Hypertherm®

Powermax® overview

Portable air plasma cutting and gouging systems



System specifications comparison

		Powermax30® XP	Powermax30® AIR	Powermax45®	Powermax65®
Handheld cut capacity	Recommended	10 mm	8 mm	12 mm	20 mm
		12 mm	10 mm	20 mm	25 mm
	Severance	16 mm	16 mm	25 mm	32 mm
Mechanized pierce capacity	with automatic torch height control	Not applicable	Not applicable	12 mm[1]	16 mm[1]
Maximum	without automatic torch height control	Not applicable	Not applicable	10 mm	12 mm
Gouge capacity	Metal removed per hour	Not applicable	Not applicable	2,8 kg	4,8 kg
	depth x width[2]	Not applicable	Not applicable	3,3 x 5,5 mm	3,5 x 6,6 mm
Output current		15–30 A	15–30 A	20–45 A	20–65 A
Input voltages		120–240 V, 1-PH, 50/60 Hz	120–240 V, 1-PH, 50/60 Hz	230 V, 1-PH, 50–60 Hz 400 V, 3-PH, 50–60 Hz	400 V, 3-PH, 50–60 Hz
Rated output voltage		125 VDC	83 VDC	132 VDC	139 VDC
Input current		120–240 V, 1-PH, 22,5–18.8 A	120–240 V, 1-PH, 28,7–15 A	230 V, 1-PH, 30 A 380/400 V, 3-PH, 10,5/10 A	380/400 V, 3-PH, 15,5/15 A
Duty cycle[3]		35%, 240 V 20%, 120 V	35%, 240 V 20%, 120 V	50% @ 45 A, 230 V, 1-PH 60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH 50% @ 45 A, 380/400 V, 3-PH 60% @ 41 A, 380/400 V, 3-PH 100% @ 32 A, 380/400 V, 3-PH	50% @ 65 A, 380/400 V, 3-PH 100% @ 46 A, 380/400 V, 3-PH
Dimensions with handle	depth x width x height	356 x 140 x 305 mm	420 x 195 x 333 mm	426 x 172 x 348 mm	500 x 234 x 455 mm
Weight with torch		9,5 kg	13,4 kg	16 kg	26 kg
Gas supply		Air or N_2	Not applicable	Air or N_2	Air or N_2
Recommended flow rate and pressure		113,3 l/min @ 5,5 bar	Not applicable	Cutting: 170 l/min @ 5,5 bar Gouging: 170 l/min @ 4,1 bar	Cutting: 189 l/min @ 5,6 bar Gouging: 212 l/min @ 4,8 bar
Torch lead lengths	Handheld	4,5 m	4,5 m	6,1, 15,2 m	7,6, 15,2, 22,8 m
	Mechanized	Not applicable	Not applicable	7,6, 10,7, 15,2 m	4,5, 7,6, 10,7, 15,2, 22,8 m
Motor generator requirements for full arc stretch at full output		5,5 kW	5,5 kW	8 kW	15 kW

[1] Pierce rating for handheld use or with automatic torch height control.

[2] Dependent on speed, torch angle and standoff.

[3] Hypertherm's duty cycle ratings are established at 40° C, according to international standards, and are determined at actual cutting arc voltage levels.

Available technologies and features

	Power supply									Torch						Work cable			Miscellaneous			
Model	Drag-cutting capability	Gouging mode	Pilot arc controller	Contact start	Boost Conditioner circuit	Auto-voltage	FastConnect design	Basic machine interface	Advanced automation interface	75° hand torch*	15° hand torch	Full-length machine torch	Mini machine torch	Long hand torch	Robotic torches	Hand clamp	C-style clamp	Ring terminal	Remote pendant	Carry strap	Wheel gear	Gantry kit
Powermax30 XP	●		●	●	●	●				●						●				●		
Powermax30 AIR	●		●	●	●	●				●						●				●		
Powermax45	●	●	●	●	●		●	●		●		●				●			●	●		
Powermax65	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	
Powermax85	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	
Powermax105	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●
Powermax125	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●		●	●

*The Powermax125 hand torch is 85° angle.



	Powermax85®	Powermax105®	Powermax125®
	25 mm	32 mm	38 mm
	32 mm	38 mm	44 mm
	38 mm	50 mm	57 mm
	20 mm[1]	22 mm[1]	25 mm[1]
	16 mm	20 mm	22 mm
	8,8 kg	9,8 kg	12,5 kg
	5,8 x 7,1 mm	8,1 x 6,6 mm	4,3–7,9 x 6,0–9,9 mm
	25–85 A	30–105 A	30–125 A
	400 V, 3-PH, 50–60 Hz	230–400 V, 3-PH, 50–60 Hz 400 V, 3-PH, 50–60 Hz	400 V, 3-PH, 50–60 Hz
	143 VDC	160 VDC	175 VDC
	380/400 V, 3-PH, 20,5/19,5 A	230/400 V, 3-PH, 50/60 Hz, 50/29 A 400 V, 3-PH, 50/60 Hz, 28 A	400 V, 3-PH, 50-60 Hz, 36 A
	60% @ 85 A, 380/400 V, 3-PH 100% @ 66 A, 380/400 V, 3-PH	70% @ 105 A, 230 V, 3-PH 80% @ 105 A, 400 V, 3-PH 100% @ 94 A, 400 V, 3-PH 100% @ 88 A, 230 V, 3-PH 80% @ 105 A, 400 V, 3-PH 100% @ 94 A, 400 V, 3-PH	100% @ 125 A, 400 V, 3-PH
	500 x 234 x 455 mm	592 x 274 x 508 mm	592 x 274 x 508 mm
	28 kg	230–400 V, 45 kg 400 V, 41 kg	49 kg
	Air or N_2	Air or N_2	Air or N_2
	Cutting: 189 l/min @ 5,6 bar Gouging: 212 l/min @ 4,8 bar	Cutting: 217 l/min @ 5,9 bar Gouging: 227 l/min @ 4,8 bar	Cutting: 260 l/min @ 5,9 bar Gouging: 212 l/min @ 4,1 bar
	7,6, 15,2, 22,8 m	7,6, 15,2, 22,8 m	7,6, 15,2, 22,8 m
	4,5, 7,6, 10,7, 15,2, 22,8 m	4,5, 7,6, 10,7, 15,2, 22,8 m	4,5, 7,6, 10,7, 15,2, 22,8 m
	20 kW	31 kW	40 kW



Why choose Powermax over other cutting or gouging systems

More productive

Our consumable technology delivers faster speeds and better cut quality to help you do more in less time.

Easier to use

High portability, simple controls and a stable plasma arc make Powermax systems easy to operate for beginners and experts.

More versatile

With the largest variety of torch options for cutting and gouging, you can leverage a Powermax for many jobs.

Lower operating cost

Faster speeds and longer consumable life lower your cost of cutting and gouging metal.

More reliable

Smart design plus intense testing during product development and manufacturing keeps you up and running.

Confidence

Hypertherm's focus on plasma by our Associate-owners, and the proven performance of our global installed base of systems gives you confidence that you are buying the best.

Capacity ratings

There is no industry standard for rating plasma systems, so it is important to take care when comparing brands.

Handheld cut capacity

Recommended – The thickness of mild steel on which the system delivers good cut quality and speeds at about 500 mm per minute or faster. Eighty percent or more of cutting should be at the recommended thickness.

Severance – The thickness that can be reasonably severed at a minimum of 125 mm per minute but with poor cut quality. Cutting the severance thickness should be infrequent.

Mechanized pierce capacity

The thickness of mild steel that may be pierced using an automated torch height control without excessive wear on the consumable parts. Cut capacity for edge starts is the same as handheld capacity.



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ISO 9001:2008

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Environmental stewardship is a core value of Hypertherm. Our Powermax products are engineered to meet and exceed global environmental regulations including the RoHS directive.

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