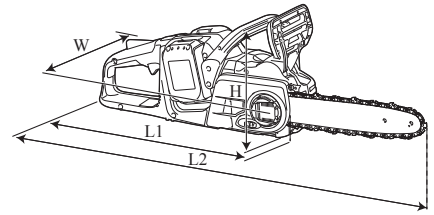


T ECHNICAL INFORMATION

Model No. ▶ DUC303 / DUC353 / DUC400

Description ▶ Cordless Chain Saws
300mm (12") / 350mm (14") / 400mm (16")



CONCEPT AND MAIN APPLICATIONS

Models DUC303, DUC353 and DUC400 are cordless chain saws powered by two 18V Li-ion batteries in series. Their main features are:

- Outer Rotor BL Brushless Motor direct-drive system provides high operating efficiency equivalent to 30mL class engine chain saw.
- Main power switch with auto power-off function
- Variable speed trigger switch
- Tool-less saw chain tension adjustment
- Low noise level for improved user comfort

Dimensions: mm (")			
Model No.	DUC303	DUC353	DUC400
Length (L1)	443 (17-1/2)		
Length (L2)	723 (28-1/2)	773 (30-1/2)	818 (32-1/4)
Width (W)	215 (8-1/2)		
Height (H)	235 (9-1/4)		

L1: Length without guide bar

L2: Length with guide bar and saw chain

► Specifications

Specifications		Model	DUC303	DUC353	DUC400
Battery	Voltage: V		36 (18x2)		
	Capacity: Ah		1.5, 2.0, 3.0, 4.0, 5.0, 6.0		
	Energy capacity: Wh		27, 36, 54, 72, 90, 108		
	Cell		Li-ion		
	Charging time: min		15, 24, 22, 36, 45, 55 with DC18RD 15x2, 24x2, 22x2, 36x2, 45x2, 55x2 with DC18RC		
Motor			Brushless		
Max output power: W			1,100		
Guide bar length: mm (")			300 (12)*1	350 (14)*1	400 (16)*1
Cutting length: mm (")			280 (11)	330 (13)	375 (14-3/4)
Saw chain	Type		90PX, 91PX*2		
	Gauge: mm (")		1.1 (0.043), 1.3 (0.050)*3		
	Pitch		3/8"*4		
Chain speed: m/s (m/min.) [ft/min.]			0-20 (0-1,200) [0-3,940]		
Variable trigger switch			Yes		
Constant speed control			Yes		
Tool-less change and tension adjustment of saw chain			Yes		
Chain brake			Yes (Electric brake)		
Kickback brake			Yes		
Oil tank capacity: mL			200		
Chain oil adjustment			Yes		
Oil capacity display			Yes		
Soft grip			Yes		
Weight according to EPTA-Procedure 01/ver.2.1: kg (lbs)			4.6 (10.2)*5	5.2 (11.5)*6	4.9 (10.7)*5
			5.1 (11.3)*6	4.8 (10.6)*7	5.4 (11.8)*6
				5.3 (11.7)*8	

*1 Optional 250mm (10") carving guide bar can be also used.

Note: When using carving guide bar, guide bar / saw chain / sprocket need to be replaced.

*2 25AP for optional 250mm (10") carving guide bar

*3 1.3 (0.050) for 25AP and 91PX

*4 1/4" for 25AP

*5 With two BL1815N batteries / guide bar / saw chain (300mm, 350mm: 90PX, 400mm: 91PX) / chain oil

*6 With two BL1830 batteries / guide bar / saw chain (300mm, 350mm: 90PX, 400mm: 91PX) / chain oil

*7 With two BL1815N batteries / guide bar / saw chain (91PX) / chain oil

*8 With two BL1830 batteries / guide bar / saw chain (91PX) / chain oil

▶ **Standard equipment**

Chain cover	Charger* 9
Guide bar	Battery* 9
Saw chain	Battery cover* 10
Chain oil 100mL (country-specific)	

***9** Battery and charger are not supplied with “Z” model ***10** Supplied with the same quantity of extra Battery

Note: The standard equipment may vary by country or model variation.

▶ **Optional accessories**

250mm Saw chain 25AP (for Carving bar)	Battery BL1815N
300mm Saw chain 90PX (for Sprocket nose bar)	Battery BL1820(B)
300mm Saw chain 91PX (for Sprocket nose bar)	Battery BL1830(B)
350mm Saw chain 90PX (for Sprocket nose bar)	Battery BL1840(B)
350mm Saw chain 91PX (for Sprocket nose bar)	Battery BL1850(B)
400mm Saw chain 90PX (for Sprocket nose bar)	Battery BL1860B
400mm Saw chain 91PX (for Sprocket nose bar)	Fast charger DC18RC
250mm Guide bar (Carving type) for 25AP	Charger DC24SC
300mm Guide bar (Sprocket nose type) for 90PX	Charger DC18SD
300mm Guide bar (Sprocket nose type) for 91PX	Four port charger DC18SF
350mm Guide bar (Sprocket nose type) for 90PX	Two port multi fast charger DC18RD
350mm Guide bar (Sprocket nose type) for 91PX	Automotive charger DC18SE
400mm Guide bar (Sprocket nose type) for 90PX	
400mm Guide bar (Sprocket nose type) for 91PX	
Round file	
File holder	
Safety goggles (country-specific)	
Sprocket 1/4” - 9 Tooth (for 25AP)	

► Features and benefits

High operating efficiency

Outer Rotor BL Brushless Motor direct-drive system provides high operating efficiency.

Main power switch with auto power-off function

Automatically turned off under the conditions below:

- Operator does not grip lock-off lever in 10 seconds*¹ after switched-on.
- Operator does not trigger the switch in 1 minute after switched-on even if the lock-off lever is gripped.
- Operator does not grip lock-off lever in 10 seconds*² after releasing the lock-off lever.

*¹ One minute for Brazil, Chile, Colombia, India, Indonesia, Korea, Malaysia, Peru, Singapore, Taiwan, Viet Nam
5 seconds for Canada, Mexico, United States

*² One minute for Brazil, Chile, Colombia, India, Indonesia, Korea, Malaysia, Peru, Singapore, Taiwan, Viet Nam
One second for Canada, Mexico, United States

Variable speed trigger switch

Powered by two 18V Li-ion batteries in series

- Two 18V Li-ion batteries can be directly installed on the machine to supply energy to the powerful 36V DC motor drive system.
- The compatible batteries are: 1.5Ah BL1815N, 2.0Ah BL1820(B), 3.0Ah BL1830(B), 4.0Ah BL1840(B), 5.0Ah BL1850(B), 6.0Ah BL1860B.

Note: When different capacity batteries are used together (for example, 1.5Ah BL1815N and 3.0Ah BL1830, or fully charged BL1830 and 70% charged BL1830), the machine stops when the battery with less capacity gets empty.

Lock-off lever

to prevent the switch trigger from being accidentally pulled

Tool-less saw chain tension adjustment

Extendable lever

1. allows for:
 - Easier saw chain tightening
 - Higher tightening torque
2. can be quickly retracted at any angle.
3. reduces the area projecting from Sprocket cover.

Dial for easier saw chain tension adjustment

High operability

Kickback brake and Variable speed trigger switch provide high operability equivalent to engine chain saw.

Metal spike bumper

Firmly grips workpiece to provide more control, making cutting easier.

Battery capacity warning lamp

The remaining battery capacity is shown while you are pressing the check button. The capacity indicators correspond to each battery.

Adjustable automatic chain lubrication

Chain oil level window

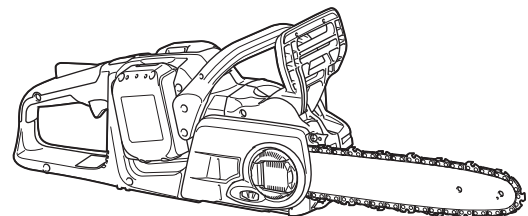
allows to check how much oil is left from outside.

Front-hand-guard-activated kickback brake

- Push of front hand guard stops the blade instantaneously.
- Anti-kickback guard is not needed on the tip of guide bar, increasing blade maneuverability for a wider range of applications.

Soft grip

for non-skid operation



XPT (eXtreme Protection Technology)

For use in outdoor applications or harsh environments, protection from dust and dripping water is enhanced.

Compatible with the two 18V Li-ion batteries equipped with the Battery protection circuit designed to protect the batteries from damages due to overdischarge, high temperature or overload current.

*The same advantages as Model DUC252

[Specifications of Guide bar]

Type	Length: mm (")	Mount	Chain type
Double guard	300, 350, 400 (12, 14, 16)	A041	90PX, 91PX

[Optional accessories]

Guide bar length: mm (")	250 (10) (Carving), 300 (12), 350 (14), 400 (16)
Chain type	25AP (Carving), 90PX, 91PX

Note: Needs to be replaced with optional Sprocket 1/4" - 9 Tooth when attaching carving guide bar.

Comparison of products

Specification comparison

Specifications	Makita										STIHL	Husqvarna
	DUC303	DUC353	DUC400	DUC252	DUC302	EA3201S	MSA200C-BQ	36		536LiXP		
Model												
Voltage: V	36 (18x2)											
Capacity: Ah	1.5, 2.0, 3.0, 4.0, 5.0, 6.0											
Charging time: min	15, 24, 22, 36, 45, 55 with DC18RD 15x2, 24x2, 22x2, 36x2, 45x2, 55x2 with DC18RC											
Motor	Brushless											
Guide bar length: mm (")	300 (12)*1	350 (14)*1	400 (16)*1	250 (10)*1	300 (12)*1	300, 350, 400 (12, 14, 16)	Brushless		250, 300, 350 (10, 12, 14)	Brushless		250, 300, 350 (10, 12, 14)
Saw chain	Type											
	Gauge: mm (")											
Pitch	90PX, 91PX*2											
	1.1 (0.043), 1.3 (0.050)*3											
Chain speed: m/s	3/8"*4											
	8.3											
Handle	Rear											
Variable trigger switch	Yes											
Tool-less change and tension adjustment of saw chain	Yes											
Chain brake	Yes (Electric brake)											
Kickback brake	Yes											
Oil tank capacity: mL	200											
Chain oil adjustment	Yes											
Oil capacity display	Yes											
Soft grip	Yes											
Vibration level (Front / Rear): m/s ² *5	4.8 / 2.8											
Noise (Sound power level): dB[A]*5	100											
Dimensions: mm (")	Length											
	443 (17-1/2)*8 443 (17-1/2)*8 443 (17-1/2)*8											
	723 (28-1/2)*9 773 (30-1/2)*9 818 (32-1/4)*9											
Weight according to EPTA-Procedure 01/ver.2.1: kg (lbs)	Width											
	215 (8-1/2)											
	235 (9-1/4)											
Weight according to EPTA-Procedure 01/ver.2.1: kg (lbs)	Height											
	4.6 (10.2)*10 4.7 (10.4)*10 4.9 (10.7)*10											
	5.1 (11.3)*11 5.2 (11.5)*11 5.4 (11.8)*11											

*1 Optional 250mm (10") carving guide bar can be also used. *10 With two BL1815N batteries / guide bar / saw chain (300mm, 350mm: 90PX, 400mm: 91PX) / chain oil

Note: When using carving guide bar, guide bar / saw chain / sprocket need to be replaced.

*2 25AP for optional 250mm (10") carving guide bar

*3 1.3 (0.050) for 25AP and 91PX

*4 1/4" for 25AP

*5 EN60745-2-13

*6 ISO22867

*7 ISO22868

*8 With battery(s), without Guide bar / saw chain

*9 With battery and Guide bar / saw chain

*12 With 350mm guide bar / saw chain / mixed gasoline / chain oil

*13 With AP80 / guide bar / saw chain / chain oil

*14 Actual measured value, With AP80 / 350mm guide bar / PM3 saw chain / chain oil

*15 With Bli80 / 350mm guide bar / 90SG saw chain / chain oil

*16 Actual measured value, With Bli150 / 350mm guide bar / 90SG saw chain / chain oil