



TEST REPORT



SOLO 665 chainsaw

Test no. 4802

OWNER OF THE TEST CERTIFICATE:

Manufacturer and applicant:

SOLO Kleinmotoren GmbH
Stuttgarter Strasse 41
D-71069 Sindelfingen-Maichingen
www.solo-germany.com





Test Results and Evaluations

SOLO 665 chainsaw with 40 cm cutting length

SOLO Kleinmotoren GmbH, 71069 Sindelfingen-Maichingen

Test item	Test results				Evaluation
Function	Chain saw in the power class over 3 kW; for professional use				
Engine power					NE
Power	Engine speed	Torque	Spec. fuel consumption		
P _{max} = 3.7 kW	10000 min ⁻¹	3.6 Nm	56 kW/l		
Md _{max} = 3.1 kW	7200 min ⁻¹	max.4.1 Nm	47 kW/l		
Fuel consumption					o
	max. power		max. torque		
absolute / specific	2.4 l/h	460 g/kWh	2.1 l/h	482 g/kWh	
Exhaust emission					NE
complies with level 1 of the standard 2002/88 EG / category SH 3 ≥ 50 cm³ Hubraum					
	Legal limit		SOLO 665		
Carbon monoxide [g/kWh]	603		267		
hydrocarbons [g/kwh]	161		138		
Nitrogen oxides [g/kWh]	5.36		2.47		
EU-type approval by the Federal Motor Transport Authority e1*97/68SH-IA*2004/26*0400*00					
Chain lubrication					.
Oil consumption	at 5000 min ⁻¹		at 9000 min ⁻¹		
min / max	3 ml/min	14 ml/min	6 ml/min	26 ml/min	
Sound pressure level					-
	idling speed	full load speed	full speed, no load		
at ear of the operator	85 dB(A)	104 dB(A)	108 dB(A)		
Equivalent sound pressure level, total value 105 dB(A) (average of idle and loaded levels)					
Accoustic power 118 dB(A) according to the standard 2000/14/EG					
Vibration					o
Cutting equipment 37, 3/8"	idling speed	full load speed	full speed, no load		
front handle	3.7 m/s²	3.4 m/s²	5.0 m/s²		
rear handle	3.6 m/s²	5.5 m/s²	4.0 m/s²		
Total equivalent vibration front/rear 4.1 / 4.4 m/s² or 4.2 / 3.4 m/s² according to guideline 2002/44/EG					o

Chain brake				
Handguard activation	Actuating force	aver. braking time	max. braking time	NE
	32 - 38 N	0.09 s	0.14s	
Inertia activation	horizontal acceleration		vertical acceleration	NE
	370 m/s²		691 m/s²	
Kickback				
Full chisel tooth 3/8“	Kickback angle with brake		Chain stop angle	NE
Cutting length 41 cm	42°		35°	
Cutting length 71 cm	42°		33°	
Mass				
Weight per unit power	With cutting equipment	Without cutting equipment		
	2.3 kg/kW	2.1 kg/kW		o
Operability / handling				
Control elements	Easy to reach and use			+
Primer	Not available			-
Chain assembly	easy, drive sprocket easily accessible			o
Chain tensioning	Simple, at the side under drive sprocket cover			o
Maintenance				
Air filter and spark plug cover	Quick release fastners for easy removal, combination wrench required			+
Casing	Hard to remove , therefore difficult to clean			-
Air filter	cleaning	No tools required, clamp fasteners high, requires frequent cleaning		+
	soiling			
Tank caps	Recessed tank caps; difficult to open with gloves; contamination of tank possible.			o
Reliability				
A problem occurred with the short-circuit switch during the test. The problem was solved on the spot				
Operating manual				
clear, well illustrated				+
Operator safety				
EG-type examination test	Intertek Deutschland GmbH No. 0905, as lodged document			

Rating: ++ / + / o / - / --./.(o = Standard / NE= no evaluation, complies with tolerance value)

Tolerance values and evaluation criteria are described in the "Informationen zur Gebrauchswertprüfung" ("Information about the type examination test"). This publication is available from the DLG and the KWF.

Description and Technical Data (measured values)

Engine

- Air-cooled single-cylinder two-stroke engine;
- engine displacement 65.9 cm³; bore 47 mm; stroke 38 mm;
- Fuel: minimum octane number 92 ROZ; mixed lubrication,
1 :50 with SOLO Profi 2T-oil (JASO FB / ISO L-EGB) or similar quality
2T-special fuel with "KWF-TEST"
- Spark plug Bosch WSR-6F or Champion RCJ-6Y.
- Idling speed 2600 min⁻¹; max. speed 13500 min⁻¹ (electronic speed limiter)

Cutting equipment

- Clutch drum with external chain sprocket;
- Guide bar with sprocket nose
- full chisel tooth, 3/8" pitch, guage 1.5 mm.
- Guide bars for 40, 45 and 50 cm cutting lengths;

Main dimensions and weights

Length,	incl. cutting equipment 40 cm	837 mm
	engine unit with spiked bumper	465 mm
Width,	engine unit	200 mm
	incl. handle	260 mm
Height,	engine unit	233 mm
	with front hand guard	316 mm
Stump height,	chain sprocket cover	17 mm
	handle	25 mm
Tank volume,	fuel	0.70 l
	chain oil	0.40 l
Weight,	incl. cutting equipment 40 cm	8.4 kg
	without cutting equipment	7.0 kg

Test

Test carried out by

Kuratorium für Waldarbeit und Forsttechnik, Gross-Umstadt
DLG-Testzentrum Technik & Betriebsmittel, Gross-Umstadt

Field test

Niedersächsisches Forstliches Bildungszentrum, Seesen
Forstamt Ehringshausen

Authors

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FPA/DLG Testing commission

“Geräte und Werkzeuge“ (“Equipment and tools”) with 13 members
Chairman: Alois Zollner, WAS Laubau

FPA / DLG-Approval: April 2008
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The applicant is entitled to display the test mark on machines of this type according to the test regulations and to use the certification for advertising purposes

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