

## Specifications

### Engine

STIHL single cylinder two-stroke engine

#### MS 311

Displacement:	59.0 cc
Bore:	47 mm
Stroke:	34 mm
Engine power to ISO 7293:	3.1 kW (4.2 bhp) at 9,500 rpm
Idle speed: <sup>1)</sup>	2,800 rpm

#### MS 391

Displacement:	64.1 cc
Bore:	49 mm
Stroke:	34 mm
Engine power to ISO 7293:	3.3 kW (4.5 bhp) at 9,500 rpm
Idle speed: <sup>1)</sup>	2,800 rpm

<sup>1)</sup> to ISO 11681 +/- 50 rpm

### Ignition System

Electronic magneto ignition

Spark plug (resistor type):	Bosch WSR 6 F, NGK BPMR 7 A
Electrode gap:	0.5 mm

### Fuel System

All position diaphragm carburetor with integral fuel pump

Fuel tank capacity: 600 cc (0.6 l)

### Chain Lubrication

Fully automatic, speed-controlled oil pump with rotary piston. Additional manual oil flow control

Oil tank capacity: 350 cc (0.35 l)

### Weight

Weight (dry, without bar and chain):

MS 311: 6.2 kg

MS 391: 6.2 kg

### Cutting Attachment

Actual cutting length may be less than the specified length

### Rollomatic E guide bars

Cutting lengths: 37, 40, 45 cm

Pitch: 3/8" (9.32 mm)

Groove width: 1.6 mm

Nose sprocket: 10-tooth

### 3/8" chains

Rapid Micro (36 RM) Type 3652

Rapid Super (36 RS) Type 3621

Rapid Super 3 (36 RS3) Type 3626

Pitch: 3/8" (9,32 mm)

Drive link gauge: 1.6 mm

### Chain Sprockets

7-tooth for 3/8" (rim sprocket)

Max. chain velocity to ISO 11681 27.5 m/s

Chain speed at maximum power: 21.7 m/s

### Noise and Vibration Data

For further details on compliance with Vibration Directive 2002/44/EC see [www.stihl.com/vib](http://www.stihl.com/vib).

### Sound pressure level $L_p$ to ISO 22868

MS 311: 105 dB(A)

MS 391: 105 dB(A)

### Sound power level $L_w$ to ISO 22868

MS 311: 117 dB(A)

MS 391: 117 dB(A)

### Vibration measurement $a_{hv, eq}$ to ISO 22867

	Handle,	
	Handle, left	right
MS 311:	4.0 m/s <sup>2</sup>	4.0 m/s <sup>2</sup>
MS 391:	4.0 m/s <sup>2</sup>	4.0 m/s <sup>2</sup>

The K-factor in accordance with Directive 2006/42/EC is 2.0 dB(A) for the sound pressure level and sound power level; the K-factor in accordance with Directive 2006/42/EC is 2.0 m/s<sup>2</sup> for the vibration level.