

2022 Volvo S90 Specifications					
	B4 (197 hp) aut	B5 (250 hp) aut	B6 AWD (300 hp) aut	T8 TwEn (303 hp) aut	B5 AWD (235 hp) aut
Engine					
Engines	B420T6	B420T2	B420T	B4204T34	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. twin turbo diesel
Configuration	FWD	FWD	AWD	AWD	AWD
Displacement	1969 cm³	1969 cm³	1969 cm³	1969 cm³	1969 cm³
Bore	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
Engine cylinder block material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Cylinder head material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Compression ratio	10,5:1	10,5:1	9,0:1	10,3:1	15,8:1
Valves, no/cylinder	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.
Camshafts	2 ea.	2 ea.	2 ea.	2 ea.	2 ea.
DOHC / SOHC	DOHC	DOHC	DOHC	DOHC	DOHC
Engine management system	Gasoline direct injection	Gasoline direct injection	Gasoline direct injection	Gasoline 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
Engine idling speed	770 rpm ± 75	770 rpm ± 75	770 rpm ± 75	850 rpm ± 50	825 rpm ± 150
Fuel, rec. Octane	95–98 RON	95–98 RON	95–98 RON	95–98 RON	Diesel <sup>1</sup>
Max engine speed	6200 rpm	6200 rpm	6300 rpm	6000 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	223 kW (303 hp) / 6000 rpm	173 kW (235 hp) / 4000 rpm
Max torque	300 / 25 - 70 Nm / rps	350 / 30 - 80 Nm / rps	420 / 35 - 80 Nm / rps	400 / 37 - 80 Nm / rps	480 / 29 - 38 Nm / rps
Battery type	-	-	-	Lithium-ion battery	-
Battery content, total amount of energy (kWh)	-	-	-	11,6	-
Battery charging time***, at 16A / 10A / 6A fuse (hours) <sup>2</sup>	-	-	-	3,0 / 4,0 / 8,0	-
Battery placement	-	-	-	Centrally in the tunnel of the car	-
Electrical motor max power (kW)	10 kW	10 kW	10 kW	65 kW	10 kW
Electrical motor max torque (Nm)	40 Nm	40 Nm	40 Nm	240 Nm	40 Nm
Driveline max power (kW)	-	-	-	65 kW + 223 kW** <sup>3</sup>	-
Driveline max torque (Nm)	-	-	-	240 Nm + 400 Nm** <sup>3</sup>	-
<sup>1</sup> According to EN590 Maximum biodiesel (FAME) content 7%					
<sup>2</sup> *** Up to					
<sup>3</sup> **) Up to					
Transmissions					
Transmissions	AWF8G45	AWF8G45	-	-	-
First Gear	5,057	5,057	-	-	-
Second Gear	3,070	3,070	-	-	-
Third Gear	2,050	2,050	-	-	-
Fourth Gear	1,520	1,520	-	-	-
Fifth Gear	1,262	1,262	-	-	-
Sixth Gear	1,000	1,000	-	-	-
Seventh Gear	0,792	0,792	-	-	-
Eighth Gear	0,661	0,661	-	-	-
Reverse Gear	3,992	3,992	-	-	-
Automatic Gearbox/final drive	3,200	3,200	-	-	-
Transmissions (AWD)	-	-	AWF8G55	AW TG-81SD	AWF8G55
First Gear (AWD)	-	-	5,057	5,250	5,057
Second Gear (AWD)	-	-	3,070	3,029	3,070
Third Gear (AWD)	-	-	2,050	1,950	2,050
Fourth Gear (AWD)	-	-	1,520	1,457	1,520
Fifth Gear (AWD)	-	-	1,262	1,221	1,262
Sixth Gear (AWD)	-	-	1,000	1,000	1,000
Seventh Gear (AWD)	-	-	0,792	0,809	0,792
Eighth Gear (AWD)	-	-	0,661	0,673	0,661
Reverse Gear (AWD)	-	-	3,992	4,015	3,992
Automatic Gearbox / final drive (AWD)	-	-	3,200	3,200	3,075
Performance					
Performance	Automatic	Automatic	Automatic	Automatic	Automatic
Gearbox	AWF8G45	AWF8G45	AWF8G55	AW TG-81SD	AWF8G55
Acceleration, 0-100 km/h	7,9 sec	6,9 sec	6,2 sec	5,1 sec	7,0 sec
Top speed	180 km/h	180 km/h	180 km/h	180 km/h	180 km/h
Tyre class A Combined, NEDC*, l/100 km / CO <sub>2</sub> g/km <sup>1</sup>	6,1 l/100 km / 140 g/km	6,1 l/100 km / 140 g/km	6,8 l/100 km / 156 g/km	1,7 l/100 km / 38 g/km	4,9 l/100 km / 128 g/km
Tyre class B Combined, NEDC*, l/100 km / CO <sub>2</sub> g/km <sup>1</sup>	6,3 l/100 km / 143 g/km	6,3 l/100 km / 143 g/km	6,9 l/100 km / 157 g/km	1,8 l/100 km / 40 g/km	5,0 l/100 km / 132 g/km
WLTP Combined l/100 km / CO <sub>2</sub> g/km	6,5 - 7,5 l/100 km / 155 - 178 g/km	6,6 - 7,5 l/100 km / 156 - 178 g/km	7,4 - 8,3 l/100 km / 176 - 196 g/km	1,9 - n/a l/100 km / 42 - n/a g/km	5,6 - 6,6 l/100 km / 147 - 174 g/km
Electric Range, NEDC* <sup>2</sup>	-	-	-	54 km - 52 km	-
Electric Range [EAER] WLTP, Comb.	-	-	-	42 km - n/a km	-
<sup>1</sup> * NEDC figures correlated from WLTP based testing					
<sup>2</sup> WLTP PHEV nomenclature: Combined refer to the combined value of all phases in WLTP, City refer to the first two phases of WLTP, low and medium. Weighted refer the calculated result for both petrol and electric drivetrain. EAER = Equivalent all-electric range.					
Measurements and Volumes					
Length	4969 mm	4969 mm	4969 mm	4969 mm	4969 mm
Width (Body width)	1879 mm	1879 mm	1879 mm	1879 mm	1879 mm
Width (door mouldings)	1890 mm	1890 mm	1890 mm	1890 mm	1890 mm
Width (Including mirrors, folded)	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
Height (Including shark fin antenna)	1440 mm	1440 mm	1440 mm	1440 mm	1440 mm
Wheelbase	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
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
Ground clearance (at curb weight + 1 person)	150 mm	150 mm	150 mm	150 mm	150 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	250 mm
Weight/Miscellaneous					
Weight (Depending on type of engine, gearbox etc.)	1794 kg - 2095 kg	1794 kg - 2095 kg	1794 kg - 2095 kg	1794 kg - 2095 kg	1794 kg - 2095 kg
Total Weight (Depending on type of engine, gearbox etc.)	2300 kg - 2590 kg	2300 kg - 2590 kg	2300 kg - 2590 kg	2300 kg - 2590 kg	2300 kg - 2590 kg
Max trailer weight, Unbraked (Max)	750 kg	750 kg	750 kg	750 kg	750 kg
Max trailer weight, Braked (Max)	2000 kg	2000 kg	2200 kg	2100 kg	2200 kg
Fuel tank, Petrol	60 l	60 l	60 l	60 l	-
Fuel tank, Diesel	-	-	-	-	60 l
Aerodynamics, (Cd)	0,26 - 0,29	0,26 - 0,29	0,26 - 0,29	0,26 - 0,29	0,26 - 0,29
Aerodynamics, (Frontal area)	2,29 m²	2,29 m²	2,29 m²	2,29 m²	2,29 m²
Max roof load	100 kg	100 kg	100 kg	100 kg	100 kg
SCR tank	-	-	-	-	11,5 l
Interior Measurements					
Headroom with sunroof (front/rear)	950 mm / 960 mm	950 mm / 960 mm	950 mm / 960 mm	950 mm / 960 mm	950 mm / 960 mm
Headroom (front/rear)	984 mm / 961 mm	984 mm / 961 mm	984 mm / 961 mm	984 mm / 961 mm	984 mm / 961 mm
Headroom maximum, with sunroof (front)	990 mm	990 mm	990 mm	990 mm	990 mm
Headroom maximum, without sunroof (front)	1027 mm	1027 mm	1027 mm	1027 mm	1027 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
Leg room (front/rear)	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
Cargo length at floor from the back of the front seatback (L212-1)	1978 mm	1978 mm	1978 mm	1978 mm	1978 mm
Cargo length at floor from the back of the rear seatback (L212-2)	1149 mm	1149 mm	1149 mm	1149 mm	1149 mm
Lift over height (H196)	672 mm	672 mm	672 mm	672 mm	672 mm
Rear opening height (H202)	363 mm	363 mm	363 mm	363 mm	363 mm
Loading height between cargo floor and parcel shelf (H212)	373 mm	373 mm	373 mm	373 mm	373 mm
Luggage floor, height to ground (H253)	515 mm	515 mm	515 mm	515 mm	515 mm
Cargo floor width, min. (W202) (between wheel housings)	1024 mm	1024 mm	1024 mm	1024 mm	1024 mm
Rear opening width at floor, min. (W207)	1014 mm	1014 mm	1014 mm	1014 mm	1014 mm
Cargo volume (V210-2) - high load floor	461 l	461 l	461 l	461 l	461 l
Cargo volume (V209) (under floor volume, included in V210-2) - high load floor without rep kit and recess / rep kit B420T6, B420T2, B420T, D420T2	32 l / 24 l	32 l / 24 l	32 l / 24 l	32 l / 24 l	32 l / 24 l
Cargo volume (V209) (under floor volume, included in V210-2) - high load floor spare wheel / rep kit all / B4204T34, B4204T35	7 l / 2 l	7 l / 2 l	7 l / 2 l	7 l / 2 l	7 l / 2 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
Suspension rear	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar
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
Turning circle (Curb to curb)	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)	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	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)
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
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
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
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
Braking distance 100-0 km/h	35 m	35 m	35 m	35 m	35 m