



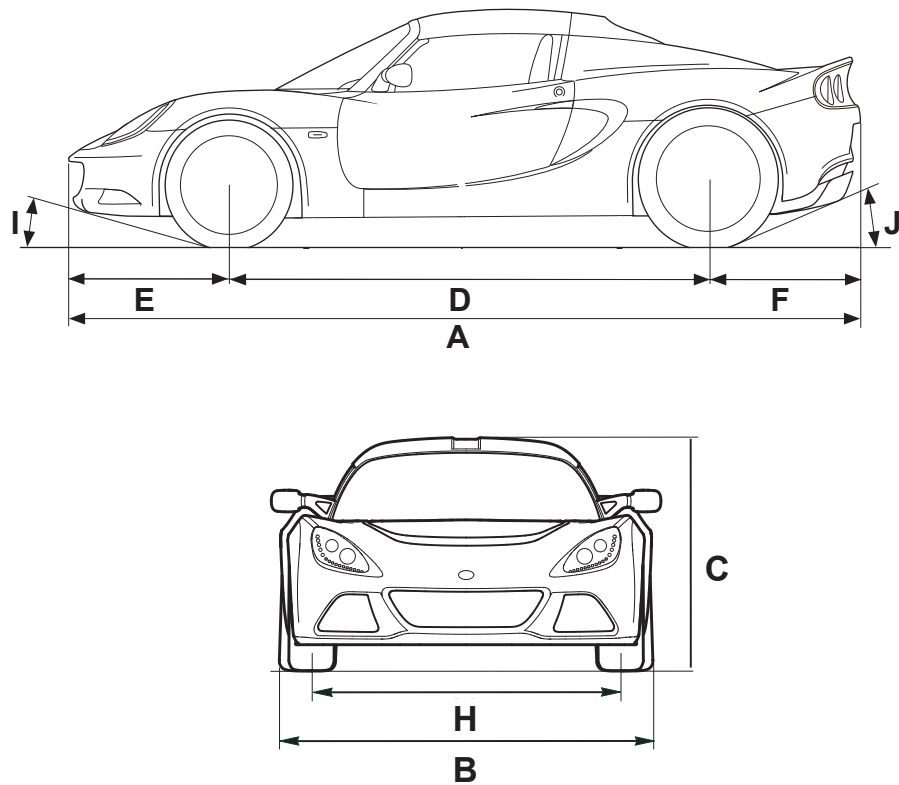
TECHNICAL DATA - VEHICLE

SECTION TDQ

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DIMENSIONS



Dimensions (In millimetres)	Model <i>Elise - pre 2011</i>	Model <i>Elise - 2011 on</i>	Model <i>Exige - pre 2012</i>	
A. Overall Length	3785 mm	3824 mm	3797 mm	
B. Overall width - excl. mirrors - incl. mirrors	1719 mm 1850 mm	1719 mm 1850 mm	1727 mm 1858 mm	
C. Overall height (mid laden weight)	1117 mm	1117 mm	1159 mm	
D. Wheelbase	2300 mm	2300 mm	2300 mm	
E. Front overhang	783 mm	805 mm	805 mm	
F. Rear overhang	702 mm	719 mm	692 mm	
G. Ground clearance* (mid laden weight)	F/R 130 mm	F/R 130 mm	F/R 130 mm	*See page 6 for specific USA ride height settings
H. Track front	1457 mm	1457 mm	1457 mm	
H. Track rear	1506 mm	1506 mm	1506 mm	
I. Approach angle front	13.5°	12.5°	13.5°	
J. Approach angle rear	23.0°	23.0°	23.0°	
K. Turning circle	10.7 m	10.7 m	10.7 m	



<b>Weights</b>	<b>Model</b> 111R/ Elise R	<b>Model</b> Elise S (1ZZ)	<b>Model</b> Elise (2ZZ/ USA)	<b>Model</b> Elise (1ZR)	<b>Model</b> Exige (2ZZ)	<b>Model</b> Exige (2ZZ/ USA)	<b>Model</b> Exige S (2ZZ)	<b>Model</b> Elise S (2ZR)	
<b>Unladen weight</b>									
Total	860 kg	862 kg	912 kg	876 kg	875 kg	920 kg	935 kg	924 kg	includes
Front	327 kg	328 kg	344 kg	342 kg	328 kg	350 kg	355 kg	350 kg	full
Rear	533 kg	534 kg	568 kg	534 kg	547 kg	570 kg	580 kg	574 kg	fuel tank
<b>Maximum weight</b>									
Total	1166 kg	1126 kg	1162 kg	1141 kg	1166 kg	1166 kg	1199 kg	1199 kg	includes
Front	443 kg	428 kg	441 kg	429 kg	443 kg	443 kg	456 kg	456 kg	occupants
Rear	723 kg	698 kg	721 kg	712 kg	723 kg	723 kg	743 kg	743 kg	& luggage

Trailer towing  
Not permissible

CAPACITIES/APPROVED PRODUCTS**Engine oil: Elise/Exige 4-cylinder 2ZZ\*/1ZZ Powertrains**

Engine oil - dry - refill inc. filter	4.4 litre (+ 3.5 litre if front mounted oil coolers are drained)
<b>Road use</b> approved product	<b>HAVOLINE</b> fully synthetic
Viscosity: ambient above -20°C	SAE 5W/40 (Fully synthetic)
Quality standard	API/ SL/CF; SJ/CF; ACEA A3
High/low dipstick mark difference	1.5 litre

**Engine oil: Elise 1ZR/2ZR\* Powertrains**

Engine oil - dry - refill inc. filter	4.8 litre *(+ 2.4 litre if single front mounted oil cooler is drained)
<b>Road use</b> approved product	<b>PETRONAS</b> Syntium Racer X1 5w40
Viscosity: ambient above -20°C	SAE 5W/40 (Fully synthetic)
Lotus approval reference	PE-00137
Quality Standard	API SM: ACEA A3/B4
<b>Track use</b> approved product	<b>PETRONAS</b> Syntium 7000
Viscosity: ambient above 0°C	SAE 0W/40
Quality Standard	API SN: ACEA A3/B4
High/low dipstick mark difference	1.0 litre

**Transmission oil: Elise/Exige 4-cylinder 2ZZ/1ZZ Powertrains**

Capacity - 2ZZ	2.3 litre
- 1ZZ	1.9 litre
Approved product	<b>HAVOLINE</b> Multigear S
Viscosity	SAE 75W/90
Quality standard	API GL-4 or GL-5

**Transmission oil: Elise 1ZR/2ZR Powertrains**

Capacity	2.4 litre
Approved product	<b>PETRONAS</b> Tutela transmission Geartech 75W/85
Lotus approval reference	PE-00138
Quality standard	API - GL-4

**Engine coolant: Elise/Exige 4-cylinder 2ZZ/1ZZ Powertrains**

Capacity	12 litre (Including 50% concentration of 6.0 litres of antifreeze).
Antifreeze type	Ethylene glycol with OAT corrosion inhibitors
Colour	Orange
Approved product	<b>HAVOLINE</b> XLC

**Engine coolant: Elise 1ZR/2ZR Powertrains**

Capacity	12 litre (Including 50% concentration of 6.0 litres of antifreeze).
Antifreeze type	Ethylene glycol with OAT corrosion inhibitors
Colour	Red
Approved product	<b>PETRONAS</b> Paraflu Up
Lotus approval reference	PE-00140

**Charge cooler coolant: 2ZR Powertrain only**

	4.0 litre (Including 50% concentration of 2.0 litres of antifreeze).
Antifreeze type	As per engine coolant

**Brake & clutch system: All Elise/Exige 4-cylinder Powertrains**

Capacity	2.0 litre
Approved product	<b>PETRONAS</b> Tutela Top 4 brake fluid
Lotus approval reference	PE-00139
Type	Non-mineral (non petroleum) hydraulic fluid
Specification	DOT 4

**Air conditioning refrigerant: Elise/Exige 4-cylinder 2ZZ/1ZZ Powertrains**

Capacity	550 g
Refrigerant type	R134a

**Air conditioning refrigerant: Elise 1ZR/2ZR Powertrains**

Capacity	375 g
Refrigerant type	R134a

**Windscreen washer bottle: All Elise/Exige 4-cylinder Powertrains**

Capacity	2.0 litre
Fluid type	<b>PETRONAS</b> Tutela SC35 windscreen washer fluid
Concentration	Mixed as per the manufacturers recommendations

**Fuel tank: All Elise/Exige 4-cylinder Powertrains**

Capacity	43.5 litre
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**Rear luggage compartment: All Elise/Exige 4-cylinder Powertrains**

Capacity	50 kg/112 litre
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WHEELS & TYRES

Tyres

Type	- Elise std. - prior '06 - from '06	Bridgestone Potenza RE040 Yokohama Advan Neova AD07
	- USA Elise	Yokohama Advan Neova AD07
	- Elise option, Exige	Yokohama A048
Size - front	- Elise std.	175/55 R16 80W
	- USA Elise	175/55 R16 80W
	- Elise option, Exige	195/50 R16 84W
- rear	- Elise std. - RE040	225/45 R17 90W
	- AD07	225/45 R17 91W
	- USA Elise - AD07	225/45 R17 91W
	- Elise opt. Exige - A048	225/45 R17 90W
Pressure (cold) - front		1.8 bar (26 lb/in <sup>2</sup> )
- rear		2.0 bar (29 lb/in <sup>2</sup> )

Winter Tyres

Type - front		Pirelli 210 Snowsport
- rear		Pirelli 240 Snowsport
Size - front		195/50 R16
- rear		215/45 R17
Pressure (cold) - front		1.8 bar (26 lb/in <sup>2</sup> )
- rear		1.9 bar (27.5 lb/in <sup>2</sup> )
Tyre studding		Not permitted
Tyre chains		Pewag Brenta-C XMR69 fitted only on rear winter tyres

Wheels

Type - Elise 111R/R/USA		Cast alloy, 8 spoke
- Elise S		Cast alloy, 6 spoke
- Elise 2011		Cast alloy, 12 spoke
- Exige std.		Cast alloy, 8 Y-spoke
- Elise/Exige option		Forged alloy, 7 split-spoke
- Elise 2011 option		Forged alloy, 5 Y-spoke
Size - front - Elise std.		5.5J x 16
- Elise option		6.0J x 16 (forged + AD07)
- Elise option, Exige		6.5J x 16 (forged + A048)
- rear		7.5J x 17
Wheel bolt torque		105 Nm (77 lbf.ft)



CHASSIS RIDE HEIGHT POINTS

Ride height - standard and sports suspension

All markets including USA from VIN 3013

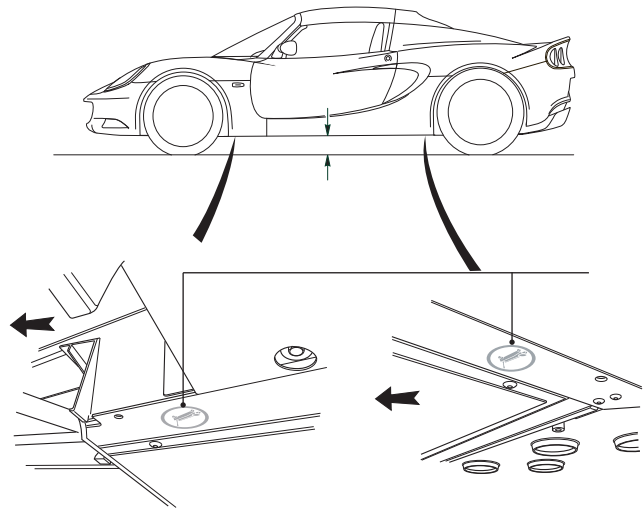
- front 130 mm below front end of chassis siderail
- rear 130 mm below rear end of chassis siderail

USA only prior VIN 3013

- front 135 mm below front end of chassis siderail
- rear 135 mm below rear end of chassis siderail

Ride height - 'Super Sport' suspension option

- front 120 mm below front end of chassis siderail
- rear 120 mm below rear end of chassis siderail



Ride height to be measured from the ground up to the chassis siderails at the location of the 'Jacking' point labels

FRONT SUSPENSION

Type

Independent. Upper and lower wishbone; co-axial coil spring/telescopic damper unit; anti-roll bar

<b>Applicable vehicles</b> <b>Standard Elise:</b> <i>(See Section CI &amp; DH for further information).</i>		<b>Camber</b> Optimum - 0.10° Tolerance range - 0.10° to - 0.30° Max. side/side ± 0.20°	
<b>Total toe</b> Optimum 0.00° (Zero) Tolerance range 0.07° toe-out to 0.07° toe-in overall		<b>Caster</b> Optimum + 3.80° Tolerance range + 3.50° to + 4.10° Max. side/side ± 0.35°	

<b>Applicable vehicles</b> <b>Elise, Exige with 'Sports' suspension option:</b> <i>(See Section CI &amp; DH for further information).</i>		<b>Camber</b> Optimum - 0.30° Tolerance range - 0.10° to - 0.50° Max. side/side ± 0.20°	
<b>Total toe</b> Optimum 0.00° (Zero) Tolerance range 0.07° toe-out to 0.07° toe-in overall		<b>Caster</b> Optimum + 3.80° Tolerance range + 3.50° to + 4.10° Max. side/side ± 0.35°	

<b>Applicable vehicles</b> <b>Elise and Exige fitted with 'Supersport' option:</b> <i>(See Section DH for further information).</i>		<b>Camber</b> Optimum - 0.20° Tolerance range - 0.10° to - 0.30° Max. side/side ± 0.20°	
<b>Total toe</b> Optimum 0.00° (Zero) Tolerance range 0.5 mm toe-out to 0.7 mm toe-in overall		<b>Caster</b> Optimum + 3.80° Tolerance range + 3.50° to + 4.10° Max. side/side ± 0.35°	



REAR SUSPENSION

Type

Independent. Upper and lower wishbone; co-axial coil spring/telescopic damper.

<p><b>Applicable vehicles</b>  <b>Standard Elise:</b>          (See Section CI &amp; DH for further information).</p>	<p><b>Total toe</b>          Optimum + 0.16° (Toe in each side)          Tolerance range 0.16° to 0.24° toe-in each side</p>	
<p><b>Camber</b>          Optimum - 1.80°          Tolerance range - 1.60° to - 2.00°          Max.side/side 0.20°.</p>	<p><b>Toe in</b>          Max. side/side difference 0.04°</p>	

<p><b>Applicable vehicles</b>  <b>Elise, Exige with 'Sports' suspension option:</b>          (See Section CI &amp; DH for further information).</p>	<p><b>Total toe</b>          Optimum + 0.20° (Toe in each side)          Tolerance range 0.16° to 0.24° toe-in each side</p>	
<p><b>Camber</b>          Optimum - 1.80°          Tolerance range - 1.60° to - 2.00°          Max.side/side 0.20°.</p>	<p><b>Toe in</b>          Max. side/side difference 0.04°</p>	

<p><b>Applicable vehicles</b>  <b>Elise and Exige fitted with 'Supersport' option:</b>          (See Section CI &amp; DH for further information).</p>	<p><b>Total toe</b>          Optimum + 0.24° (Toe in each side)          Tolerance range 0.20° to 0.27° toe-in each side</p>	
<p><b>Camber</b>          Optimum - 2.50°          Tolerance range - 2.00° to - 2.70°          Max.side/side 0.20°.</p>	<p><b>Toe in</b>          Max. side/side difference 0.04°</p>	





ELECTRICAL

*Light Bulbs*

		<i>Wattage</i>	<i>Type</i>
Headlamps - prior '07	- main beam	55	H7
	- dip beam	55	H1
- from '07	- main beam	55	H7U
	- dip beam	55	H7U
2011 Elise	- main beam	65	H9B
	- dip beam	60	HB3A
Driving lamps		55	H3
Front side/parking lamps	- except '11 Elise	5	W5W
	- 2011 Elise	-	5 x LED
Side repeater lamps	- except '11 Elise	5	WY5W amber
	- 2011 Elise	-	LED
Front turn indicators	- except '11 Elise	21	PY21w amber
	- 2011 Elise	-	11 x LED
Rear turn indicators	- prior '06	21	H21
	- from '06	16	W16W capless
Stop/Tail lamps	- prior '06	4/21	P21/4w
	- from '06	-	20 x LED
Stop lamps (USA)	- prior '06	21	H21
	- from '06	-	20 x LED
Tail lamps	- prior '06	5	R5W
	- from '06	-	20 x LED
Tail/turn lamps (USA)	- prior '06	4/21	P21/4w
Rear fog lamps	- except '11 Elise	4/21	P21/4w
	- 2011 Elise	-	10 x LED
Reversing lamp	- prior '06	21	H21
	- from '06	16	W16W capless
High mounted stop lamp	- Elise	2.5	16 x LED
	- Exige	5	W5W capless
Licence plate lamps		5	C5W
Interior lamp		5	W5W
System voltage/polarity		12V negative earth	
Alternator	- 2ZZ/1ZZ	85A	
	- 1ZR/2ZR	100A	
Battery - non USA	- type	Varta Blue Dynamic 544 402 044 3132	
	- short code	B18	
	- capacity	44 Ah	
	- cold test current	440 A (EN)	
	- dimensions	L 207, W 175, H 175mm	
	- USA	Delco 19001598	
- USA	- type	26R-6YR	
	- cranking power	550 amps @ -18°C	
	- reserve capacity	80 minutes	



**TRANSMISSION**

- Gearbox - all except Elise S (1ZZ) 6-speed manual transaxle incl. final drive
- Elise S (1ZZ) 5-speed manual transaxle incl. final drive
- Differential - standard Open, bevel gear
- option (2ZZ only) Torsen or plate type LSD combined with with Lotus Traction Control engine programming
- Transmission designation - Elise 111R (2ZZ) C64
- by powertrain - Elise S (1ZZ) C56
- Elise (1ZR/2ZR) EC60

Gear	Ratio			mph (km/h)/1000 rpm		
	C64	C56	EC60	C64	C56	EC60
First	3.17	3.17	3.54	5.1 (8.2)	5.36 (8.62)	4.75 (7.64)
Second	2.05	1.90	1.91	7.7 (12.4)	8.73 (14.1)	8.79 (14.1)
Third	1.48	1.39	1.31	10.7 (17.2)	12.0 (19.2)	12.8 (20.6)
Fourth	1.17	1.03	0.97	13.6 (21.8)	16.2 (26.0)	17.3 (27.9)
Fifth	0.92	0.82	0.82	17.3 (27.8)	20.4 (32.8)	20.6 (33.1)
Sixth	0.81	-	0.70	19.4 (31.3)	-	24.0 (38.6)
Reverse	3.25	3.25	3.33			
Final Drive	4.53	4.31	4.29			

**CLUTCH**

- Type Single dry plate. Diaphragm spring cover. Hydraulic release.
- Friction plate diameter - 2ZZ/1ZZ/2ZR 215 mm
- 1ZR 212 mm
- Diaphragm finger clearance - 2ZZ/1ZZ 1.00 mm
- 1ZR/2ZR XXX
- Max. finger wear - 1ZR - depth 0.5 mm
- width 6.0 mm
- Diaphragm finger height - 2ZZ/1ZZ - new 37.5 - 32.1 mm
- service limit 42.75 mm
- Diaphragm finger height - 1ZR/2ZR - new XX.X - XX.X mm
- service limit XX.XX mm
- Max. finger tip non-alignment - 1ZR 0.5 mm
- 2ZR X.X mm
- Friction plate thickness 2ZZ/1ZZ - new 7.4 - 6.9 mm
- 1ZR - new X.X - X.X mm
- 2ZR - new 7.5 - 7.3 mm
- 2ZZ/1ZZ - service limit 5.6 mm
- 1ZR/2ZR - service limit 5.9 mm
- Rivet depth 2ZZ/1ZZ - new 1.0 mm
- 1ZR/2ZR - new X.X mm / 1.62 mm
- 2ZZ/1ZZ - service limit 0.2 mm
- 1ZR/2ZR - service limit 0.3 mm / 0.87 mm
- Friction plate run-out 2ZZ/1ZZ - new 0.8 mm
- 1ZR/2ZR - new 0.8 mm
- 2ZZ/1ZZ - service limit 1.0 mm
- 1ZR/2ZR - service limit 1.0 mm
- Pressure plate warp 2ZZ/1ZZ - service limit 0.15 mm
- 1ZR/2ZR - service limit 0.15 mm



**BRAKES**

Brake discs		Cast iron, curved vane ventilated, cross-drilled discs on all four wheels.
Calipers	- front	A.P. Racing, aluminium alloy body, one pair of opposed pistons
	- rear	Brembo, cast iron, single piston sliding rear calipers
Disc size	- front & rear	288 mm
Operation		Tandem master cylinder with vacuum servo and Kelsey Hayes EBC430 Anti-lock system (all 2ZZ and 1ZR up to '11MY VIN BH_10930). Bosch 8.1 ESP Anti-lock system (1ZR from '12MY VIN BH_10931 and all 2ZR from start of production), Cable operation of rear calipers, self adjusting for pad wear.
Parking brake		

**STEERING**

Type		Rack and pinion
Turns, lock to lock		2.8
Gear ratio		15.8:1
Rack height plate		6 notch
Turning circle	- between walls (excl. mirrors)	10 m
	- between kerbs	10.8 m

**FUEL CONSUMPTION**

	<b>1ZZ-FE</b>	<b>2ZZ-GE</b>	<b>1ZR-FAE</b>	<b>2ZR-FE</b>
<i>Urban- Prior 2010</i>	11.3 l/100km	-	-	-
- Elise R, Exige	-	12.1 l/100km	-	-
- Elise SC	-	11.6 l/100km	-	-
- Exige S	-	12.3 l/100 km	-	-
<i>From 2010</i>	10.6 l/100km	-	-	-
- Elise R	-	11.6 l/100km	-	-
- Elise SC	-	11.8 l/100km	-	-
- Exige S	-	11.9 l/100 km	-	-
	-	-	8.3 l/100km	-
				10.3 l/100km
<i>Extra Urban- Prior 2010</i>	6.5 l/100km	-	-	-
- Elise R, Exige	-	6.8 l/100km	-	-
- Elise SC	-	6.7 l/100km	-	-
- Exige S	-	9.1 l/100 km	-	-
<i>From 2010</i>	5.8 l/100km	-	-	-
- Elise R	-	6.2 l/100km	-	-
- Elise SC	-	6.4 l/100km	-	-
- Exige S	-	6.5 l/100km	-	-
	-	-	5.0 l/100km	-
				5.9 l/100km
<i>Combined- Prior 2010</i>	8.3 l/100km	-	-	-
- Elise R, Exige	-	8.8 l/100km	-	-
- Elise SC	-	8.5 l/100km	-	-
- Exige S	-	9.1 l/100km	-	-
<i>From 2010</i>	7.6 l/100km	-	-	-
- Elise R	-	8.2 l/100km	-	-
- Elise SC	-	8.5 l/100km	-	-
- Exige S	-	8.5 l/100km	-	-
	-	-	6.28 l/100km	-
				7.5 l/100km