

2016 Volvo All-New XC90 Specifications						
	XC90 T5 AWD (254 hp) aut	XC90 T6 AWD (320 hp) aut	XC90 T8 AWD (320 hp) aut	XC90 D4 FWD (190 hp) aut	XC90 D4 AWD (190 hp) aut	XC90 D5 AWD (225 hp) aut
Engine						
Engines	B4204T23	B4204T27	B4204T35	D4204T14	D4204T6	D4204T11
Type	In-line, 4 cyl. Turbocharged	In-line, 4 cyl. Supercharged and turbocharged	In-line, 4 cyl. Supercharged and turbocharged	In-line 4 cyl. Twin-turbodiesel	In-line 4 cyl. Twin-turbodiesel	In-line 4 cyl. Twin-turbodiesel
Configuration	AWD	AWD	AWD	FWD	AWD	AWD
Displacement	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
Stroke	93,2 mm	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	15,8:1	15,8:1	15,8:1
Valves, no/cylinder	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.	4 ea.
DOHC / SOHC	DOHC	DOHC	DOHC	DOHC	DOHC	DOHC
Engine management system	Integrated fuel (SFI) / ignition control system	Integrated fuel (SFI) / ignition control system	Integrated fuel (SFI) / ignition control system	Common rail electronic fuelling	Common rail electronic fuelling	Common rail electronic fuelling
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
Engine idling speed	850 rpm	825 rpm	850 rpm	825 rpm	825 rpm	825 rpm
Fuel, rec. Octane	For best performance and lowest fuel consumption 98 RON is recommended. For normal driving 95 RON can be used 91 RON should only be used in exceptional cases. For 4-cylinder engines only 95 RON or higher is recommended.	For best performance and lowest fuel consumption 98 RON is recommended. For normal driving 95 RON can be used 91 RON should only be used in exceptional cases. For 4-cylinder engines only 95 RON or higher is recommended.	For best performance and lowest fuel consumption 98 RON is recommended. For normal driving 95 RON can be used 91 RON should only be used in exceptional cases. For 4-cylinder engines only 95 RON or higher is recommended.	Diesel. Fuel must comply with EN590 standard. Cetane Number min 48	Diesel. Fuel must comply with EN590 standard. Cetane Number min 48	Diesel. Fuel must comply with EN590 standard. Cetane Number min 48
Max engine speed	6000 rpm	6000 rpm	6000 rpm	5000 rpm	5000 rpm	5000 rpm
Max output	187 kW (254 hp) / 5500 rpm	235 kW (320 hp) / 5700 rpm	235 kW (320 hp) / 5700 rpm	140 kW (190 hp) / 4250 rpm	140 kW (190 hp) / 4250 rpm	165 kW (225 hp) / 4250 rpm
Max torque	350 / 25 - 80 Nm / rps	400 / 37 - 90 Nm / rps	400 / 37 - 90 Nm / rps	400 / 29 - 42 Nm / rps	420 / 25 - 42 Nm / rps	470 / 29 - 42 Nm / rps
Battery type	-	-	Lithium-ion battery	-	-	-
Battery content, total amount of energy (kWh)	-	-	9,2	-	-	-
Battery charging time***, at 16A / 10A / 6A fuse (hours) ¹	-	-	2,5 / 3,5 / 6,0	-	-	-
Battery placement	-	-	Centrally in the tunnel of the car	-	-	-
Electrical motor max power (kW)	-	-	65 kW	-	-	-
Electrical motor max torque (Nm)	-	-	240 Nm	-	-	-
Driveline max power (kW)	-	-	65 kW + 235 kW** ¹	-	-	-
Driveline max torque (Nm)	-	-	240 Nm + 400 Nm** ¹	-	-	-
¹ ** Up to						
Transmissions						
Transmissions	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC	AW TG-81SC
First Gear	5,250	5,250	5,250	5,250	5,250	5,250
Second Gear	3,029	3,029	3,029	3,029	3,029	3,029
Third Gear	1,950	1,950	1,950	1,950	1,950	1,950
Fourth Gear	1,457	1,457	1,457	1,457	1,457	1,457
Fifth Gear	1,221	1,221	1,221	1,221	1,221	1,221
Sixth Gear	1,000	1,000	1,000	1,000	1,000	1,000
Seventh Gear	0,809	0,809	0,809	0,809	0,809	0,809
Eighth Gear	0,673	0,673	0,673	0,673	0,673	0,673
Reverse Gear	4,015	4,015	4,015	4,015	4,015	4,015
Automatic Gearbox/final drive	3,329	3,329	3,200	3,075	3,075	3,075
Performance						
Performance	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
Acceleration, 0-100 km/h	8,2 sec	6,5 sec	5,6 sec	9,2 sec	9,4 sec	7,8 sec
Top speed	215 km/h	230 km/h	230 km/h	205 km/h	200 km/h	220 km/h
Fuel consumption (l/100km (7.5 l/100km *) ¹ / 8.0 l/100km (7.7 l/100km *) ¹ / 11.0 l/100km (10.3 l/100km *) ¹)	7.6 l/100km (7.5 l/100km *) ¹	8.0 l/100km (7.7 l/100km *) ¹	2.1 l/100km	5.2 l/100km	5.8 l/100km (5.7 l/100km *) ¹	5.8 l/100km (5.7 l/100km *) ¹
CO ₂	176 g/km (174 g/km *) ¹	186 g/km (179 g/km *) ¹	49 g/km	136 g/km	152 g/km (149 g/km *) ¹	152 g/km (149 g/km *) ¹
¹ * - Restricted offer						
Measurements and Volumes						
Length	4950 mm	4950 mm	4950 mm	4950 mm	4950 mm	4950 mm
Width	1923 mm	1923 mm	1923 mm	1923 mm	1923 mm	1923 mm
Width (Including mirrors, outer edge)	2140 mm	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	1776 mm
Height with open tailgate/trunklid (H110)	2146 mm	2146 mm	2146 mm	2146 mm	2146 mm	2146 mm
Wheelbase	2984 mm	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	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	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	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	1671 mm / 1679 mm
Ground clearance (Standard chassis)	238 mm	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	227 mm - 267 mm
Approach angle (at curb weight)	23,8 degr	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	21,3 degr
Departure angle (at curb weight)	23,3 degr	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	450 mm
Weight/Miscellaneous						
Serving Weight (Depending on type of engine, gearbox etc.)	2052 kg - 2324 kg	2052 kg - 2324 kg	2052 kg - 2324 kg	2052 kg - 2324 kg	2052 kg - 2324 kg	2052 kg - 2324 kg
Total Weight (Depending on type of engine, gearbox etc.)	2570 kg - 3010 kg	2570 kg - 3010 kg	2570 kg - 3010 kg	2570 kg - 3010 kg	2570 kg - 3010 kg	2570 kg - 3010 kg
Max trailer weight, Unbraked (Max)	750 kg	750 kg	750 kg	750 kg	750 kg	750 kg
Max trailer weight, Braked (Max)	2400 kg	2700 kg	2400 kg	1800 kg	2400 kg	2700 kg
Fuel tank, Petrol	71 l	71 l	50 l	-	-	-
Fuel tank, Diesel	-	-	-	71 l	71 l	71 l
Aerodynamics, (Cd)	0,29	0,29	0,29	0,29	0,29	0,29
Aerodynamics, (Frontal area)	2,78 m²	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	100 kg
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	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	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	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	998 mm / 999 mm	998 mm / 999 mm
Headroom maximum, with sunroof (front)	1033 mm	1033 mm	1033 mm	1033 mm	1033 mm	1033 mm
Headroom maximum, without sunroof (front)	1051 mm	1051 mm	1051 mm	1051 mm	1051 mm	1051 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	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	1465 mm / 1435 mm	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	1038 mm / 940 mm / 811 mm	1038 mm / 940 mm / 811 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	1422 mm / 1435 mm / 1140 mm	1422 mm / 1435 mm / 1140 mm
Leg room (front/rear) (5 seat)	1038 mm / 940 mm	1038 mm / 940 mm	-	1038 mm / 940 mm	1038 mm / 940 mm	1038 mm / 940 mm
Hip room (front/rear) (5 seat)	1422 mm / 1435 mm	1422 mm / 1435 mm	-	1422 mm / 1435 mm	1422 mm / 1435 mm	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	1057 l / 83 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	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	692 l / 83 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	721 l / 157 l	721 l / 157 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	314 l / 83 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	1868 l / 83 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	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	1019 l / 83 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	1071 l / 157 l	1071 l / 157 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	368 l / 83 l	368 l / 83 l
Luggage floor, height to ground	782 mm	782 mm	782 mm	782 mm	782 mm	782 mm
Rear opening height	816 mm	816 mm	816 mm	816 mm	816 mm	816 mm
Height of luggage compartment	889 mm	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	1130 mm
Rear opening width at floor, min.	1192 mm	1192 mm	1192 mm	1192 mm	1192 mm	1192 mm
Rear opening width upper, min.	986 mm	986 mm	986 mm	986 mm	986 mm	986 mm
Rear opening maximum width	1204 mm	1204 mm	1204 mm	1204 mm	1204 mm	1204 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	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	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	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	335 mm / 554 mm	335 mm / 554 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. 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
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
Steering	Power Assisted Rack and Pinion Steering	Power Assisted Rack and Pinion Steering	Power Assisted Rack and Pinion Steering	Power Assisted Rack and Pinion Steering	Power Assisted Rack and Pinion Steering	Power Assisted Rack and Pinion Steering
Steering ratio (angle/angle)	16,8	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	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	12,2 m / 12,5 m	12,2 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	3,0 / 2,9	3,0 / 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)	Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA)
Brake disc diameter (front)	345 mm	345 mm	345 mm	345 mm	345 mm	345 mm
Brake disc diameter (rear)	320 mm	320 mm	320 mm	320 mm	320 mm	320 mm
Brake disc thickness (front)	30 mm	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	20 mm
Braking distance 100-0 km/h	36 m	36 m	36 m	36 m	36 m	36 m