-	-	0,792	0,809	0,809	-	0,792	0,792
Eighth Gear (AWD)	-	-	0,661	0,673	0,673	-	0,661	0,661
Reverse Gear (AWD)	-	-	3,992	4,015	4,015	-	3,992	3,992
Automatic Gearbox / final drive (AWD)	-	-	3,200	3,200	3,200	-	3,075	3,075
Performance								
Performance	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Gearbox	AWF8G45	AWF8G45	AWF8G55	AW TG-81SD	AW TG-81SD	AWF8G45	AWF8G45	AWF8G55
Acceleration, 0-100 km/h	7,9 sec	6,9 sec	6,2 sec	5,9 sec	5,3 sec	8,5 sec	8,7 sec	7,2 sec
Top speed	180 km/h	180 km/h	180 km/h	180 km/h	180 km/h	180 km/h	180 km/h	180 km/h
Tyre class A Combined, NEDC*, l/100 km / CO_2 g/km [1]	6,2 l/100 km / 143 g/km	6,2 l/100 km / 143 g/km	6,9 l/100 km / 157 g/km	1,7 l/100 km / 40 g/km	1,7 l/100 km / 40 g/km	5,0 l/100 km / 128 g/km	5,2 l/100 km / 136 g/km	5,2 l/100 km / 136 g/km
Tyre class B Combined, NEDC*, l/100 km / CO_2 g/km [1]	6,4 l/100 km / 146 g/km	6,4 l/100 km / 146 g/km	6,9 l/100 km / 158 g/km	1,8 l/100 km / 42 g/km	1,8 l/100 km / 42 g/km	5,2 l/100 km / 133 g/km	5,3 l/100 km / 140 g/km	5,3 l/100 km / 140 g/km
WLTP Combined l/100 km / CO_2 g/km	6,7 - 7,5 l/100 km / 159 - 178 g/km	6,8 - 7,5 l/100 km / 160 - 178 g/km	7,4 - 8,5 l/100 km / 179 - 196 g/km	l/100 km / 58 g/km	l/100 km / 58 g/km	5,7 - 6,3 l/100 km / 148 - 164 g/km	5,9 - 6,6 l/100 km / 155 - 174 g/km	5,9 - 6,6 l/100 km / 155 - 174 g/km
Electric Range [EAER] WLTP, Comb.	-	-	-	50 km	50 km	-	-	-
[1] * NEDC figures correlated from WLTP based testing								
Measurements and Volumes								
Length	4945 mm	4945 mm	4945 mm	4945 mm	4945 mm	4945 mm	4945 mm	4945 mm
Width (Body width)	1879 mm	1879 mm	1879 mm	1879 mm	1879 mm	1879 mm	1879 mm	1879 mm
Width (door mouldings)	1890 mm	1890 mm	1890 mm	1890 mm	1890 mm	1890 mm	1890 mm	1890 mm
Width (Incl mirrors, folded)	1895 mm	1895 mm	1895 mm	1895 mm	1895 mm	1895 mm	1895 mm	1895 mm
Width (Including mirrors, outer edge)	2019 mm	2019 mm	2019 mm	2019 mm	2019 mm	2019 mm	2019 mm	2019 mm
Height (Including shark fin antenna)	1472 mm	1472 mm	1472 mm	1472 mm	1472 mm	1472 mm	1472 mm	1472 mm
Wheelbase	2941 mm	2941 mm	2941 mm	2941 mm	2941 mm	2941 mm	2941 mm	2941 mm
Track, front (Rim size 17"+18" / 19"/20"/21")	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm	1628 mm / 1618 mm / 1617 mm /1623 mm
Track, rear (Rim size 17"+18" / 19"/20"/21")	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm	1629 mm / 1619 mm / 1618 mm /1624 mm
Ground clearance (at curb weight)	156 mm	156 mm	156 mm	156 mm	156 mm	156 mm	156 mm	156 mm
Wading capability depth at curb weight (at walking speed)	250 mm	250 mm	250 mm	Up to a depth approximately level with the floor at walking speed	Up to a depth approximately level with the floor at walking speed	250 mm	250 mm	250 mm
Weight/Miscellaneous								
Weight (Depending on type of engine, gearbox etc.)	1791 kg - 2099 kg	1791 kg - 2099 kg	1791 kg - 2099 kg	1791 kg - 2099 kg	1791 kg - 2099 kg	1791 kg - 2099 kg	1791 kg - 2099 kg	1791 kg - 2099 kg
Total Weight (Depending on type of engine, gearbox etc.)	2350 kg - 2620 kg	2350 kg - 2620 kg	2350 kg - 2620 kg	2350 kg - 2620 kg	2350 kg - 2620 kg	2350 kg - 2620 kg	2260 kg - 2620 kg	2260 kg - 2620 kg
Max trailer weight, Unbraked (Max)	750 kg	750 kg	750 kg	750 kg	750 kg	750 kg	750 kg	750 kg
Max trailer weight, Braked (Max)	2000 kg	2000 kg	2200 kg	2100 kg	2100 kg	1800 kg	2200 kg	2200 kg
Fuel tank, Petrol	60 l	60 l	60 l	60 l	60 l	-	-	-
Fuel tank, Diesel	-	-	-	-	-	60 l	60 l	60 l
Aerodynamics, (Cd)	0,30 - 0,33	0,30 - 0,33	0,30 - 0,33	0,30 - 0,33	0,30 - 0,33	0,30 - 0,33	0,30 - 0,33	0,30 - 0,33
Aerodynamics, (Frontal area)	2,30 m^2	2,30 m^2	2,30 m^2	2,30 m^2	2,30 m^2	2,30 m^2	2,30 m^2	2,30 m^2
Max roof load	100 kg	100 kg	100 kg	100 kg	100 kg	100 kg	100 kg	100 kg
SCR tank [1]	-	-	-	-	-	11,5 l	11,5 l	11,5 l
[1] = D420T8, D420T2								
Interior Measurements								
Headroom with panoramic sunroof (front/rear)	959 mm / 957 mm	959 mm / 957 mm	959 mm / 957 mm	959 mm / 957 mm	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	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	1006 mm	1006 mm	1006 mm	1006 mm
Headroom maximum, without panoramic sunroof (front)	1026 mm	1026 mm	1026 mm	1026 mm	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	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	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	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	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	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	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	1153 mm	1153 mm	1153 mm	1153 mm
Rear opening height (H202)	704 mm	704 mm	704 mm	704 mm	704 mm	704 mm	704 mm	704 mm
Luggage floor, height to ground (H253)	610 mm	610 mm	610 mm	610 mm	610 mm	610 mm	610 mm	610 mm
Cargo floor width, min. (W202) (between wheel housings)	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm
Rear opening width at floor, min. (W207)	1030 mm	1030 mm	1030 mm	1030 mm	1030 mm	1030 mm	1030 mm	1030 mm
Rear opening width maximum (W206)	1162 mm	1162 mm	1162 mm	1162 mm	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	1526 l	1526 l	1526 l	1526 l	1526 l	1526 l	1526 l	1526 l
Under floor volume, V209 - without rep kit and recess. All / B420T6, B420T2, B420T, D420T8 ,D420T2	77 l / 68 l	77 l / 68 l	77 l / 68 l	77 l / 68 l	77 l / 68 l	77 l / 68 l	77 l / 68 l	77 l / 68 l
Under floor volume, V209 - rep kit. All / B420T6, B420T2, B420T, D420T8, D420T2	64 l / 24 l	64 l / 24 l	64 l / 24 l	64 l / 24 l	64 l / 24 l	64 l / 24 l	64 l / 24 l	64 l / 24 l
Under floor volume, V209 - spare wheel	22 l	22 l	22 l	22 l	22 l	22 l	22 l	22 l
Under floor volume, V209 - rep kit (B4204T46, B4204T34)	5 l	5 l	5 l	5 l	5 l	5 l	5 l	5 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	723 l	723 l	723 l	723 l	723 l	723 l	723 l	723 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	913 l	913 l	913 l	913 l	913 l	913 l	913 l	913 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	560 l	560 l	560 l	560 l	560 l	560 l	560 l	560 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	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	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	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)	16,3	16,3	16,3	16,3	16,3	16,3	16,3	16,3
Turning circle (Curb to curb. (Rim size: 16"-18" / 19"-21"))	11,4 m / 11,8 m	11,4 m / 11,8 m	11,4 m / 11,8 m	11,4 m / 11,8 m	11,4 m / 11,8 m	11,4 m / 11,8 m	11,4 m / 11,8 m	11,4 m / 11,8 m
Turning circle (Wall to wall. (depending on rim size))	11,8 m - 12,2 m	11,8 m - 12,2 m	11,8 m - 12,2 m	11,8 m - 12,2 m	11,8 m - 12,2 m	11,8 m - 12,2 m	11,8 m - 12,2 m	11,8 m - 12,2 m
Turns of steering wheel end to end (depending on rim size)	2,9 / 3,0	2,9 / 3,0	2,9 / 3,0	2,9 / 3,0	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)	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) (16" / 17" / 18")	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm	296 mm / 322 mm / 345 mm
Brake disc diameter (rear) (16" / 17")	302 mm / 320 mm	302 mm / 320 mm	302 mm / 320 mm	302 mm / 320 mm	302 mm / 320 mm	302 mm / 320 mm	302 mm / 320 mm	302 mm / 320 mm
Brake disc thickness (front) (16" + 17" / 18")	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm	28 mm / 30 mm
Brake disc thickness (rear) (16" / 17")	12 mm / 20 mm	12 mm / 20 mm	12 mm / 20 mm	12 mm / 20 mm	12 mm / 20 mm	12 mm / 20 mm	12 mm / 20 mm	12 mm / 20 mm
Braking distance 100-0 km/h	35 m	35 m	35 m	35 m	35 m	35 m	35 m	35 m