

# SL100 SV Mechanized Torch



The patented SL100 SV torch cuts up to 32 mm (1-1/4 in.) material using air as the plasma and shielding gas. Utilizing a blowback start, and an electronically controlled pilot arc, the SL100 SV sets a new standard for starting reliability, cutting characteristics, and consumable life.

- 100% duty cycle at 100A and 80% duty cycle at 120A for enhanced productivity allowing for continuous operation even at maximum thickness
- Blowback starting mechanism to initiate the cut, which eliminates high frequency interference from the starting circuits
- Torch lead length up to 30.5 m (100 ft.) available
- Machined torch body, 35 mm (1-3/8 in.) diameter, available with and without 32-pitch rack to fit industry standard torch holders
- Robust machined torch components provide for reliability, durability and ease of maintenance

Visit [esab.com](http://esab.com) for more information.

Torch Specifications	
Recommended maximum production cutting	15 mm (5/8 in.)
Severs	32 mm (1-1/4 in.) max
Maximum piercing thickness	20 mm (3/4 in.)
Current capacity, DC	120 A @ 80% duty cycle 100 A @ 100% duty cycle
Nominal flow rate, with 120 A consumables	189 l/min @ 5.5 bar (402 cfm @ 80 psig)
Available lead lengths	7.6 m (25 ft.) 10.6 m (35 ft.) 15.2 m (50 ft.) 23 m (75 ft.) 30.5 m (100 ft.)
Length	403 mm (15.875 in.)
Power sources	ESAB A40, A60, A80, A120

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Cutting Specifications						
Material Thickness	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
<b>40 A</b>						
<b>4.8 bar (70 psi), 7.6 m (25 ft.)</b>						
<b>5.2 bar (75 psi), 15.2 m (50 ft.)</b>						
0.95 mm (20 ga)	101 V	3.5 mm (0.14 in.)	4064 mm/min (160 ipm)	4.5 mm (0.18 in.)	0 s	1.3 mm (0.05 in.)
1.59 mm (16 ga)	103 V	3.5 mm (0.14 in.)	3556 mm/min (140 ipm)	4.5 mm (0.18 in.)	0 s	1.3 mm (0.05 in.)
1.98 mm (14 ga)	105 V	3.5 mm (0.14 in.)	3048 mm/min (120 ipm)	4.5 mm (0.18 in.)	0.1 s	1.5 mm (0.06 in.)
2.78 mm (12 ga)	108 V	3.5 mm (0.14 in.)	2032 mm/min (80 ipm)	4.5 mm (0.18 in.)	0.2 s	1.5 mm (0.06 in.)
3.57 mm (10 ga)	110 V	3.5 mm (0.14 in.)	1524 mm/min (60 ipm)	4.5 mm (0.18 in.)	0.3 s	1.5 mm (0.06 in.)
5 mm (3/16 in.)	111 V	3.5 mm (0.14 in.)	1397 mm/min (55 ipm)	4.5 mm (0.18 in.)	0.4 s	1.5 mm (0.06 in.)
6 mm (1/4 in.)	117 V	3.5 mm (0.14 in.)	1016 mm/min (40 ipm)	4.5 mm (0.18 in.)	0.5 s	1.8 mm (0.07 in.)
10 mm (3/8 in.)	119 V	3.5 mm (0.14 in.)	635 mm/min (25 ipm)	4.5 mm (0.18 in.)	1.2 s	1.8 mm (0.07 in.)
<b>60 A</b>						
<b>5.8 bar (85 psi), 7.6 m (25 ft.)</b>						
<b>6.2 bar (90 psi), 15.2 m (50 ft.)</b>						
1.59 mm (16 ga)	118 V	4.8 mm (0.19 in.)	7366 mm/min (290 ipm)	4.8 mm (0.19 in.)	0 s	2.0 mm (0.08 in.)
1.98 mm (14 ga)	120 V	4.8 mm (0.19 in.)	7239 mm/min (285 ipm)	4.8 mm (0.19 in.)	0.10 s	2.0 mm (0.08 in.)
3.18 mm (11 ga)	118 V	4.8 mm (0.19 in.)	4572 mm/min (180 ipm)	4.8 mm (0.19 in.)	0.10 s	2.0 mm (0.08 in.)
3.57 mm (10 ga)	119 V	4.8 mm (0.19 in.)	4470 mm/min (176 ipm)	4.8 mm (0.19 in.)	0.10 s	2.0 mm (0.08 in.)
5 mm (3/16 in.)	121 V	4.8 mm (0.19 in.)	2540 mm/min (100 ipm)	4.8 mm (0.19 in.)	0.20 s	2.0 mm (0.08 in.)
6 mm (1/4 in.)	122 V	4.8 mm (0.19 in.)	2032 mm/min (80 ipm)	4.8 mm (0.19 in.)	0.30 s	2.0 mm (0.08 in.)
10 mm (3/8 in.)	124 V	4.8 mm (0.19 in.)	1270 mm/min (50 ipm)	4.8 mm (0.19 in.)	0.50 s	2.3 mm (0.09 in.)
12 mm (1/2 in.)	132 V	4.8 mm (0.19 in.)	660 mm/min (26 ipm)	4.8 mm (0.19 in.)	0.75 s	2.5 mm (0.10 in.)
15 mm (5/8 in.)	135 V	4.8 mm (0.19 in.)	483 mm/min (19 ipm)	Edge Start		2.5 mm (0.10 in.)
<b>80 A</b>						
<b>5.8 bar (85 psi), 7.6 m (25 ft.)</b>						
<b>6.2 bar (90 psi), 15.2 m (50 ft.)</b>						
1.59 mm (16 ga)	110 V	4.8 mm (0.19 in.)	8128 mm/min (320 ipm)	5.1 mm (0.20 in.)	0 s	1.5 mm (0.06 in.)
3.18 mm (11 ga)	113 V	4.8 mm (0.19 in.)	5842 mm/min (230 ipm)	5.1 mm (0.20 in.)	0.10 s	1.8 mm (0.07 in.)
3.57 mm (10 ga)	110 V	4.8 mm (0.19 in.)	4572 mm/min (180 ipm)	5.1 mm (0.20 in.)	0.20 s	1.8 mm (0.07 in.)
5 mm (3/16 in.)	110 V	4.8 mm (0.19 in.)	3454 mm/min (136 ipm)	5.1 mm (0.20 in.)	0.30 s	1.8 mm (0.07 in.)
6 mm (1/4 in.)	115 V	4.8 mm (0.19 in.)	2540 mm/min (100 ipm)	5.1 mm (0.20 in.)	0.40 s	2.3 mm (0.09 in.)
10 mm (3/8 in.)	125 V	4.8 mm (0.19 in.)	1067 mm/min (42 ipm)	5.1 mm (0.20 in.)	0.50 s	2.3 mm (0.09 in.)
12 mm (1/2 in.)	123 V	4.8 mm (0.19 in.)	1016 mm/min (40 ipm)	5.1 mm (0.20 in.)	0.60 s	2.3 mm (0.09 in.)
15 mm (5/8 in.)	133 V	4.8 mm (0.19 in.)	457 mm/min (18 ipm)	5.1 mm (0.20 in.)	0.75 s	2.5 mm (0.10 in.)
20 mm (3/4 in.)	140 V	6.4 mm (0.25 in.)	457 mm/min (18 ipm)	Edge Start		2.8 mm (0.11 in.)

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## Cutting Specifications

Material Thickness	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
<b>100 A</b>						
<b>5.2 bar (75 psi), 7.6 m (25 ft.)</b>						
<b>5.2 bar (75 psi), 15.2 m (50 ft.)</b>						
6 mm (1/4 in.)	110 V	4.6 mm (0.18 in.)	2159 mm/min (85 ipm)	5.1 mm (0.20 in.)	0.10 s	2.3 mm (0.09 in.)
10 mm (3/8 in.)	112 V	4.6 mm (0.18 in.)	1905 mm/min (75 ipm)	5.1 mm (0.20 in.)	0.20 s	2.3 mm (0.09 in.)
12 mm (1/2 in.)	115 V	4.6 mm (0.18 in.)	1143 mm/min (45 ipm)	5.1 mm (0.20 in.)	0.40 s	2.5 mm (0.10 in.)
15 mm (5/8 in.)	118 V	4.6 mm (0.18 in.)	762 mm/min (30 ipm)	5.1 mm (0.20 in.)	0.60 s	2.8 mm (0.11 in.)
20 mm (3/4 in.)	120 V	4.6 mm (0.18 in.)	508 mm/min (20 ipm)	5.1 mm (0.20 in.)	1.20 s	3.0 mm (0.12 in.)
25 mm (1 in.)	123 V	4.6 mm (0.18 in.)	381 mm/min (15 ipm)	Edge Start		3.0 mm (0.12 in.)
<b>120 A</b>						
<b>5.5 bar (80 psi), 7.6 m (25 ft.)</b>						
<b>5.5 bar (80 psi), 15.2 m (50 ft.)</b>						
6 mm (1/4 in.)	134 V	4.8 mm (0.19 in.)	3810 mm/min (150 ipm)	6.4 mm (0.25 in.)	0.10 s	2.8 mm (0.11 in.)
10 mm (3/8 in.)	141 V	4.8 mm (0.19 in.)	2159 mm/min (85 ipm)	6.4 mm (0.25 in.)	0.30 s	2.8 mm (0.11 in.)
12 mm (1/2 in.)	141 V	4.8 mm (0.19 in.)	1778 mm/min (70 ipm)	6.4 mm (0.25 in.)	0.80 s	3.0 mm (0.12 in.)
15 mm (5/8 in.)	146 V	4.8 mm (0.19 in.)	1143 mm/min (45 ipm)	6.4 mm (0.25 in.)	1.00 s	3.0 mm (0.12 in.)
20 mm (3/4 in.)	150 V	4.8 mm (0.19 in.)	762 mm/min (30 ipm)	6.4 mm (0.25 in.)	1.20 s	3.0 mm (0.12 in.)
22 mm (7/8 in.)	160 V	6.4 mm (0.25 in.)	635 mm/min (25 ipm)	Edge Start		3.5 mm (0.14 in.)
25 mm (1 in.)	163 V	6.4 mm (0.25 in.)	482 mm/min (19 ipm)	Edge Start		3.5 mm (0.14 in.)
31.75 mm (1-1/4 in.)	168 V	6.4 mm (0.25 in.)	305 mm/min (12 ipm)	Edge Start		3.8 mm (0.15 in.)

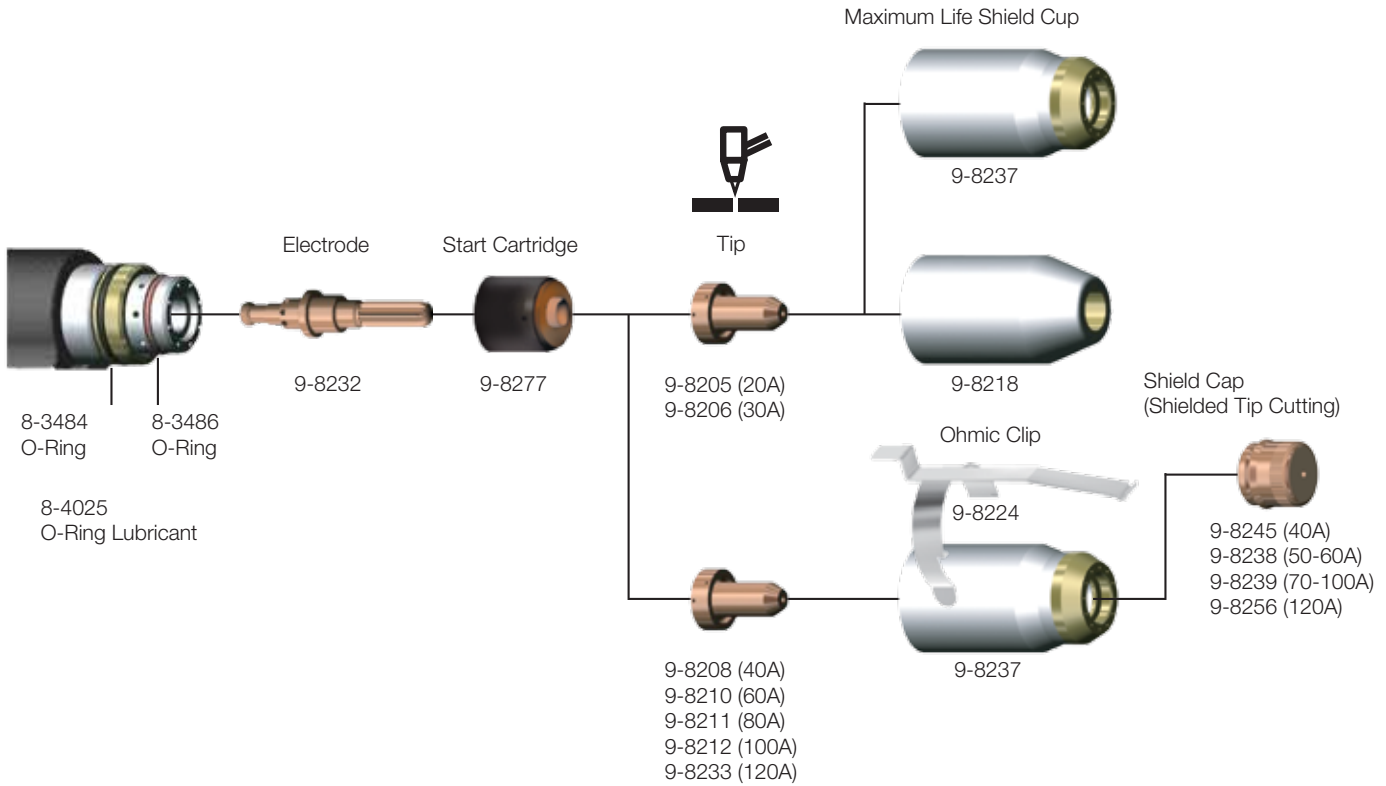
## Ordering Information

Description	Part Number
SL100 SV with ATC, 180° Automation, 7.6 m (25 ft.)	7-4001
SL100 SV with ATC, 180° Automation, 10.6 m (35 ft.)	7-4002
SL100 SV with ATC, 180° Automation, 15.2 m (50 ft.)	7-4003
SL100 SV with ATC, 180° Automation, 23 m (75.5 ft.)	7-4004
SL100 SV with ATC, 180° Automation, 30.5 m (100 ft.)	7-4005

## Options & Accessories

Description	Part Number
Hand pendant extension, 7.6 m (25 ft.)	7-7744
Spare parts kit 120 A	5-0175
Spare parts kit 80 A	5-0123
Spare parts kit 60 A	5-0122
Spare parts kit 40 A	5-0079

# SL100 SV Mechanized Torch



MCUT-3100A/NA/EN/02/16/Note: Specifications subject to change without notice. Products may vary from those pictured.



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