2019 Volvo All-New XC90 Specifications

	XC90 T5 AWD (250 hp) auto	XC90 T6 AWD (318 hp) auto	XC90 T8 AWD (320 hp) auto	XC90 T8 AWD or Excellence AWD (320 hp) auto	XC90 T8 AWD or Excellence AWD (400 hp) auto	XC90 D4 AWD (140 hp) auto	XC90 D5 AWD (235 hp) auto
Engine							
Engine	INline4TURBO	INline4TURBO	INline4TURBO	INline4TURBO	INline4TURBO	INline4DIESEL	INline4DIESEL
Type	In-line 4-cyl turbocharged	In-line 4-cyl supercharged turbocharged	In-line 4-cyl supercharged turbocharged	In-line 4-cyl supercharged turbocharged	In-line 4-cyl supercharged turbocharged	In-line 4-cyl, twin turbo diesel	In-line 4-cyl, twin turbo diesel
Configuration	AWD	AWD	AWD	AWD	AWD	FWD	AWD
Displacement	1969 cm³	1969 cm³	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	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
Compression ratio	10.3:1	10.3:1	10.3:1	10.3:1	10.3:1	15.8:1	15.8:1
Valves, no/cyl/exh	4 valves	4 valves	4 valves	4 valves	4 valves	4 valves	4 valves
DOHC / SOHC	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	LKA common rail direct injection	LKA 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
Engine idling speed	675 rpm ± 50	675 rpm ± 50	600 rpm ± 50	600 rpm ± 50	625 rpm ± 100	625 rpm ± 100	625 rpm ± 100
Fuel, no. Octane	95 (98 RON)	95 (98 RON)	95 (98 RON)	95 (98 RON)	Diesel [1]	Diesel [1]	Diesel [1]
Max engine speed	6500 rpm	6500 rpm	6500 rpm	6500 rpm	6500 rpm	5000 rpm	5000 rpm
Max output	187 kW (250 hp) @ 5700 rpm	235 kW (318 hp) @ 5700 rpm	235 kW (320 hp) @ 5700 rpm	235 kW (320 hp) @ 5700 rpm	294 kW (400 hp) @ 5700 rpm	140 kW (190 hp) @ 4250 rpm	175 kW (235 hp) @ 4250 rpm
Max torque	350 Nm - 80 Nm @ 1500 rpm	400 / 107 - 80 Nm @ 1500 rpm	400 / 107 - 80 Nm @ 1500 rpm	400 / 107 - 80 Nm @ 1500 rpm	500 / 133 - 80 Nm @ 1500 rpm	400 / 42 - 80 Nm @ 1750 rpm	480 / 35 - 80 Nm @ 1750 rpm
Battery type	Lithium-ion battery			Lithium-ion battery			
Battery (current output of energy (AH))				10.4	10.4		
Battery charging level [1], at 12V				3.0 / 4.0 / 7.2	3.0 / 4.0 / 7.2		
Battery (alternator)				Centrally in the tunnel of the car	Centrally in the tunnel of the car		
Electrical motor max power (kW)				65 kW	65 kW		
Electrical motor max torque (Nm)				240 Nm	240 Nm		
Gasoline max power (kW)				65 kW - 2.25 dm³ [1]	65 kW - 2.25 dm³ [1]		
Gasoline max torque (Nm)				240 Nm + 400 Nm	240 Nm + 400 Nm		
[1] According to ECMA Electric Vehicle Battery (EVB) Latest **							
[1] Diesel **							
[1] Gas **							
Transmission							
Transmission					AW TG-81SC		
First Gear					4.714		
Second Gear					3.035		
Third Gear					1.856		
Fourth Gear					1.407		
Fifth Gear					1.231		
Sixth Gear					1.000		
Seventh Gear					0.823		
Eighth Gear					0.673		
Reverse Gear					4.015		
Automatic Gearbox(Final drive)					3.200		
Transmission (AWD)	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC
First Gear (AWD)	5.250	5.250	5.250	5.250	5.250	5.250	5.250
Second Gear (AWD)	3.029	3.029	3.029	3.029	3.029	3.029	3.029
Third Gear (AWD)	1.850	1.850	1.850	1.850	1.850	1.850	1.850
Fourth Gear (AWD)	1.457	1.457	1.457	1.457	1.457	1.457	1.457
Fifth Gear (AWD)	1.231	1.231	1.231	1.231	1.231	1.231	1.231
Sixth Gear (AWD)	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Seventh Gear (AWD)	0.809	0.809	0.809	0.809	0.809	0.809	0.809
Eighth Gear (AWD)	0.673	0.673	0.673	0.673	0.673	0.673	0.673
Reverse Gear (AWD)	4.015	4.015	4.015	4.015	4.015	4.015	4.015
Automatic Gearbox(Final drive) (AWD)	3.329	3.329	3.329	3.329	3.329	3.075	3.329
Performance							
Performance	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Gearbox	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC
Acceleration, 0 - 100 km/h (sec)	8.2 sec	6.9 sec	6.5 sec	6.5 sec	5.4 sec	9.4 sec	7.8 sec
Top speed	210 km/h	230 km/h	230 km/h	230 km/h	250 km/h	200 km/h	220 km/h
Fuel consumption (EU 715/2007)	7.6 l/100km	8.1 l/100km	2.1 l/100km	2.1 l/100km	5.2 l/100km	5.7 l/100km	
CO²	176 g/km	184 g/km	48 g/km	48 g/km	136 g/km	149 g/km	
Tyre Size 8 Combined (EU 715/2007)							6.2 l/100 km / 183 g/km
Tyre Size 9 Combined (EU 715/2007)							6.6 l/100 km / 173 g/km
** WLTC Figures combined for Petrol, Diesel and Plug-in Hybrid							
Measurements and Volumes							
Length	4950 mm	4950 mm	4950 mm	4950 mm	4950 mm	4950 mm	4950 mm
Width (Body width)	1923 mm	1923 mm	1923 mm	1923 mm	1923 mm	1923 mm	1923 mm
Width (with pedal wheelcover)	1931 mm	1931 mm	1931 mm	1931 mm	1931 mm	1931 mm	1931 mm
Width (with pedal wheelcover)	1958 mm	1958 mm	1958 mm	1958 mm	1958 mm	1958 mm	1958 mm
Width (incl mirrors folded)	2008 mm	2008 mm	2008 mm	2008 mm	2008 mm	2008 mm	2008 mm
Height (including roof rails)	1776 mm	1776 mm	1776 mm	1776 mm	1776 mm	1776 mm	1776 mm
Height (with air suspension) (R18)	2140 mm	2140 mm	2140 mm	2140 mm	2140 mm	2140 mm	2140 mm
Wheelbase	2984 mm	2984 mm	2984 mm	2984 mm	2984 mm	2984 mm	2984 mm
Track, front (R18) (R19)	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm
Track, front, with air suspension (R18) (R19) (R20) (R21)	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm	1668 mm / 1675 mm
Track, rear (R18) (R19) (R20) (R21)	1667 mm / 1675 mm	1667 mm / 1675 mm	1667 mm / 1675 mm	1667 mm / 1675 mm	1667 mm / 1675 mm	1667 mm / 1675 mm	1667 mm / 1675 mm
Track, rear, with air suspension (R18) (R19) (R20) (R21)	1671 mm / 1675 mm	1671 mm / 1675 mm	1671 mm / 1675 mm	1671 mm / 1675 mm	1671 mm / 1675 mm	1671 mm / 1675 mm	1671 mm / 1675 mm
Ground clearance (with air suspension)	238 mm	238 mm	238 mm	238 mm	238 mm	238 mm	238 mm
Approach angle (at curb weight)	22.0 deg	22.0 deg	22.0 deg	22.0 deg	22.0 deg	22.0 deg	22.0 deg
Breakover angle (at curb weight)	21.3 deg	21.3 deg	21.3 deg	21.3 deg	21.3 deg	21.3 deg	21.3 deg
Departure angle (at curb weight)	23.3 deg	23.3 deg	23.3 deg	23.3 deg	23.3 deg	23.3 deg	23.3 deg
Rearing capability (at curb weight)	450 mm	450 mm	Up to a depth of 500 mm (water with the foot at walking speed)	Up to a depth of 500 mm (water with the foot at walking speed)	450 mm	450 mm	450 mm
Weight/Volumes							
Weight (Empty/unladen) (kg)	1932 kg - 2001 kg	1932 kg - 2001 kg	2265 kg	2364 kg	1932 kg - 2001 kg	1932 kg - 2001 kg	1932 kg - 2001 kg
Total Weight (Empty/unladen) + Payload (kg)	2575 kg - 2750 kg	2575 kg - 2750 kg	3016 kg	2775 kg	2575 kg - 2750 kg	2575 kg - 2750 kg	2575 kg - 2750 kg
Max trailer weight (Braked) (12%)	2400 kg	2400 kg	2400 kg	2400 kg	2400 kg	2400 kg	2400 kg
Fuel tank, Petrol [1]	71 [1]	71 [1]	50 [1]	50 [1]		71 [1]	71 [1]
Fuel tank, Diesel						71 [1]	71 [1]
Adblue [1]						5.5 [1]	5.5 [1]
Aerodynamics, Cd	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Aerodynamics, Cd x A	2.79 m²	2.79 m²	2.79 m²	2.79 m²	2.79 m²	2.79 m²	2.79 m²
Max roof load	120 kg	120 kg	100 kg	100 kg	100 kg	100 kg	100 kg
* = Tank volume (incl. 7.5 liter AdBlue) **							
[1] Tank volume (incl. 7.5 l AdBlue) **							
[1] Tank volume (incl. 7.5 l AdBlue) **							
Interior Measurements							
Headroom with standard roof (front/rear seat) (mm)	997 mm / 976 mm / 923 mm	997 mm / 976 mm / 923 mm	997 mm / 976 mm / 923 mm	997 mm / 976 mm / 923 mm	997 mm / 976 mm / 923 mm	997 mm / 976 mm / 923 mm	997 mm / 976 mm / 923 mm
Headroom without sunroof (front/rear seat) (mm)	998 mm / 987 mm / 923 mm	998 mm / 987 mm / 923 mm	998 mm / 987 mm / 923 mm	998 mm / 987 mm / 923 mm	998 mm / 987 mm / 923 mm	998 mm / 987 mm / 923 mm	998 mm / 987 mm / 923 mm
Headroom with sunroof (front/rear seat) (mm)	996 mm / 986 mm	996 mm / 986 mm	996 mm / 986 mm	996 mm / 986 mm	996 mm / 986 mm	996 mm / 986 mm	996 mm / 986 mm
Headroom with panoramic roof (front/rear seat) (mm)	1003 mm	1003 mm	1003 mm	1003 mm	1003 mm	1003 mm	1003 mm
Headroom with headliner (without sunroof) (mm)	1001 mm	1001 mm	1001 mm	1001 mm	997 mm / 976 mm	1001 mm	1001 mm
Headroom with headliner (with sunroof) (mm)							
Passenger compartment length (front/rear) (mm)	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm
Passenger compartment width at shoulder level (front/rear) (mm)	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm	1465 mm / 1430 mm
Passenger compartment width at elbow level (front/rear) (mm)				1465 mm / 1430 mm			
Leg room (front/rear seat) (mm)	1038 mm / 980 mm / 910 mm	1038 mm / 980 mm / 910 mm	1038 mm / 980 mm / 910 mm		1038 mm / 980 mm / 910 mm	1038 mm / 980 mm / 910 mm	1038 mm / 980 mm / 910 mm
Leg room (front/rear seat) (mm)	1038 mm / 980 mm	1038 mm / 980 mm			1038 mm / 980 mm	1038 mm / 980 mm	1038 mm / 980 mm
Leg room (front/rear seat) (mm)				1038 mm / 980 mm			
Hip room (front/rear seat) (mm)	1422 mm / 1426 mm / 1426 mm	1422 mm / 1426 mm / 1426 mm	1422 mm / 1426 mm / 1426 mm		1422 mm / 1426 mm / 1426 mm	1422 mm / 1426 mm / 1426 mm	1422 mm / 1426 mm / 1426 mm
Hip room (front/rear seat) (mm)	1422 mm / 1426 mm	1422 mm / 1426 mm	1422 mm / 1426 mm		1422 mm / 1426 mm	1422 mm / 1426 mm	1422 mm / 1426 mm
Hip room (front/rear seat) (mm)				1422 mm / 1426 mm			
Luggage volume, behind 2nd row seats, to roof (dm³)	1307 / 1351	1307 / 1351	1055 / 2121		1307 / 1351	1307 / 1351	1307 / 1351
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³)	1121 / 1187	1121 / 1187			1121 / 1187	1121 / 1187	1121 / 1187
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)			1055 / 2121				
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	1121 / 1187	1121 / 1187			1121 / 1187	1121 / 1187	1121 / 1187
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	662 / 651	662 / 651	846 / 311		662 / 651	662 / 651	662 / 651
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	721 / 727	721 / 727			721 / 727	721 / 727	721 / 727
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)				431 / 351			
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	314 / 351	314 / 351	263 / 311		314 / 351	314 / 351	314 / 351
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	1868 / 1951	1868 / 1951	1916 / 2121		1868 / 1951	1868 / 1951	1868 / 1951
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	1868 / 1951	1868 / 1951			1868 / 1951	1868 / 1951	1868 / 1951
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	1010 / 951	1010 / 951	687 / 311		1010 / 951	1010 / 951	1010 / 951
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	1271 / 1271	1271 / 1271			1271 / 1271	1271 / 1271	1271 / 1271
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)				735 / 351			
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	380 / 351	380 / 351	319 / 311		380 / 351	380 / 351	380 / 351
Luggage volume, behind 2nd row seats, to roof, measured according to VDA (dm³) (including 50 l EU7/2 cover)	762 / 760	762 / 760	762 / 760	762 / 760	762 / 760	762 / 760	762 / 760
Rear opening height	916 mm	916 mm	916 mm	916 mm	916 mm	916 mm	916 mm
Height of luggage compartment floor	889 mm	889 mm	889 mm	889 mm	889 mm	889 mm	889 mm
Inner luggage compartment length (measured on floor)	1136 mm	1136 mm	1136 mm	1136 mm	1136 mm	1136 mm	1136 mm
Rear opening upper edge	986 mm	986 mm	986 mm	986 mm	986 mm	986 mm	986 mm
Rear opening maximum width	1224 mm	1224 mm	1224 mm	1224 mm	1224 mm	1224 mm	1224 mm
Rear opening maximum height	1192 mm	1192 mm	1192 mm	1192 mm	1192 mm	1192 mm	1192 mm
Cargo length from the first seat back to the tailgate (measured on floor, without the seat back)	1903 mm / 2840 mm	1903 mm / 2840 mm	1903 mm / 2840 mm	1903 mm / 2840 mm	1903 mm / 2840 mm	1903 mm / 2840 mm	1903 mm / 2840 mm
Cargo length from the second seat back to the tailgate (measured on floor, without the seat back)	1040 mm / 1260 mm	1040 mm / 1260 mm	1040 mm / 1260 mm		1040 mm / 1260 mm	1040 mm / 1260 mm	1040 mm / 1260 mm
Cargo length from the second seat back to the tailgate (measured on floor, without the seat back)				1040 mm / 1260 mm			
Cargo length from the second seat back to the tailgate (measured on floor, without the seat back)	1030 mm / 1250 mm	1030 mm / 1250 mm			1030 mm / 1250 mm	1030 mm / 1250 mm	1030 mm / 1250 mm
Cargo length from the second seat back to the tailgate (measured on floor, without the seat back)				1030 mm / 1250 mm			
Cargo length from the second seat back to the tailgate (measured on floor, with the seat back folded forward)	335 mm / 554 mm	335 mm / 554 mm	335 mm / 554 mm		335 mm / 554 mm	335 mm / 554 mm	335 mm / 554 mm
Cargo length from the second seat back to the tailgate (measured on floor, with the seat back folded forward)				335 mm / 554 mm			
Cargo length from the second seat back to the tailgate (measured on floor, with the seat back folded forward)				890 mm			
Cargo length at height of 50 cm from floor (measured behind the first row seats)				761 mm			
Cargo length at height of 50 cm from floor (measured behind the second row seats)							
Chassis							
Suspension front	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension	Double Wishbone Suspension, Cut Forged Aluminum Wishbones, Anti-roll Bar, Stabilizer Bar, Gas Pressure Suspension
Suspension rear	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension	Integral Arm with Transverse Suspension Spring, Hydraulic Damper, Anti-roll Bar, Optional Air Suspension
Steering	Electric Power Assisted Steering (Volvo Steering)	Electric Power Assisted Steering (Volvo Steering)	Electric Power Assisted Steering (Volvo Steering)	Electric Power Assisted Steering (Volvo Steering)	Electric Power Assisted Steering (Volvo Steering)	Electric Power Assisted Steering (Volvo Steering)	Electric Power Assisted Steering (Volvo Steering)
Steering ratio (overall)	16.8:1	16.8:1	16.8:1	16.8:1	16.8:1	16.8:1	16.8:1
Turning circle (kerb to kerb)	11.8 m / 12.1 m	11.8 m / 12.1 m	11.8 m / 12.1 m	12.1 m	11.8 m / 12.1 m	11.8 m / 12.1 m	11.8 m / 12.1 m
Turning circle (Wall to wall)	12.2 m / 12.5 m	12.2 m / 12.5 m	12.2 m / 12.5 m	12.5 m	12.2 m / 12.5 m	12.2 m / 12.5 m	12.2 m / 12.5 m
Turns of steering wheel (lock to lock)	3.0 / 2.8	3.0 / 2.8	3.0 / 2.8	2.8	3.0 / 2.8	3.0 / 2.8	3.0 / 2.8
Braking system	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)	Antilock Braking System, Electronic Brake Distribution (EBD), Electronic Stability Control, Brake Assistance (EBA)
Brake disc diameter (front)	345 mm	345 mm	345 mm	345 mm	345 mm	345 mm	345 mm
Brake disc diameter (rear)	325 mm	325 mm	325 mm	340 mm	325 mm	325 mm	325 mm
Brake disc thickness (front)	30 mm	30 mm	30 mm	30 mm	30 mm	30 mm	30 mm
Brake disc thickness (rear)	20 mm	20 mm	20 mm	20 mm	20 mm	20 mm	20 mm
Driving distance (km) on one tank	38 km	38 km	38 km	38 km	38 km	38 km	38 km