2019 Volvo All-New XC90 Specifications

	XC90 T5 AWD (250 hp) aut	XC90 T6 AWD (310 hp) aut	XC90 T8 AWD (5&7 Seat) (390 hp) aut	XC90 T8 AWD (4 Seat) (390 hp) aut	XC90 D5 AWD (235 hp) aut

Engine

Engines	B4204T26	B4204T29	B4204T34	B4204T34	D4204T23
Type	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
Configuration	AWD	AWD	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
Compression ratio	10,8:1	10,3:1	10,3:1	10,3:1	15,8:1
Valves, no/cylinder	4 ea.	4 ea.	4 ea.	4 ea.	4 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	875 rpm ± 50	875 rpm ± 50	875 rpm ± 50	875 rpm ± 50	825 rpm ± 150
Fuel, rec. Octane	95–98 RON	95–98 RON	95–98 RON	95–98 RON	Diesel [1]
Max engine speed	6000 rpm	6000 rpm	6000 rpm	6000 rpm	5000 rpm
Max output	184 kW (250 hp) / 5500 rpm	228 kW (310 hp) / 5700 rpm	223 kW (303 hp) / 6000 rpm	223 kW (303 hp) / 6000 rpm	173 kW (235 hp) / 4000 rpm
Max torque	350 / 30 - 80 Nm / rps	400 / 37 - 85 Nm / rps	400 / 37 - 80 Nm / rps	400 / 37 - 80 Nm / rps	480 / 29 - 37 Nm / rps
Battery type	-	-	Lithium-ion battery	Lithium-ion battery	-
Battery content, total amount of energy (kWh)	-	-	10,4	10,4	-
Battery charging time***, at 16A / 10A / 6A fuse (hours) [2]	-	-	3,0 / 4,0 / 7,0	3,0 / 4,0 / 7,0	-
Battery placement	-	-	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	-
Driveline max power (kW)	-	-	65 kW + 223 kW** [3]	65 kW + 223 kW** [3]	-
Driveline max torque (Nm)	-	-	240 Nm + 400 Nm** [3]	240 Nm + 400 Nm** [3]	-

[1] According to EN590 Maximum biodiesel (FAME) content 7%

[2] *** Up to

[3] **) Up to

Transmissions

Transmissions (AWD)	AW TG-81SC	AW TG-81SC	AW TG-81SD	AW TG-81SD	AW TG-81SC
First Gear (AWD)	5,250	5,250	5,250	5,250	5,250
Second Gear (AWD)	3,029	3,029	3,029	3,029	3,029
Third Gear (AWD)	1,950	1,950	1,950	1,950	1,950
Fourth Gear (AWD)	1,457	1,457	1,457	1,457	1,457
Fifth Gear (AWD)	1,221	1,221	1,221	1,221	1,221
Sixth Gear (AWD)	1,000	1,000	1,000	1,000	1,000
Seventh Gear (AWD)	0,809	0,809	0,809	0,809	0,809
Eighth Gear (AWD)	0,673	0,673	0,673	0,673	0,673
Reverse Gear (AWD)	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

Performance

Performance	Automatic	Automatic	Automatic	Automatic	Automatic
Gearbox	AW TG-81SC	AW TG-81SC	AW TG-81SD	AW TG-81SD	AW TG-81SC
Acceleration, 0-100 km/h	7,9 sec	6,5 sec	5,8 sec	5,8 sec	7,8 sec
Top speed	215 km/h	230 km/h	230 km/h	230 km/h	220 km/h
Tyre class B Combined, NEDC*, l/100 km / CO² g/km [1]	7,9 l/100 km / 184 g/km	8,1 l/100 km / 187 g/km	2,6 l/100 km / 59 g/km	2,6 l/100 km / 59 g/km	6,0 l/100 km / 158 g/km
Tyre class C Combined, NEDC*, l/100 km / CO² g/km [1]	8,1 l/100 km / 189 g/km	8,3 l/100 km / 192 g/km	2,8 l/100 km / 63 g/km	2,8 l/100 km / 63 g/km	6,2 l/100 km / 162 g/km
Tyre class E Combined, NEDC*, l/100 km / CO² g/km [1]	9,2 - 10,4 / 211 - 238	9,7 - 10,7 / 221 - 245	- / -	- / -	7,6 - 8,4 / 201 - 221

[1] * NEDC figures correlated from WLTP based testing

Measurements and Volumes

Length	4950 mm	4950 mm	4950 mm	4950 mm	4950 mm
Width (Body width)	1923 mm	1923 mm	1923 mm	1923 mm	1923 mm
Width (with small wheelarch)	1931 mm	1931 mm	1931 mm	1931 mm	1931 mm
Width (with large wheelarch)	1958 mm	1958 mm	1958 mm	1958 mm	1958 mm
Width (incl mirrors folded)	2008 mm	2008 mm	2008 mm	2008 mm	2008 mm
Width (Including mirrors, outer edge)	2140 mm	2140 mm	2140 mm	2140 mm	2140 mm
Height (Including shark fin antenna)	1776 mm	1776 mm	1776 mm	1776 mm	1776 mm
Height with open tailgate/trunklid (H110)	2146 mm	2146 mm	2146 mm	2146 mm	2146 mm
Wheelbase	2984 mm	2984 mm	2984 mm	2984 mm	2984 mm
Track, front (Tire (width): 235 / 275)	1665 mm / 1673 mm	1665 mm / 1673 mm	1665 mm / 1673 mm	1665 mm / 1673 mm	1665 mm / 1673 mm
Track, front, with air suspension (Tire (width): 235 / 275)	1668 mm / 1676 mm	1668 mm / 1676 mm	1668 mm / 1676 mm	1668 mm / 1676 mm	1668 mm / 1676 mm
Track, rear (Tire (width): 235 / 275)	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 (Tire (width): 235 / 275)	1671 mm / 1679 mm	1671 mm / 1679 mm	1671 mm / 1679 mm	1671 mm / 1679 mm	1671 mm / 1679 mm
Ground clearance (Standard chassie)	238 mm	238 mm	238 mm	238 mm	238 mm
Ground clearance (with air suspension)	227 mm - 267 mm	227 mm - 267 mm	227 mm - 267 mm	227 mm - 267 mm	227 mm - 267 mm
Approach angle (at curb weight)	23,8 degr	23,8 degr	23,8 degr	23,8 degr	23,8 degr
Breakover angle (at curb weight)	21,3 degr	21,3 degr	21,3 degr	21,3 degr	21,3 degr
Departure angle (at curb weight)	23,3 degr	23,3 degr	23,3 degr	23,3 degr	23,3 degr
Wading capability depth at curb weight (at walking speed)	450 mm	450 mm	450 mm	450 mm	450 mm

Weight/Miscellaneous

Weight (Depending on type of engine, gearbox etc.)	1970 kg - 2434 kg	1970 kg - 2434 kg	1970 kg - 2434 kg	1970 kg - 2434 kg	1970 kg - 2434 kg
Total Weight (Depending on type of engine, gearbox etc.)	2630 kg - 3100 kg	2630 kg - 3100 kg	2630 kg - 3100 kg	2630 kg - 3100 kg	2630 kg - 3100 kg
Max trailer weight, Unbraked (Max)	750 kg	750 kg	750 kg	750 kg	750 kg
Max trailer weight, Braked (Max)	2400 kg	2700 kg	2400 kg	2400 kg	2700 kg
Fuel tank, Petrol	71 l [1]	71 l [1]	70 l	70 l	-
Fuel tank, Diesel	-	-	-	-	71 l [1]
SCR tank [2]	-	-	-	-	11,7 l
Aerodynamics, (Cd)	0,33	0,33	0,33	0,33	0,33
Aerodynamics, (Frontal area)	2,78 m²	2,78 m²	2,78 m²	2,78 m²	2,78 m²
Max roof load	100 kg	100 kg	100 kg	100 kg	100 kg

[1] = Sales version L5 and L7 has 60l tank

[2] = Market codes, 10, 14, 15, 19, 26, 41, 48, 49

Interior Measurements

Headroom with sunroof (front/rear/third row) (7 seat)	987 mm / 979 mm / 923 mm	987 mm / 979 mm / 923 mm	987 mm / 979 mm / 923 mm	-	987 mm / 979 mm / 923 mm
Headroom without sunroof (front/rear/third row) (7 seat)	998 mm / 997 mm / 923 mm	998 mm / 997 mm / 923 mm	998 mm / 997 mm / 923 mm	-	998 mm / 997 mm / 923 mm
Headroom with sunroof (front/rear) (5 seat)	987 mm / 979 mm	987 mm / 979 mm	-	-	987 mm / 979 mm
Headroom without sunroof (front/rear) (5 seat)	998 mm / 999 mm	998 mm / 999 mm	-	-	998 mm / 999 mm
Headroom maximum, with sunroof (front)	1033 mm	1033 mm	1033 mm	1033 mm	1033 mm
Headroom maximum, without sunroof (front)	1051 mm	1051 mm	1051 mm	-	1051 mm
Headroom with sunroof (front/rear) (4 seat)	-	-	-	987 mm / 979 mm	-
Passenger compartment width at shoulder height (front/rear/third row) (7 seat)	1465 mm / 1435 mm / 1192 mm	1465 mm / 1435 mm / 1192 mm	1465 mm / 1435 mm / 1192 mm	-	1465 mm / 1435 mm / 1192 mm
Passenger compartment width at shoulder height (front/rear) (5 seat)	1465 mm / 1435 mm	1465 mm / 1435 mm	-	-	1465 mm / 1435 mm
Passenger compartment width at shoulder height (front/rear) (4 seat)	-	-	-	1465 mm / 1435 mm	-
Leg room (front/rear/third row) (7 seat)	1038 mm / 940 mm / 811 mm	1038 mm / 940 mm / 811 mm	1038 mm / 940 mm / 811 mm	-	1038 mm / 940 mm / 811 mm
Leg room (front/rear) (5 seat)	1038 mm / 940 mm	1038 mm / 940 mm	-	-	1038 mm / 940 mm
Leg room (front/rear) (4 seat)	-	-	-	1038 mm / 989 mm	-
Hip room (front/rear/third row) (7 seat)	1422 mm / 1435 mm / 1140 mm	1422 mm / 1435 mm / 1140 mm	1422 mm / 1435 mm / 1140 mm	-	1422 mm / 1435 mm / 1140 mm
Hip room (front/rear) (5 seat)	1422 mm / 1435 mm	1422 mm / 1435 mm	-	-	1422 mm / 1435 mm
Hip room (front/rear) (4 seat)	-	-	-	1422 mm / 1435 mm	-
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-1) (7 seat)	1057 l / 83 l	1057 l / 83 l	1005 l / 31 l	-	1057 l / 83 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-1) (5 seat)	1131 l / 157 l	1131 l / 157 l	-	-	1131 l / 157 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-2) (7 seat)	692 l / 83 l	692 l / 83 l	640 l / 31 l	-	692 l / 83 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-2) (5 seat)	721 l / 157 l	721 l / 157 l	-	-	721 l / 157 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-2) (4 seat)	-	-	-	431 l / 55 l	-
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-3) (7 seat)	314 l / 83 l	314 l / 83 l	262 l / 31 l	-	314 l / 83 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V214-1) (7 seat)	1868 l / 83 l	1868 l / 83 l	1816 l / 31 l	-	1868 l / 83 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V214-1) (5 seat)	1886 l / 157 l	1886 l / 157 l	-	-	1886 l / 157 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V214-2) (7 seat)	1019 l / 83 l	1019 l / 83 l	967 l / 31 l	-	1019 l / 83 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V214-2) (5 seat)	1071 l / 157 l	1071 l / 157 l	-	-	1071 l / 157 l
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V211-1) (4 seat)	-	-	-	726 l / 55 l	-
Luggage volume, Variants with Spare wheel / including under floor volume (According to ISO V214-3) (7 seat)	368 l / 83 l	368 l / 83 l	316 l / 31 l	-	368 l / 83 l
Luggage floor, height to ground	782 mm	782 mm	782 mm	782 mm	782 mm
Rear opening height	816 mm	816 mm	816 mm	816 mm	816 mm
Height of luggage compartment	889 mm	889 mm	889 mm	889 mm	889 mm
Width of luggage compartment between wheelhouses	1130 mm	1130 mm	1130 mm	1130 mm	1130 mm
Rear opening width upper, min.	986 mm	986 mm	986 mm	986 mm	986 mm
Rear opening maximum width	1204 mm	1204 mm	1204 mm	1204 mm	1204 mm
Rear opening width at floor, min.	1192 mm	1192 mm	1192 mm	1192 mm	1192 mm
Cargo length from the first seatback to the tailgate measured at the top of the first seatback / the height of the floor covering	1903 mm / 2040 mm	1903 mm / 2040 mm	1903 mm / 2040 mm	-	1903 mm / 2040 mm
Cargo length from the second seatback to the tailgate measured at the top of the second seatback / the height of the floor covering (7 seat)	1040 mm / 1260 mm	1040 mm / 1260 mm	1040 mm / 1260 mm	-	1040 mm / 1260 mm
Cargo length from the second seatback to the tailgate measured at the top of the second seatback / the height of the floor covering (5 seat)	1000 mm / 1220 mm	1000 mm / 1220 mm	-	-	1000 mm / 1220 mm
Cargo length from the third seatback to the top of the third seatback / the height of the floor covering	335 mm / 554 mm	335 mm / 554 mm	335 mm / 554 mm	-	335 mm / 554 mm
Cargo length at floor from the back of front seatback (maximum)	-	-	-	898 mm	-
Cargo length at floor from the back of rear seatback (minimum (at refrigerator))	-	-	-	761 mm	-

Chassis

Suspension front	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar, Optional Air Suspension	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar, Optional Air Suspension	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar, Optional Air Suspension	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar, Air Suspension	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar, Optional Air Suspension
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, 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
Steering ratio (angle/angle)	16,8	16,8	16,8	16,8	16,8
Turning circle (Curb to curb)	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
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
Turns of steering wheel end to end	3,0 / 2,9	3,0 / 2,9	3,0 / 2,9	2,9	3,0 / 2,9
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)	345 mm	345 mm	366 mm	366 mm	345 mm
Brake disc diameter (rear)	320 mm	320 mm	340 mm	340 mm	320 mm
Brake disc thickness (front)	30 mm	30 mm	30 mm	30 mm	30 mm
Brake disc thickness (rear) (Ventilated EPB)	20 mm	20 mm	20 mm	20 mm	20 mm
Braking distance 100-0 km/h	36 m	36 m	36 m	36 m	36 m