2025 Volvo XC90 Technical Specifications "Plug-in hybrids"T8 AWD (7 Seat) (455 B5 AWD (7 Seat) (250 hp) aut **ENGINE** B420T11 B4204T56 **Engines** Type In-line, 4 cyl. turbocharged In-line, 4 cyl. Turbocharged with e-boost Configuration AWD AWD Displacement 1969 cm<sup>3</sup> 1969 cm<sup>3</sup> 82,0 mm 82,0 mm Bore Stroke 93,2 mm 93,2 mm Engine cylinder block material Aluminum Aluminum Cylinder head material Aluminum Aluminum 11.5:1 10,3:1 Compression ratio Valves, no/cylinder 4 ea. 4 ea. Camshafts 2 ea. 2 ea. DOHC/SOHC DOHC DOHC Gasoline direct injection Engine management system Gasoline direct injection Ignition sequence 1 - 3 - 4 - 2 1 - 3 - 4 - 2 Engine idling speed  $800 \text{ rpm} \pm 75$  $850 \text{ rpm} \pm 50$ Fuel, rec. Octane 95-98 RON 95-98 RON 6200 rpm 6000 rpm Max engine speed Max output 184 kW (250 hp) / 5400 - 5700 rpm 228 kW (310 hp) / 6000 rpm 360 / 33 - 75 Nm / rps 400 / 50 - 80 Nm / rps Max torque Battery type Lithium-ion battery 18,8 Battery content, total amount of energy (kWh) (Nominal) Battery content, total amount of energy (kWh) (Usable) Battery charging time \*/\*\*, at 16A / 10A / 6A fuse (hours) 3.0 / 4.0 / 7.0 Battery charging time \*/\*\*\*, at 16A / 10A / 6A fuse (hours) 5,0 / 7.0 / 12.0 Battery placement Centrally in the tunnel of the car 107 kW Electrical motor max power (kW) 10 kW Electrical motor max torque (Nm) 40 Nm 309 Nm 107 kW + 228 kW  $^{**}$  3 Driveline max power (kW) Driveline max torque (Nm) 309 Nm + 400 Nm \*\* 3\* Charging time can vary depending on vehicle climatization and other active electric loads in the vehicle. Charging time as well depends on e.g. ambient temperature \*\* AC 2-PHASE CHARGING TIME (200-240V), AC 2-phase only in EU \*\*\* AC 1-PHASE CHARGING TIME (200-240V) \*\* 3 Up to **TRANSMISSION** Transmissions (AWD) AWF8G45 AW TG-81SD 5,057 5,250 First Gear (AWD) Second Gear (AWD) 3,070 3,029 Third Gear (AWD) 2,050 1,950 Fourth Gear (AWD) 1,520 1,457 Fifth Gear (AWD) 1,262 1,221 Sixth Gear (AWD) 1,000 1,000 Seventh Gear (AWD) 0,792 0,809 Eighth Gear (AWD) 0,661 0,673 Reverse Gear (AWD) 3,992 4,015 Automatic Gearbox / final drive (AWD) 3,329 3,329 PERFORMANCE Performance Automatic Automatic Gearbox AWF8G45 AW TG-81SD Acceleration, 0-100 km/h 7,7 sec 5,4 sec Top speed 180 km/h 180 km/h WLTP "Low" I/100 km / CO2 g/km 11.6 - 12.3 l/100 km / 263 - 277 g/km WLTP "Medium" I/100 km / CO<sup>2</sup> g/km 7.7 - 8.4 l/100 km /174 - 189 g/km 7.1 - 7.7 l/100 km / 160 - 174 g/km WLTP "High" I/100 km / CO² g/km WLTP "Extra High" I/100 km / CO<sup>2</sup> g/km 8.9 - 9.8 I/100 km / 202 - 222 g/km 1.2 - 1.6 l/100 km / 30 - 36 g/km WLTP Combined I/100 km / CO<sup>2</sup> g/km 8,5 - 9,2 l/100 km / 191 - 208 g/km Electric Range [EAER] WLTP, City. 87 - 75 km Electric Range [EAER] WLTP, Comb. 71 - 63 km Electric Consumption (kWh/100 km) 19.4 - 21.4 kWh/100 km DIMENSIONS EXTERIOR 4953 mm Length (L103) 4953 mm Wheelbase (L101) 2984 mm 2984 mm Front Overhang (L104) 890 mm 890 mm Rear Overhang (L105) 1079 mm 1079 mm Height (Including shark fen) (at curb weight + 1 person) (H101) 1767 mm - 1771 mm 1767 mm - 1771 mm Height with open tailgate/trunklid (H110) 2146 mm 2146 mm / 2146 mm Width (W103) 1931 mm - 1958 mm 1931 mm - 1958 mm Width (mirrors folded) (W145) 2008 mm 2008 mm Width (Including mirrors, outer edge) (W144) 2140 mm 2140 mm Width (Body width) (W116) 1923 mm 1923 mm Track, front (depending on rim size) (W101-1) 1665 mm - 1673 mm 1665 mm - 1673 mm Track, front (depending on rim size) (W101-2) 1667 mm - 1675 mm 1667 mm - 1675 mm DIMENSIONS INTERIOR Headroom maximum, without sunroof (front) (H62-1) 1051 mm 1051 mm Headroom maximum, with sunroof (front) (H62-1 SR) 1033 mm 1033 mm Headroom without sunroof (front/rear/third row) (7 seat) (H61-1 / H61-2 / H61-3) 998 mm / 997 mm / 923 mm 998 mm / 997 mm / 923 mm Headroom with sunroof (front/rear/third row) (7 seat) (H61-1 SR / H61-2 SR / H61-3 SR) 987 mm / 979 mm / 923 mm 987 mm / 979 mm / 923 mm 1465 mm / 1435 mm / 1192 mm 1465 mm / 1435 mm / 1192 mm Passenger compartment width at shoulder height (front/rear/third row) (7 seat) (W3-1 / W3-2 / W3-3) Leg room (front/rear/third row) (7 seat) (L34 / L51-2 / L51-3) 1038 mm / 940 mm / 811 mm 1038 mm / 940 mm / 811 mm Hip room (front/rear/third row) (7 seat) (W5-1 / W5-2 / W5-3) 1422 mm / 1435 mm / 1140 mm 1422 mm / 1435 mm / 1140 mm GROUND CLEARANCE Ground clearance (at curb weight + 1 person) (H156) 205 mm - 216 mm 205 mm - 216 mm Approach angle (at curb weight) (A116-1) 21,0 degr 21,0 degr Departure angle (at curb weight) (A116-2) 23.1 degr 23.1 degr 20.9 degr Breakover angle (at curb weight) (A117) 20.9 degr WADING CAPABILITY Wading capability depth at curb weight (at walking speed) 450 mm Up to a depth approximately level with the floor at walking speed **STEERING** Turning circle (depending on rim size) (Curb to curb) 11.9 m - 12,1 m 11.9 m - 12,1 m Turning circle (depending on rim size) (Wall to wall) 12.3 m - 12,5 m 12.3 m - 12,5 m 3,0-3,0-Turns of steering wheel end to end (depending on rim size) CHASSIS AND BRAKES Double Wishbone Suspension, Coil Suspension front Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Springs, Hydraulic Shock Absorbers, Stabilizer Bar, Optional Air Suspension Stabilizer Bar, Optional Air Suspension Integral Axle with Transverse Composite Suspension rear Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar, Optional Air Suspension Stabilizer Bar, Optional Air Suspension Electric Power Assisted Rack and Pinion Electric Power Assisted Rack and Pinion Steering Steering Steering Braking system Antilock Braking System (ABS) with Antilock Braking System (ABS) with Electronic Brake Distribution (EBD) and Electronic Brake Distribution (EBD) and Electronic Brake Assistance (EBA) Electronic Brake Assistance (EBA) Brake disc diameter (front) (Brake:18" / 19") 345 mm / 366 mm 345 mm / 366 mm 320 mm / 340 mm Brake disc diameter (rear) (Brake: 17" / 18") 320 mm / 340 mm Brake disc thickness (front) 30 mm 30 mm Brake disc thickness (rear) 20 mm 20 mm Braking distance 100-0 km/h 36 m 36 m VOLUMES Largest Luggage volume - First (V214-1) 2005 I 1959 I (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 V209) (7 seat) 1035 I 995 I Largest Luggage volume - Second (V214-2) (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 V209) (7 seat) Largest Luggage volume - Third (V214-2) 356 I 316 I (Second seat up. Load height limited by the headlining. Front limited by vertical plane tangential to the rear side of the third seatback) Total (including V209) (7 seat) 1194 I 1148 I Open Luggage Compartment - First (V211-1) (Second seat folded. Load height limited to upper edge of the front seatback or lower edge of the rear window) Total (including V209) (7 seat) 708 I Open Luggage Compartment - Second (V211-2) 668 I (Second seat up. Load height limited to the upper edge of the second seatback or second window) Total (including V209) (7 seat) Open Luggage Compartment - Third (V211-3) 302 I 262 I (Third seat up. Load height limited to the upper edge of the third seatback or second window) Total (including V209) (7 seat) 71 I Closed storage compartments. (V209) 31 I (Closed storage areas located around the luggage compartments, behind wheel arches, under the floor, or any other area) Closed storage compartments. (V209-L) 99 I 96 I (Closed storage areas located around the luggage compartments, behind wheel arches, under the floor, or any other area) **LENGTHS** Cargo length from the first seatback to the tailgate measured at - the height of the floor covering (L212-1) 2040 mm 2040 mm Cargo length from the first seatback to the tailgate measured at - the top of the first seatback (L214-1) 1903 mmm 1903 mmm Cargo length from the second seatback to the tailgate measured at (L212-2) 1260 mm 1260 mm the height of the floor covering (7 seat) Cargo length from the second seatback to the tailgate measured at (L214-2) 1040 mm 1040 mm the top of the second seatback (7 seat) Cargo length from the third seatback to the tailgate measured at (L212-3) 554 mm 554 mm the height of the floor covering Cargo length from the third seatback to the tailgate measured at (L214-3) 335 mm 335 mm the top of the third seatback HEIGHT 782 mm Luggage floor, height to ground (H253) 782 mm Rear opening height, (car center line) (H202) 816 mm 816 mm Cargo height (rear wheel center and car center line) (H201) 889 mm 889 mm WIDTHS Cargo floor width, min. (Wheelhouse Width – at Floor) (W201) 1130 mm 1130 mm Rear opening width upper, min (W205) 986 mm 986 mm Rear opening width at floor, min (W207) 1192 mm 1192 mm WEIGHT/MISCELLANEOUS Weight, kg (min-max, depending on setup) (Curb weight/\*MiRO) 2015 kg // 2080 kg 2227 kg / 2297 kg Total Weight (Depending on type of engine, gearbox etc.) 2790 kg 2950 kg Max trailer weight, Unbraked (Max) 750 kg 750 kg Max trailer weight, Braked (Max) 2400 kg 2400 kg Max roof load 100 kg 100 kg Fuel tank, Petrol 71 I 71 I Aerodynamics, (Cd) 0,33 0,33 Aerodynamics, (Frontal area) 2,78 m<sup>2</sup> 2,78 m<sup>2</sup> Aerodynamics, (Cd\*A) 0.92 0.92 \* MiRO = Mass in Running Order