



Powermax45[®] XP

Professional-grade plasma system for cutting 16 mm (5/8") thick metal, gouging, and marking.



| Capacity | Thickness | Cut speed |
|--------------------------|----------------|---------------------|
| Cutting | | |
| Recommended | 16 mm (5/8") | 500 mm/min (20 ipm) |
| | 22 mm (7/8") | 250 mm/min (10 ipm) |
| Severance (hand cutting) | 29 mm (1-1/8") | 125 mm/min (5 ipm) |
| Pierce* | 12 mm (1/2") | |

* Pierce rating for handheld use or with automatic torch height control

| Capacity | Metal removal rate | Groove profile |
|----------------|---------------------------|-----------------------------------|
| Gouging | | |
| Typical gouge | 3,4 kg (7.5 lbs) per hour | 3,2 mm (.12") D x 6,8 mm (.26") W |

Easy-to-use with versatile design

- Small size and light weight provides exceptional portability for a 16 mm (5/8") rated cutting system.
- Handheld and mechanized usage with CNC interface and FastConnect™ torch connection.
- Patented drag-cutting technology makes it easy to use – even for first-time operators.
- Tackle different jobs with multiple, easy-to-use torch and consumable styles.
- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Mark, score and make precision gouges with new low amp process.

Maximum productivity

- Finish jobs faster with cut speeds one and a half times greater than oxyfuel on 6 mm (1/4") mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.
- Fast change out of consumables using the new torch disable switch feature.

Rugged and reliable

- Duramax® Lock torches are designed for high-impact and heat resistance.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Hypertherm Certified™ reliability ensures performance in the most demanding environment.

Duramax Lock standard torch styles

(for more torch options, see www.hypertherm.com)



Duramax Lock 75° hand torch

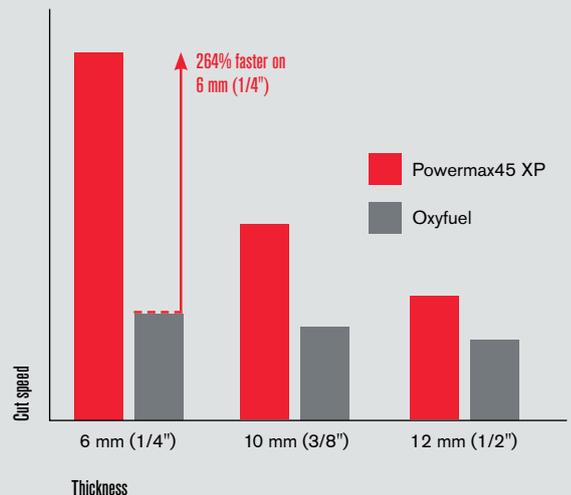


Duramax Lock 15° hand torch



Duramax Lock machine torch

Relative cut performance on mild steel



Specifications

| | |
|--|---|
| Input voltages (± 10%) | CSA 200-240 V, 1-PH, 50-60 Hz CE/CCC 230 V, 1-PH, 50-60 Hz 400 V, 3-PH, 50-60 Hz |
| Input current @ 6,5 kW | CSA 200-240 V, 1-PH, 39/32 A CE/CCC 230 V, 1-PH, 33 A 400 V, 3-PH, 10 A |
| Output current | 10-45 A |
| Rated output voltage | 145 VDC |
| Duty cycle @ 40° C (104° F) | CSA 50% @ 45 A, 200-240 V, 1-PH 60% @ 41 A, 200-240 V, 1-PH 100% @ 32 A, 200-240 V, 1-PH CE/CCC 50% @ 45 A, 230 V, 1-PH 60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH 50% @ 45 A, 480 V, 3-PH 60% @ 41 A, 480 V, 3-PH 100% @ 32 A, 480 V, 3-PH |
| Open circuit voltage (OCV) | 275 VDC (200-240 V, CSA/CE/CCC and 480 V, CSA) 265 VDC (400 V CE/CCC) |
| Dimensions with handles | 442 mm (17.4") D; 173 mm (6.8") W; 357 mm (14.1") H |
| Weight with 6,1 m (20') torch | CSA 14 kg (31 lbs.) CE/CCC 15 kg (33 lbs.) |
| Gas supply | Cutting: air (clean, dry and oil-free), nitrogen, F5 Gouging: air (clean, dry and oil-free), nitrogen, F5 Marking: air (clean, dry and oil-free), argon |
| Recommended gas inlet flow rate/pressure | 188 l/min (400 scfh) @ 5,9 bar (90 psi) |
| Input power cable length | 3 m (10') |
| Power supply type | Inverter - IGBT |
| Engine drive requirement | 12.5 kVA (10 kW) for full 45 A output |
| Electrical efficiency | 88% |
| Recyclability | 100% |
| Certifications | CSA certified for use in the Americas and Asia, except China. CCC for use in China. CE, RCM, CU/GOST-TR, UkrSEPRO, and Serbian AAA for use in Europe, Australia, Belarus, Kazakhstan, Russia, Serbia, Ukraine, and other countries where accepted. |
| Warranty | Power supply: 3-year Torch: 1-year |

Common applications

Property/plant maintenance, HVAC and mechanical contracting, general fabrication, plus:



Construction



Maintenance and repair



Agricultural and farm equipment maintenance

Ordering information

Below are the standard system configurations, which include a power supply, torch and work cable. Additional configurations are available or a custom configuration can be made. See the next page for details.

| | Voltage configuration | 75° hand torch | | 75° and 15° hand torch | 180° full-length machine torch | | | | | | 180° full-length machine torch and 75° hand torch | |
|--|-----------------------|------------------|-------------------|------------------------|--------------------------------|------------------------|------------------------------|---------------------|---------------------|-----------------------------------|---|---------------------|
| | | 6,1 m (20') lead | 15,2 m (50') lead | 6,1 m (20') leads | 7,6 m (25') lead | | 10,6 m (35') lead | 15,2 m (50') lead | | 6,1 m (20') and 7,6 m (25') leads | | |
| Power supplies | | | | without remote pendant | with remote pendant | without remote pendant | with I/O cables (no pendant) | with remote pendant | with remote pendant | without remote pendant | with I/O cables (no pendant) | with remote pendant |
| Standard power supply | 200-240 V CSA | 088112 | 088114 | | | | | | | | | |
| Power supply with CPC port and voltage divider | 200-240 V CSA | 088113 | 088115 | 088124 | 088116 | 088121 | | 088117 | 088118 | 088122 | | 088123 |
| Power supply with CPC port, voltage divider, and serial port | 200-240 V CSA | | | | | | 088119 | | | | 088120 | |
| Standard power supply | 230 V CE/CCC | 088130 | 088132 | | | | | | | | | |
| Power supply with CPC port and voltage divider | 230 V CE/CCC | 088131 | 088133 | | 088134 | 088141 | | 088135 | 088136 | | | |
| Power supply with CPC port, voltage divider, and serial port | 230 V CE/CCC | | | | | | 088139 | | | | 088140 | |
| Standard power supply | 400 V CE/CCC | 088144 | 088146 | | | | | | | | | |
| Power supply with CPC port and voltage divider | 400 V CE/CCC | 088145 | 088147 | | 088148 | 088155 | | 088149 | 088150 | | | |
| Power supply with CPC port, voltage divider, and serial port | 400 V CE/CCC | | | | | | 088153 | | | | 088154 | |

Custom configurations (select power supply, torch, consumable kit, work cable, and other components)

Power supply options

| | Standard power supply | Power supply with CPC port and voltage divider | Power supply with CPC port, voltage divider, and serial port |
|---------------|-----------------------|--|--|
| 200–240 V CSA | 088092 | 088104 | 088105 |
| 230 V CE/CCC | 088093 | 088106 | 088107 |
| 400 V CE/CCC | 088094 | 088108 | 088109 |

Starter kit consumable options

| | Handheld | Mechanized | Mechanized with ohmic retaining cap |
|-----|----------|------------|-------------------------------------|
| Kit | 428559 | 428560 | 428561 |

Torch options

| Cable length | Hand torches | | Machine torches | | Robotic torches | | |
|--------------|--------------|---------|-----------------|-----------|-----------------|---------|---------|
| | 75° | 15° | 180° | Mini 180° | 45° | 90° | 180° |
| 4,5 m (15') | | | 059476* | 059481* | | | |
| 6,1 m (20') | 088164 | 088162 | | | | | |
| 7,6 m (25') | | | 088167 | 059482* | 059464* | 059465* | 059466* |
| 10,6 m (35') | | | 088168 | 059483* | | | |
| 15,2 m (50') | 088165 | 088163 | 088169 | 059484* | | | |
| 22,8 m (75') | 059475* | 059472* | 059480* | | | | |

* without torch disable switch

Cable options

| Cable length | Work cables | | Control cables | | | |
|--------------|-------------|----------------|---------------------------------------|--|----------------------------------|---------------------------|
| | Hand clamp | Remote pendant | CNC, spade connector, divided voltage | CNC, spade connector, no divided voltage | RS-485 Serial comm, unterminated | RS-485 Serial comm, D-sub |
| 7,6 m (25') | 223595 | 128650 | 228350 | 023206 | 223236 | 223239 |
| 15,2 m (50') | 223596 | 128651 | 228351 | 023279 | 223237 | 223240 |
| 22,8 m (75') | 223127 | 128652 | | | | |

Torch consumable parts

Nozzles and electrodes are available in various quantities. Contact your distributor for more information.

| Consumable type | Torch type | Amperage | Nozzle | Shield/Deflector | Retaining cap | Electrode | Swirl ring |
|---------------------|---------------|----------|---------------------|-------------------------------|-------------------------------|-----------|------------|
| Drag-cutting | Hand | 45 | 220941 | 220818 | 220854 | 220842 | 220857 |
| Mechanized | Machine | 45 | 220941 | 220817 or 220955 ¹ | 220854 or 220953 ² | 220842 | 220857 |
| FineCut® | Hand | 45 | 220930 | 220931 | 220854 or 220953 ² | 220842 | 220947 |
| | Machine | 45 | | 220955 or 220948 ² | | | |
| Max control gouging | Hand/ Machine | 26–45 | 420419 | 420480 | 220854 | 220842 | 220857 |
| Precision gouging | Hand/ Machine | 10–25 | 420415 | 420414 | 220854 | 220842 | 220857 |
| Marking | Hand/ Machine | 10–25 | 420415 | 420542 | 220854 or 220953 ² | 220842 | 220857 |
| FlushCut™ | Hand/ Machine | 30–45 | 420633 ³ | 420540 ⁴ | 420536 | 420635 | 420634 |
| HyAccess™ cutting | Hand | 15–45 | 420410 ³ | N/A | 420413 | 420408 | 220857 |
| HyAccess™ gouging | Hand | 15–45 | 420412 ³ | N/A | 420413 | 420408 | 220857 |

¹ Deflector for unshielded cutting

² Ohmic retaining cap

³ Nozzle/shield assembly

⁴ Retaining ring

Recommended Hypertherm genuine accessories



Face shield

Clear face shield with flip-up shade for cutting and grinding. Safety shield included. ANSI Z87.1, CSA Z94.3, CE

127239 Face shield shade 6

127103 Face shield shade 8



Air filtration kit

A ready-to-install kit with a 1-micron filter and an auto drain moisture separator protects against contaminated air.

128647 Eliminator filter



Leather torch sheathing

Available in 7,6 m (25') sections, this option provides additional protection for torch leads against burn-through and abrasion.

024877 Black leather with Hypertherm logos



Circle cutting guides

Quick and easy set up for accurate circles up to 70 cm (28") diameter. For optional use as a stand-off guide for straight and bevel cuts.

127102 Basic kit – 38 cm (15") arm, wheels and pivot pin

027668 Deluxe kit – 28 cm (11") arm, wheels, pivot pin, anchor base and plastic case



Rolling tool bag

This rugged bag transports the Powermax45 XP with extra room for torches, consumables, accessories, and other gear. 50 cm x 44 cm x 32 cm (19.5" x 17.5" x 12.5")

017060 Rolling tool bag



System dust covers

Made from a flame-retardant vinyl, a dust cover will protect your Powermax® system for years.

127219 Cover, Powermax45 and 45 XP

ISO 9001:2008

Environmental stewardship is one of Hypertherm's core values, and it is critical to our success and our customers' success. We are striving to reduce the environmental impact of everything we do. For more information: www.hypertherm.com/environment.

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Essential consumable kit

Essential kits provide an assortment of standard consumables in a convenient case for organizing and reordering.

851510 Handheld kit

851511 Mechanized kit

851512 Mechanized ohmic kit

Hypertherm
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