

# ESAB Cutmaster® 40

Highest power-to-weight ratio in its class



The Cutmaster® 40 with SL60™ 1Torch® is the perfect combination of end-user insight, advanced technology, and intelligent design. Packed with power and offering the highest power-to-weight ratio in its class, the Cutmaster 40 with SL60 1Torch also has best in class cutting arc length and the most empowering and engaging user experience no matter the application.

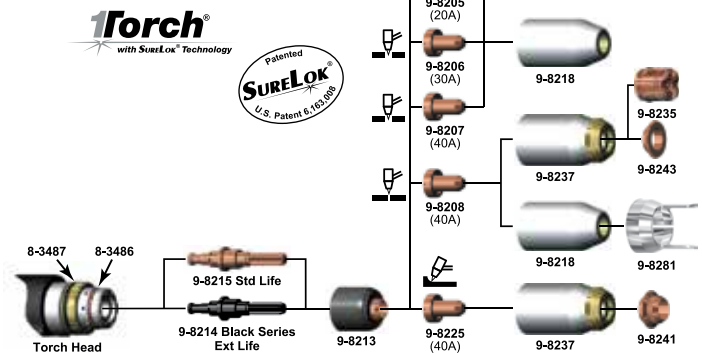
- Built for portability and durability with the integral multi-handle design
- 35% Duty Cycle depending on application. Automatic voltage input detection from 200-240V.
- Industrial SL60 1Torch with ATC® (Advanced Torch Connector)
- Up to 12 mm recommended pierce and cut capacity with up to 16 mm maximum sever
- Cutmaster Black Series electrode included for up to 60% longer life of consumable parts
- Industry leading 3-year warranty on power supply and 1-year warranty on torch

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

## Industry

- Automotive Bodies
- Industrial and General Fabrication
- General Manufacturing
- HVAC
- Repair and Maintenance
- Training Schools

## SL60 Consumables



# ESAB Cutmaster® 40

| Specifications                                |                                                        |
|-----------------------------------------------|--------------------------------------------------------|
| Amperage Output                               | 15 – 40 A, continuously adjustable                     |
| Recommended Generator Size                    | 8.0 kW                                                 |
| Open Circuit Voltage (OCV)                    | 280 V                                                  |
| Input Voltage                                 | 200-240 VAC +/-10%, 50/60Hz, 1ph                       |
| Rated Duty Cycle                              | 35% @ 40 A<br>60% @ 30 A<br>100% @ 20 A                |
| Amperage Draw *                               | $I_{1eff}$ : 15.5 A @230V<br>* 26A @ 230V              |
| Input Power Cable                             | 2.7 m length, 2.5mm <sup>2</sup> input cable. 16A plug |
| Work Lead with Ground Clamp                   | 4 m work cable with 50 mm connection                   |
| Gas Requirements                              | Compressed air                                         |
| Operating Temperature Range                   | 0° – 50° C                                             |
| Operating Input Air Pressure Range            | 6.2 – 8.6 bar                                          |
| Min Air Flow Requirements (cutting & gouging) | 142-235 l/min                                          |
| Recommended Cut                               | up to 12 mm                                            |
| Maximum Sever                                 | up to 16 mm                                            |
| Pierce Rating                                 | 12 mm                                                  |
| SL60 Torch Duty Cycle                         | 100% at 40 A @ 189 l/min air flow                      |
| Torches – for use with the Cutmaster 40       | SL60 1Torch (supplied)<br>SL60QD 1Torch                |
| Dimensions L x W x H                          | 460 x 200 x 320 mm                                     |
| Weight                                        | 10 kg                                                  |

\* at Maximum Cut Capacity

| Cutting Specifications |                       |
|------------------------|-----------------------|
| Plate Thickness        | Recommended Cut Speed |
| 1 mm                   | 7670 mm/min           |
| 2 mm                   | 6985 mm/min           |
| 4 mm                   | 2667 mm/min           |
| 5 mm                   | 1778 mm/min           |
| 6 mm                   | 762 mm/min            |
| 9 mm                   | 508 mm/min            |
| 13 mm                  | 254 mm/min            |

# ESAB Cutmaster® 40

## Ordering Information

| Description                                                   | Part Number |
|---------------------------------------------------------------|-------------|
| ESAB Cutmaster 40, 1 ph with SL60 1Torch 16 ft (5 m) 90° Head | 0559140004  |
| <b>Torches</b>                                                |             |
| SL60 1Torch and Lead 6.1 m 75° Head                           | 7-5204      |
| SL60 1Torch and Lead 15.2 m 75° Head                          | 7-5205      |
| SL60QD 1Torch and Lead 6.1 m 75° Head                         | 7-5620      |
| SL60QD 1Torch and Lead 15.2 m 75° Head                        | 7-5650      |
| SL60QD 1Torch Handle Assembly 75° Head (no leads)             | 7-5681      |
| SL60QD Lead 6.1 m                                             | 4-5620      |
| SL60QD Lead 15.2 m                                            | 4-5650      |

*Cutmaster 40 power supply, SL60 90° torch with lead, work lead with ground clamp, spare parts kit, 1/4" NPT air fitting with quick connect, and operating manual.*

*Cutmaster 40 is compatible with all 1Torch ATC torch connections.*

## Wear & Spare Parts 1Torch

| Description                                                 | Part Number |
|-------------------------------------------------------------|-------------|
| Cutmaster Black Series Extended Life Electrode              | 9-8214      |
| Electrode                                                   | 9-8215      |
| Start Cartridge                                             | 9-8213      |
| Stand off cutting guide                                     | 9-8251      |
| Shield Cup                                                  | 9-8218      |
| Shield Cup Max Life                                         | 9-8237      |
| Shield Cap Gouging                                          | 9-8241      |
| Shield Cap (Drag only)                                      | 9-8244      |
| Deflector                                                   | 9-8243      |
| Tip – Drag (20 A)                                           | 9-8205      |
| Tip – Drag (30 A)                                           | 9-8206      |
| Tip – Drag (40 A)                                           | 9-8207      |
| Tip – Standoff (40 A)                                       | 9-8208      |
| Tip – “A” Gouging, (40 A Max), Profile: Shallow/Narrow      | 9-8225      |
| Tip – “B” Gouging, (50 – 100 A), Profile: Deep/Narrow       | 9-8226      |
| Tip – “C” Gouging, (60 – 100 A), Profile: Moderate/Moderate | 9-8227      |
| Tip – “D” Gouging, (60 – 120 A), Profile: Shallow/Wide      | 9-8228      |

# ESAB Cutmaster® 40

## Options & Accessories

| Description                     | Part Number |
|---------------------------------|-------------|
| Cutting Guide Kit (Deluxe)      | 7-8910      |
| Circle Cutting Guide Kit        | 7-3291      |
| Lead Extension, 4.6 m           | 7-7544      |
| Lead Extension, 7.6 m           | 7-7545      |
| Lead Extension, 15.2 m          | 7-7552      |
| Leather Lead Covers 6.1 m       | 9-1260      |
| Multi-Purpose Cart              | 7-8888      |
| Radius/Roller Cutting Guide Kit | 7-7501      |
| Single Stage Air Filter Kit     | 7-7507      |
| Straight Line Cutting Guide     | 7-8911      |
| Two Stage Air Filter Kit        | 9-9387      |

## 1TORCH CONSUMABLES PARTS APPLICATION GUIDE

For SL60® / SL100® Manual Cutting and Gouging Operations.



**DRAG TIP CUTTING** The preferred method of cutting light gauge metal up to 6 mm thickness. Produces the best cut quality narrowest kerf width, fastest cutting speeds, and with little to no distortion. Traditional drag cutting was limited to 40 Amps or less; now with ESAB TRUE Cut Drag Tip Series™ technology, it is possible to cut up to 60 Amps. For best results, use the Shield Cup with the torch tip in direct contact with the work (up to 60 Amps).



**DRAG SHIELD CUTTING** This is an operator-friendly method of cutting while maintaining a constant standoff distance. For metal thickness greater than 6 mm, simply drag the shield cap in contact with the work piece. Use the shield cup body with the appropriate drag shield cap matching the current level being used. This method is not recommended for cutting light-gauge sheet metal.







**STANDOFF CUTTING** The preferred method of cutting metal thicker than 6 mm and at current levels above 60 Amps. Provides maximum visibility and accessibility. Shield cup for 'standoff' cutting (with the torch tip 3 mm to 6 mm from the work piece). Use the shield cup body together with the deflector for extended parts life and improved resistance to reflect heat. This combination provides cutting results similar to the single piece shield cup, as well as easy changeover to gouging or drag shield cutting.



**GOUGING** A simple method of metal removal by angling the torch to a lead angle of 35°-45°, and using a gouging tip. While maintaining a constant standoff distance, this allows for only a partial penetration into the work, thus removing metal from the surface. The amount of current, travel speed, standoff distance, lead angle, and tip size will determine the amount of material removed and the profile of the gouge. You can use the shield cup body with either the gouging shield cap or the shield deflector. Also, you can use the single piece shield cup.

### Gouging Profiles

|                                                                                                       | Output Range | Depth    | Width    |
|-------------------------------------------------------------------------------------------------------|--------------|----------|----------|
| <b>Tip A</b><br> | 40A (MAX)    | Shallow  | Narrow   |
| <b>Tip B</b><br> | 50-100A      | Deep     | Narrow   |
| <b>Tip C</b><br> | 60-120A      | Moderate | Moderate |
| <b>Tip D</b><br> | 60-120A      | Shallow  | Wide     |



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