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# **L-Category Vehicles (Powered Light Vehicles - PLVs)**

## Examples & Definitions

# L-Category Vehicles\_ Examples & Definitions



## ELECTRIC BICYCLE

### TECHNICAL

- Up to 250W
- Pedal assisted only
- Subject to machinery directive
- No registration or insurance.



### PERFORMANCE

- Power assist cuts off at 25 km/h (15.5 mph)



### OTHER

- No Licence required, insurance optional
- Minimum age 14
- Electric bicycles with a power output of less than 250w are not covered by L-Cat regulations, although they can be visually identical to an over 250W L1e "Pedelec". It is also possible to have a self propelled electrically assisted, pedal cycle (EAPC) based on the UK EAPC Regulations 1983, SI 1983 No. 1168 as amended by The EAPC Regulations 2015 SI 2015



NO LICENCE  
REQUIRED



## L1e-A

### TECHNICAL

- 2,3 or 4 wheels
- Pedals
- Power less than, or equal to 1,000W
- Type Approval required



### PERFORMANCE

- Power assist cuts off at 25 km/h (15.5 mph)



### OTHER

- Rider must wear a motorcycle helmet
- Subject to VED, MoT & Insurance
- Registered and carry a number plate **[NB]** L1e Category vehicles can look similar to sub-250w electric bicycles, which can result in exploitation of the regulations



<b>AM</b>	PROVISIONAL +CBT AGE 16+	<b>AM</b>	FULL AGE 16+	<b>A1</b>	PROVISIONAL +CBT AGE 17+	<b>A1</b>	FULL AGE 17+
<b>A2</b>	FULL AGE 19+	<b>A</b>	FULL, AGE FROM 24 or A2 HELD 2YRS	<b>B</b>	FULL +CBT (TEST AFTER 2001)	<b>B</b>	FULL (TEST PRE 2001)

## L1e-B (Moped)

### TECHNICAL

- 2 wheels
- Up to 50cc if Positive Ignition Combustion Engine or Power up to 4kW
- Pedelecs capable of more than 25km/h (15.5 mph)



### PERFORMANCE

- Maximum speed 45km/h (28mph)



### OTHER

- Rider must wear a motorcycle helmet
- Subject to VED, MoT & Insurance
- Registered and carry a number plate
- 3 or 4 wheelers are permitted in this category, but only in the case of "twin wheel" vehicles, where two wheels mounted on the same axle have a distance between the centres of their areas of contact with the ground equal to, or less than, 460 mm **[NB]** L1e Category vehicles can look similar to sub-250w electric bicycles, which can result in exploitation of the regulations



<b>AM</b>	PROVISIONAL +CBT AGE 16+	<b>AM</b>	FULL AGE 16+	<b>A1</b>	PROVISIONAL +CBT AGE 17+	<b>A1</b>	FULL AGE 17+
<b>A2</b>	FULL AGE 19+	<b>A</b>	FULL, AGE FROM 24 or A2 HELD 2YRS	<b>B</b>	FULL +CBT (TEST AFTER 2001)	<b>B</b>	FULL (TEST PRE 2001)

# L-Category Vehicles\_ Examples & Definitions



## L2e

### TECHNICAL

- 3 wheels\* / 1 or 2 seats.
- Mass (in running order) of up to 270kg
- Up to 50cc if Positive Ignition combustion engine or up to 500cc if Compression Ignition
- 4kW power limit, irrespective of propulsion type

### PERFORMANCE

- Maximum speed 45km/h (28mph)

### OTHER

\*4 wheelers are permitted in this category, but only in the case of "twinned wheel" vehicles, where two wheels mounted on the same axle have a distance between the centres of their areas of contact with the ground equal to, or less than, 460 mm

<b>AM</b>	FULL AGE 16+	<b>A1</b>	FULL AGE 17+	<b>A2</b>	FULL AGE 19+
<b>A</b>	FULL AGE FROM 24 or A2 HELD 2YRS	<b>B</b>	FULL +CBT (TEST AFTER 2001)	<b>B</b>	FULL (TEST PRE 2001)



## L3e-A1

### TECHNICAL

- 2 wheels\*
- Motorcycle or scooter up to 125cc and 11kW power, with a power:weight ratio of up to 0.1kW/kg

### PERFORMANCE

- Not Specified

### OTHER

\*3 or 4 wheelers are permitted in this category, but only in the case of "twinned wheel" vehicles, where two wheels mounted on the same axle have a distance between the centres of their areas of contact with the ground equal to, or less than, 460 mm

<b>A1</b>	PROVISIONAL +CBT AGE 17+	<b>A1</b>	FULL AGE 17+	<b>A2</b>	FULL AGE 19+	<b>A</b>	FULL AGE FROM 24 or A2 HELD 2YRS
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## L3e-A2

### TECHNICAL

- 2 wheels\*
- Motorcycle or scooter up to 35kW power, with a power:weight ratio of up to 0.2kW/kg

### PERFORMANCE

- Not Specified

### OTHER

\*3 or 4 wheelers are permitted in this category, but only in the case of "twinned wheel" vehicles, where two wheels mounted on the same axle have a distance between the centres of their areas of contact with the ground equal to, or less than, 460 mm

<b>A2</b>	FULL AGE 19+	<b>A</b>	FULL AGE FROM 24 or A2 HELD 2YRS
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# L-Category Vehicles\_ Examples & Definitions

## L3e-A3

### TECHNICAL

- 2 wheels\*
- Technical Regs (per EU 168/2013)

### PERFORMANCE

- Not Specified

### OTHER

\*3 or 4 wheelers are permitted in this category, but only in the case of "twinned wheel" vehicles, where two wheels mounted on the same axle have a distance between the centres of their areas of contact with the ground equal to, or less than, 460 mm

- Any L3e vehicle that cannot be classified as L3e-A1 or L3e-A2.
- There are also further sub-sub categories of enduro (L3e-AxE where x = 1, 2 or 3) and trials (L3e-AxT where x = 1, 2 or 3) motorcycles.

**A**

FULL, AGE FROM 24 or A2 HELD 2YRS



## L4e

### TECHNICAL

- 3 wheels
- As L3e plus sidecar

### PERFORMANCE

- Not Specified

### OTHER

• L4e vehicles supplied for use on UK roads must have the sidecar fitted to the left of the bike (i.e. next to the kerb)

**A1**

PROVISIONAL +CBT, AGE 17+ UP TO 15kW

**A1**

FULL AGE 17+ UP TO 15kW

**A2**

FULL AGE 19+ UP TO 35kW

**A**

FULL, AGE FROM 24 or A2 HELD 2YRS



## L5e

### TECHNICAL

- 3 wheels\*
- Cannot be classified as an L2e vehicle
- Mass (in running order) of up to 1000kg
- Max 5 seats (2 for commercial trikes)

### PERFORMANCE

- Not Specified

### OTHER

\*4 wheelers are permitted in this category, but only in the case of "twinned wheel" vehicles, where two wheels mounted on the same axle have a distance between the centres of their areas of contact with the ground equal to, or less than, 460 mm

**A1**

FULL AGE 17+ UP TO 15kW

**A2**

FULL AGE 19+ UP TO 15kW

**A**

FULL, AGE FROM 24 or A2 HELD 2YRS

**B**

FULL (TEST PRE 19/1/13) OR AGE 21+

# L-Category Vehicles\_ Examples & Definitions



## L6e-A (Light on-road Quad)

### TECHNICAL

- 4 wheels
- Mass in running order up to 425kg
- Max engine capacity 50cc (Positive Ignition) or 500cc (Compression Ignition)
- Maximum power 4kW

### PERFORMANCE

- Max speed 45km/h (28mph)

A1	FULL AGE 17+	A2	FULL AGE 19+	A	FULL, AGE FROM 24 or A2 HELD 2YRS
AM	FULL AGE 16+	B	FULL	B1	FULL

## L6e-BP (Light Quad/Passenger) / L6e-BU (Light Quad - Goods)

### TECHNICAL

- 4 wheels, max 2 seats, enclosed passenger compartment
- Mass in running order up to 425kg
- Max engine capacity 50cc (Positive Ignition) or 500cc (Compression Ignition)
- Maximum power 6kW

### PERFORMANCE

- Max speed 45km/h (28mph)

A1	FULL AGE 17+	A2	FULL AGE 19+	A	FULL, AGE FROM 24 or A2 HELD 2YRS
AM	FULL AGE 16+	B	FULL	B1	FULL



## L7e-A

### TECHNICAL

- 4 wheels
- **L7e-A1:** Max 2 straddle seats & handlebar steer
- **L7e-A2:** Max 2 non-straddle seats
- Maximum power 15kW
- Mass in running order up to 450kg

### PERFORMANCE

- Not Specified

B	FULL	B1	FULL
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## L7e-C

### TECHNICAL

- 4 wheels
- Enclosed passenger compartment
- **L7e-CP:** Max 4 non-straddle seats  
Mass in running order up to 450kg
- **L7e-CU:** Max 2 non-straddle seats plus load area  
Mass in running order up to 600kg
- Maximum power 15kW

### PERFORMANCE

- Maximum design speed 90km/h (56mph)

B	FULL	B1	FULL
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# L-Category Vehicles\_ Category Criteria

Category	Category name	Common classification criteria
L1e-L7e	All category vehicles	(1) length $\leq$ 4 000 mm or $\leq$ 3 000 mm for a L6e-B vehicle or $\leq$ 3 700 mm for a L7e-C vehicle, and (2) width $\leq$ 2 000 mm, or $\leq$ 1 000 mm for a L1e vehicle, or $\leq$ 1 500 mm for a L6e-B or a L7e-C vehicle and (3) height $\leq$ 2 500 mm and

Category	Category name	Common classification criteria
L1e	Light two-wheel powered vehicle	(4) two wheels and powered by a propulsion as listed under Article 4(3) and (5) engine capacity $\leq$ 50 cm <sup>3</sup> if a PI internal combustion engine forms part of the vehicle's propulsion configuration and (6) maximum design vehicle speed $\leq$ 45 km/h and (7) maximum continuous rated or net power $\leq$ 4 000 W and (8) maximum mass = technically permissible mass declared by the manufacturer and

Sub-categories	Subcategory name	Supplemental sub-classification criteria
L1e-A	Powered cycle	(9) cycles designed to pedal equipped with an auxiliary propulsion with the primary aim to aid pedalling and (10) output of auxiliary propulsion is cut off at a vehicle speed $\leq$ 25 km/h and (11) maximum continuous rated or net power $\leq$ 1 000 W and (12) a powered three- or four-wheel cycle complying with supplemental specific sub-classification criteria (9) to (11) is classified as being technically equivalent to a two-wheel L1e-A vehicle.
L1e-B	Two-wheel moped	(9) any other vehicle of the L1e category that cannot be classified according to the criteria (9) to (12) of a L1e-A vehicle.

Category	Category name	Common classification criteria
L2e	Three-wheel moped	(4) three wheels and powered by a propulsion as listed under Article 4(3) and (5) engine capacity $\leq$ 50 cm <sup>3</sup> if a PI internal combustion engine or engine capacity $\leq$ 500 cm <sup>3</sup> if a CI combustion engine forms part of the vehicle's propulsion configuration and (6) maximum design vehicle speed $\leq$ 45 km/h and (7) maximum continuous rated or net power $\leq$ 4 000 W and (8) mass in running order $\leq$ 270 kg and (9) equipped with a maximum of two seating positions, including the seating position for the driver and

Sub-categories	Subcategory name	Supplemental sub-classification criteria
L2e-P	Three-wheel moped for passenger transport	(10) L2e vehicle other than those complying with the specific classification criteria for a L2e-U vehicle.
L2e-U	Three-wheel moped for utility purposes	10) exclusively designed for the carriage of goods with an open or enclosed, virtually even and horizontal loading bed that meets the following criteria: (a) length loading bed x width loading bed $\geq$ 0,3 x Length vehicle x maximum Width vehicle or (b) an equivalent loading bed area as defined above in order to install machines and/or equipment and (c) designed with a loading bed area which is clearly separated by a rigid partition from the area reserved for the vehicle occupants and (d) the loading bed area shall be able to carry a minimum volume represented by a 600 mm cube.

# L-Category Vehicles\_ Category Criteria

Category	Category name	Common classification criteria
L3e	Two-wheel motorcycle	(4) two wheels and powered by propulsion as listed under Article 4(3) and (5) maximum mass = technically permissible mass declared by the manufacturer and (6) two-wheel vehicle that cannot be classified as category L1e.
<b>Sub-categories</b>	<b>Subcategory name</b>	<b>Supplemental sub-classification criteria</b>
L3e-A1	Low-performance motorcycle	(7) engine capacity $\leq 125$ cm <sup>3</sup> and (8) maximum continuous rated or net power $\leq 11$ kW and (9) power/weight ratio $\leq 0,1$ kW/kg.
L3e-A2	Medium-performance motorcycle	(7) maximum continuous rated or net power $\leq 35$ kW and (8) power/weight ratio $\leq 0,2$ kW/kg and (9) not derived from a vehicle equipped with an engine of more than double its power and (10) L3e vehicle that cannot be classified under supplemental sub-classification criteria (7), (8) and (9) of a L3e-A1 vehicle.
L3e-A3	High-performance motorcycle	(7) any other L3e vehicle that cannot be classified according to the classification criteria of a L3e-A1 or L3e-A2 vehicle.
<b>Sub-Sub categories</b>	<b>Sub-Sub cat. name</b>	<b>Supplemental sub-classification criteria</b>
L3e-AxE (x = 1, 2 or 3)	Enduro motorcycles	(a) seat height $\geq 900$ mm and (b) ground clearance $\geq 310$ mm and (c) overall gear ratio in highest gear (primary gear ratio $\times$ secondary gear ratio in the highest speed $\times$ final drive ratio) $\geq 6,0$ and (d) mass in running order plus the mass of the propulsion battery in case of electric or hybrid electric propulsion $\leq 140$ kg and (e) no seating position for a passenger.
L3e-AxT (x = 1, 2 or 3)	Trial motorcycles	(a) seat height $\leq 700$ mm and (b) ground clearance $\geq 280$ mm and (c) fuel tank capacity $\leq 4$ litres and (d) overall gear ratio in highest gear (primary gear ratio $\times$ secondary gear ratio in the highest speed $\times$ final drive ratio) $\geq 7,5$ and (e) mass in running order $\leq 100$ kg and (f) no seating position for a passenger.
Category	Category name	Common classification criteria
L4e	Two-wheel motorcycle with side-car	(4) base powered vehicle complying with the classification and subclassification criteria for a L3e vehicle and (5) base powered vehicle equipped with one side-car and (6) with a maximum of four seating positions including the driver on the motorcycle with side car and (7) a maximum of two seating positions for passengers in the side car and (8) maximum mass = technically permissible mass declared by the manufacturer.

# L-Category Vehicles\_ Category Criteria

Category	Category name	Common classification criteria
L5e	Powered tricycle	(4) three wheels and powered by a propulsion as listed under Article 4(3) and (5) mass in running order $\leq 1\,000$ kg and (6) three-wheel vehicle that cannot be classified as a L2e vehicle and
<b>Sub-categories</b>	<b>Subcategory name</b>	<b>Supplemental sub-classification criteria</b>
L5e-A	Tricycle	(7) L5e vehicle other than those complying with the specific classification criteria for a L5e-B vehicle and (8) with a maximum of five seating positions, including the seating position of the driver.
L5e-B	Commercial tricycle	(7) designed as a utility vehicle and characterised by an enclosed driving and passenger compartment accessible by maximum three sides and (8) equipped with a maximum of two seating positions, including the seating position for the driver and (9) exclusively designed for the carriage of goods with an open or enclosed, virtually even and horizontal loading bed that meets the following criteria: (a) length loading bed x width loading bed $\geq 0,3 \times$ Length vehicle x Width vehicle or (b) an equivalent loading bed area as defined above designed to install machines and/or equipment and (c) designed with a loading bed area which is clearly separated by a rigid partition from the area reserved for the vehicle occupants and (d) the loading bed area shall be able to carry a minimum volume represented by a 600 mm cube.

Category	Category name	Common classification criteria
L6e	Light quadricycle	(4) four wheels and powered by a propulsion as listed under Article 4(3) and (5) maximum design vehicle speed $\leq 45$ km/h and (6) the mass in running order $\leq 425$ kg and (7) engine capacity $\leq 50$ cm <sup>3</sup> if a PI engine or engine capacity $\leq 500$ cm <sup>3</sup> if a CI engine forms part of the vehicle's propulsion configuration and (8) equipped with a maximum of two seating positions, including the seating position for the driver and
<b>Sub-categories</b>	<b>Subcategory name</b>	<b>Supplemental sub-classification criteria</b>
L6e-A	Light on-road quad	(9) L6e vehicle not complying with the specific classification criteria for a L6e-B vehicle and (10) maximum continuous rated or net power $\leq 4\,000$ W.
L6e-B	Light quadri-mobile	(9) enclosed driving and passenger compartment accessible by maximum three sides and (10) maximum continuous rated or net power $\leq 6\,000$ W and
<b>Sub-Sub categories</b>	<b>Sub-Sub cat. name</b>	<b>Supplemental sub-classification criteria</b>
L6e-BP	Light quadri-mobile for passenger transport	(11) L6e-B vehicle mainly designed for passenger transport and (12) L6e-B vehicle other than those complying with the specific classification criterion for a L6e-BU vehicle.
L6e-BU	Light quadri-mobile for utility purposes	(11) exclusively designed for the carriage of goods with an open or enclosed, virtually even and horizontal loading bed that meets the following criteria: (a) length loading bed x width loading bed $\geq 0,3 \times$ Length vehicle x Width vehicle or (b) an equivalent loading bed area as defined above in order to install machines and/or equipment and (c) designed with a loading bed area which is clearly separated by a rigid partition from the area reserved for the vehicle occupants and (d) the loading bed area shall be able to carry a minimum volume represented by a 600 mm cube.



# L-Category Vehicles\_ Category Criteria

Category	Category name	Common classification criteria
L7e	Heavy quadricycle	(4) four wheels and powered by a propulsion as listed under Article 4(3) and (5) mass in running order: (a) $\leq 450$ kg for transport of passengers; (b) $\leq 600$ kg for transport of goods, and (6) L7e vehicle that cannot be classified as a L6e vehicle and
<b>Sub-categories</b>	<b>Subcategory name</b>	<b>Supplemental sub-classification criteria</b>
L7e-A	Heavy on-road quad	(7) L7e vehicle not complying with the specific classification criteria for a L7e-B or a L7e-C vehicle and (8) vehicle designed for the transport of passengers only and (9) maximum continuous rated or net power $\leq 15$ kW and
<b>Sub-Sub categories</b>	<b>Sub-Sub cat. name</b>	<b>Supplemental sub-classification criteria</b>
L7e-A1	A1 heavy on-road quad	(10) maximum two straddle seating positions, including the seating position for the rider and (11) handlebar to steer.
L7e-A2	A2 heavy on-road quad	(10) L7e-A vehicle not complying with the specific classification criteria for a L7e-A1 vehicle and (11) maximum two non-straddle seating positions, including the seating position for the driver.
<b>Sub-categories</b>	<b>Subcategory name</b>	<b>Supplemental sub-classification criteria</b>
L7e-B	Heavy all terrain quad	(7) L7e vehicle not complying with the specific classification criteria for a L7e-C vehicle and (8) ground clearance $\geq 180$ mm and
<b>Sub-Sub categories</b>	<b>Sub-Sub cat. name</b>	<b>Supplemental sub-classification criteria</b>
L7e-B1	All terrain quad	(9) maximum two straddle seating positions, including the seating position for the rider and (10) equipped with a handlebar to steer and (11) maximum design vehicle speed $\leq 90$ km/h and (12) wheelbase to ground clearance ratio $\leq 6$ .
L7e-B2	Side-by-side buggy	(9) L7e-B vehicle other than a L7e-B1 vehicle and (10) maximum three non-straddle seats of which two positioned side-by-side, including the seating position for the driver and (11) maximum continuous rated or net power $\leq 15$ kW and (12) wheelbase to ground clearance ratio $\leq 8$ .
<b>Sub-categories</b>	<b>Subcategory name</b>	<b>Supplemental sub-classification criteria</b>
L7e-C	Heavy quadri-mobile	(7) L7e vehicle not complying with the specific classification criteria for a L7e-B vehicle and (8) maximum continuous rated or net power $\leq 15$ kW and (9) maximum design vehicle speed $\leq 90$ km/h and (10) enclosed driving and passenger compartment accessible via maximum three sides and
<b>Sub-Sub categories</b>	<b>Sub-Sub cat. name</b>	<b>Supplemental sub-classification criteria</b>
L7e-CP	Heavy quadri-mobile for passenger transport	(11) L7e-C vehicle not complying with the specific classification criteria for a L7e-CU vehicle and (12) maximum four non-straddle seats, including the seating position for the driver.
L7e-CU	Heavy quadri-mobile for utility purposes	(11) exclusively designed for the carriage of goods with an open or enclosed, virtually even and horizontal loading bed that meets the following criteria: (a) length loading bed x width loading bed $\geq 0,3 \times$ Length vehicle x Width vehicle or (b) an equivalent loading bed area as defined above designed to install machines and/or equipment and (c) designed with a loading bed area which is clearly separated by a rigid partition from the area reserved for the vehicle occupants and (d) the loading bed area shall be able to carry a minimum volume represented by a 600 mm cube and (12) maximum two non-straddle seats, including the seating position for the driver.



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