

TECHNICAL SPECIFICATION 2025

RANGE ROVER
VELAR



ENGINES AND TECHNICAL SPECIFICATION

Range Rover Velar features advanced engine options, providing new levels of performance, efficiency, and refinement. There is a plug-in electric hybrid (PHEV) for all-electric, zero tailpipe emissions driving, as well as petrol and diesel engine options.

1

ENGINES

View the available engines, their fuel economy and specifications.

2

DIMENSIONS AND CAPABILITIES

View the ride height, turning circle and other capability specifications.

ENGINES

ENGINE			PLUG-IN PETROL ELECTRIC HYBRID (PHEV)		
ENGINE			P400e		
Transmission			Automatic		
Driveline			All Wheel Drive (AWD)		
Maximum power (PS / kW / rpm)			404 / 297 / 5.500*		
Maximum torque (Nm / rpm)			640 / 1.500-4.400*		
Capacity (cc)			1.997		
No. of cylinders / Valves per cylinder			4 / 4		
Cylinder layout			Inline		
Bore / stroke (mm)			83 / 92,3		
Compression ratio (:1)			9,5		
FUEL ECONOMY**					
Consumption	Combined	l/100km	2,2		
CO ₂ Emissions	Combined	(g/km)	51		
FUEL ECONOMY – WLTP†					
WLTP Consumption	Combined	l/100km	4,5-4,8 (62,5-58,7)		
WLTP CO ₂ Emissions	Combined	(g/km)	103-110		
Fuel tank capacity - useable litres			69		
Selective Catalytic Reduction Filter / Gasoline Particulate Filter (SCRf / GPF)			■		

■ Standard.

*When combined with electric motor. **The figures provided are NEDC calculated from official manufacturer’s tests. Figures may vary according to environment and driving style. For comparison purposes only. Real world figures may differ.

†The figures provided are as a result of official manufacturer’s tests in accordance with EU legislation with a fully charged battery. For comparison purposes only. Real-world figures may differ. CO₂, fuel economy, energy consumption and range figures may vary according to factors such as driving styles, environmental conditions, load, wheel fitment, accessories fitted, actual route and battery condition. Range figures are based upon production vehicle over a standardised route.

Engines

	PLUG-IN PETROL ELECTRIC HYBRID (PHEV)
BATTERY AND CHARGING TIMES	P400e
Home Charger / Wall box 7kW	2 hours 30 minutes to 100%
Rapid DC Charger 35kW	30 minutes to 80%
Domestic Plug 2,3kW	8 hours to 100%
Battery capacity Total (Usable) kWh	19.246 (15.39)
Charging cable length (m)	5
PERFORMANCE	
Acceleration (secs) 0-100 km/h (0-60 mph)	5,4 (5,1)
Maximum speed km/h (mph)	209 (130)
ELECTRIC MOTOR DATA	
Maximum power PS (kW)	142.7 (105)
Maximum torque (Nm)	275
EV Range Class A Combined (NEDC2*) km	69
EV Range Combined (WLTP**) km (miles)	59-58 (37-36)
EV Range expected Real World data (up to) km (miles)	49 (30)
BRAKES	
Front type	Single piston sliding caliper, vented disc
Front diameter (mm)	370
Rear type	Single piston sliding caliper, vented disc
Rear diameter (mm)	325
Park Brake	iEPB, motor on caliper
WEIGHTS (kg)†	
Unladen weight (EU)††	2.280
Unladen weight (DIN)‡	2.205
Gross Vehicle Weight (GVW)	2.740
TOWING (kg)	
Unbraked trailer	750
Maximum towing	2.000
Maximum coupling point (nose weight)	100
Maximum vehicle and trailer combination	4.740
ROOF CARRYING (kg)	
Maximum roof load (including cross bars)	79

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Engines

			Petrol Mild Hybrid (MHEV)		
Engine			P400		P340
Mild Hybrid Electric Vehicle (MHEV)			■		■
Transmission			Automatic		Automatic
Driveline			All Wheel Drive (AWD)		All Wheel Drive (AWD)
Maximum power (PS / kW / rpm)			400 / 294 / 5.500-6.500		340 / 250 / 5.500-6.500
Maximum torque (Nm / rpm)			550 / 2.000-5.000		480 / 1.500-4.500
Capacity (cc)			2.996		2.996
No. of cylinders / Valves per cylinder			6 / 4		6 / 4
Cylinder layout			Inline		Inline
Bore / stroke (mm)			83 / 92,3		83 / 92,3
Compression ratio (:1)			10,5		10,5
Fuel Economy*					
Consumption	Combined	l/100km	9,1		9,1
CO ₂ Emissions	Combined	(g/km)	206		206
Fuel Economy – WLTP**					
WLTP Consumption	Low	l/100km (mpg)	14,3-14,9 (19,8-18,9)		-
	Medium	l/100km (mpg)	9,5-10,0 (29,8-28,4)		-
	High	l/100km (mpg)	8,1-8,6 (34,9-32,8)		-
	Extra High	l/100km (mpg)	9,1-9,9 (30,9-28,5)		-
	Combined	l/100km (mpg)	9,6-10,2 (29,5-27,7)		-
WLTP CO ₂ Emissions	Low	(g/km)	326-341		-
	Medium	(g/km)	216-227		-
	High	(g/km)	185-196		-
	Extra High	(g/km)	208-226		-
	Combined	(g/km)	218-232		-
Fuel tank capacity - useable litres			83		83
Selective Catalytic Reduction Filter / Gasoline Particulate Filter (SCRf / GPF)			■		■

■ Standard – Not Available.

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Engines

	Petrol Mild Hybrid (MHEV)	
Performance	P400	P340
Acceleration (secs) 0-100 km/h (0-60 mph)	5,5 (5,2)	6,3 (6,0)
Maximum speed km/h (mph)	250 (155)*	240 (149)*
Brakes		
Front type	Single piston sliding caliper, vented disc	Single piston sliding caliper, vented disc
Front diameter (mm)	370	370
Rear type	Single piston sliding caliper, vented disc	Single piston sliding caliper, vented disc
Rear diameter (mm)	325	325
Park Brake	iEPB, motor on caliper	iEPB, motor on caliper
Weights (kg)**		
Unladen weight (EU)†	2.085	2.085
Unladen weight (DIN)††	2.010	2.010
Gross Vehicle Weight (GVW)	2.670	2.670
Towing (kg)		
Unbraked trailer	750	750
Maximum towing	2.500	2.500
Maximum coupling point (nose weight)	100	100
Maximum vehicle and trailer combination	5.170	5.170
Roof Carrying (kg)		
Maximum roof load (including cross bars)	79	79

*Top speed on engines with coil suspension is 210km/h (130mph). **Weights reflect vehicles to standard specifications. Optional extras increase weight. †Includes a 75kg driver, full fluids and 90% fuel. ††Includes full fluids and 90% fuel.

ENGINES

ENGINE			PETROL		
			P250		
Transmission			Automatic		
Driveline			All Wheel Drive (AWD)		
Maximum power (PS / kW / rpm)			250 / 183.9 / 5.500		
Maximum torque (Nm / rpm)			365 / 1.300-4.500		
Capacity (cc)			1.997		
No. of cylinders / Valves per cylinder			4 / 4		
Cylinder layout			In-line		
Bore / stroke (mm)			83 / 92,3		
Compression ratio (:1)			10,5		
FUEL ECONOMY*					
Consumption	Combined	l/100km	8,0		
CO ₂ Emissions	Combined	(g/km)	182		
Fuel tank capacity - useable litres			83		
Selective Catalytic Reduction Filter / Gasoline Particulate Filter (SCRF / GPF)			■		

■ Standard.

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Engines

Performance

Acceleration (secs) 0-100 km/h (0-60 mph)
Maximum speed km/h (mph)

Brakes

Front type
Front diameter (mm)
Rear type
Rear diameter (mm)
Park Brake

Weights (kg)*

Unladen weight (EU)**
Unladen weight (DIN)†
Gross Vehicle Weight (GVW)

Towing (kg)

Unbraked trailer
Maximum towing
Maximum coupling point (nose weight)
Maximum vehicle and trailer combination

Roof Carrying (kg)

Maximum roof load (including cross bars)
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PETROL	
P250	
7,5 (7,1)	
217 (135)	
Single piston sliding caliper, vented disc	
350	
Single piston sliding caliper, vented disc	
325	
iEPB, motor on caliper	
1.950	
1.875	
2.550	
750	
2.400	
100	
4.950	
79	

*Weights reflect vehicles to standard specifications. Optional extras increase weight. **Includes a 75kg driver, full fluids and 90% fuel. †Includes full fluids and 90% fuel.

Engines

			DIESEL MILD HYBRID (MHEV)		
ENGINE			D300		D200
Mild Hybrid Electric Vehicle (MHEV)			■		■
Transmission			Automatic		Automatic
Driveline			All Wheel Drive (AWD)		All Wheel Drive (AWD)
Maximum power (PS / kW / rpm)			300 / 221 / 4.000		204 / 150 / 3.750-4.000
Maximum torque (Nm / rpm)			650 / 1.500-2.500		430 / 1.750-2.500
Capacity (cc)			2.997		1.998
No. of cylinders / Valves per cylinder			6 / 4		4 / 4
Cylinder layout			Inline		Inline
Bore / stroke (mm)			83 / 92,3		83 / 92,3
Compression ratio (:1)			15,5		16,5
FUEL ECONOMY*					
Consumption	Combined	l/100km	7,0		5,7
CO ₂ Emissions	Combined	(g/km)	185		150
FUEL ECONOMY – WLTP**					
WLTP Consumption	Low	l/100km (mpg)	10,4-11,2 (27,2-25,1)		7,4-7,9 (38,0-35,6)
	Medium	l/100km (mpg)	7,6-7,9 (37,2-35,9)		6,3-6,8 (45,1-41,4)
	High	l/100km (mpg)	5,7-6,1 (49,6-46,4)		5,5-6,1 (51,1-46,5)
	Extra High	l/100km (mpg)	7,1-7,7 (40,0-36,7)		6,7-7,4 (41,8-38,0)
	Combined	l/100km (mpg)	7,2-7,7 (39,3-36,6)		6,4-7,0 (44,3-40,5)
WLTP CO ₂ Emissions	Low	(g/km)	272-294		195-208
	Medium	(g/km)	198-206		164-179
	High	(g/km)	149-159		145-159
	Extra High	(g/km)	185-201		177-195
	Combined	(g/km)	188-202		167-183
Fuel tank capacity - useable litres			68		62
Selective Catalytic Reduction Filter / Gasoline Particulate Filter (SCRf / GPF)			■		■

■ Standard.

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Engines

	Diesel Mild Hybrid (MHEV)	
Performance	D300	D200
Acceleration (secs) 0-100 km/h (0-60 mph)	6,5 (6,1)	8,3 (7,8)
Maximum speed km/h (mph)	230 (143)*	210 (130)
Brakes		
Front type	Single piston sliding caliper, vented disc	Single piston sliding caliper, vented disc
Front diameter (mm)	370	350
Rear type	Single piston sliding caliper, vented disc	Single piston sliding caliper, vented disc
Rear diameter (mm)	325	325
Park Brake	iEPB, motor on caliper	iEPB, motor on caliper
Weights (kg)**		
Unladen weight (EU)†	2.124	2.003
Unladen weight (DIN)††	2.049	1.928
Gross Vehicle Weight (GVW)	2.710	2.590
Towing (kg)		
Unbraked trailer	750	750
Maximum towing	2.500	2.400
Maximum coupling point (nose weight)	100	100
Maximum vehicle and trailer combination	5.210	4.990
Roof Carrying (kg)		
Maximum roof load (including cross bars)	79	79

*Top speed on engines with coil suspension is 210km/h (130mph). **Weights reflect vehicles to standard specifications. Optional extras increase weight. †Includes a 75kg driver, full fluids and 90% fuel. ††Includes full fluids and 90% fuel.

ENGINES

			DIESEL		
ENGINE			D300		D200
Transmission			Automatic		Automatic
Driveline			All Wheel Drive (AWD)		All Wheel Drive (AWD)
Maximum power (PS / kW / rpm)			300 / 221 / 4.000		199 / 146 / 3.750-4.000
Maximum torque (Nm / rpm)			650 / 1.500-2.500		430 / 1.750-2.500
Capacity (cc)			2.997		1.998
No. of cylinders / Valves per cylinder			6 / 4		4 / 4
Cylinder layout			Inline		Inline
Bore / stroke (mm)			83 / 92,3		83 / 92,3
Compression ratio (:1)			15,5		16,5
FUEL ECONOMY*					
Consumption	Combined	l/100km	7,3		5,9
CO ₂ Emissions	Combined	(g/km)	193		156
Fuel tank capacity - useable litres			68		62
Selective Catalytic Reduction Filter / Gasoline Particulate Filter (SCR _F / GPF)			■		■

■ Standard.

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ENGINES

	DIESEL	
PERFORMANCE	D300	D200
Acceleration (secs) 0-100 km/h (0-60 mph)	6,5 (6,1)	8,3 (7,8)
Maximum speed km/h (mph)	230 (143)*	210 (130)
BRAKES		
Front type	Single piston sliding caliper, vented disc	Single piston sliding caliper, vented disc
Front diameter (mm)	370	350
Rear type	Single piston sliding caliper, vented disc	Single piston sliding caliper, vented disc
Rear diameter (mm)	325	325
Park Brake	iEPB, motor on caliper	iEPB, motor on caliper
WEIGHTS (kg)**		
Unladen weight (EU)†	2.068	1.946
Unladen weight (DIN)††	1.993	1.871
Gross Vehicle Weight (GVW)	2.710	2.590
TOWING (kg)		
Unbraked trailer	750	750
Maximum towing	2.500	2.400
Maximum coupling point (nose weight)	100	100
Maximum vehicle and trailer combination	5.210	4.990
ROOF CARRYING (kg)		
Maximum roof load (including cross bars)	79	79

*Top speed on engines with coil suspension is 210km/h (130mph). **Weights reflect vehicles to standard specifications. Optional extras increase weight. †Includes a 75kg driver, full fluids and 90% fuel. ††Includes full fluids and 90% fuel.

DIMENSIONS AND CAPABILITIES

DIMENSIONS
Maximum height 1.678mm (Air) 1.683mm (Coil) Access height air suspension setting will reduce the above by 40mm
Overall length 4.797mm
Width 2.041mm mirrors folded Width 2.147mm mirrors out
Front wheel track 1.643,6mm (Air), 1.640,2mm (Coil) Rear wheel track 1.662,8mm (Air), 1.657,2mm (Coil)
Wheelbase 2.874mm
TURNING CIRCLE
Kerb-to-kerb 11,95m Wall-to-wall 12,35m Turns lock-to-lock 2,52

WADING DEPTH
Maximum wading depth 530mm / 580mm*
HEADROOM
Maximum front / rear headroom with standard roof 993mm / 988mm Maximum front / rear headroom with panoramic roof 970mm / 966mm
LEGROOM
Maximum front legroom 1.023mm Maximum rear legroom 944mm

OBSTACLE CLEARANCE
Off-road height (Air) 252mm* (Coil) 214mm Standard ride height (Air) 205mm* (Coil) 214mm
APPROACH AND DEPARTURE CLEARANCE
Standard Approach Angle - (Air) 22,5° (Coil) 23,6° Departure Angle - (Air) 24,8° (Coil) 25,0° Ramp Angle - (Air) 18,3° (Coil) 19,1°
Off-road Approach Angle - (Air) 28,9° (Coil) 26,2° Departure Angle - (Air) 29,0° (Coil) 26,7° Ramp Angle - (Air) 23,8° (Coil) 21,0°

LOADSPACE CAPACITY
Height 687mm Width 1.245mm
Loadspace width between arches 1.050mm
Length behind first row 1.791mm
Maximum loadspace volume behind first row Dry** 1.374 litres Wet† 1.811 litres
Length behind second row 988mm
Maximum loadspace volume behind second row Dry** 568 litres Wet† 748 litres



Weights and dimensions shown apply to standard-specification, unladen vehicles, which may be affected by optional features and equipment.

*Electronic air suspension only. **Dry: Volume as measured with VDA-compliant solid blocks (200mm x 50mm x 100mm). Volume measured up to the headliner. Boot configuration and total loadspace will vary by vehicle specification (model and powertrain) and market. †Wet: Volume as measured by simulating the loadspace filled with liquid. Volume measured up to the headliner. Boot configuration and total loadspace will vary by vehicle specification (model and powertrain) and market.

Vehicle shown is Autobiography with optional Black contrast roof and 22" Style 1075, 10 Spoke, Gloss Dark Grey with contrast Diamond Turned finish.

Figures may vary for P400e models.