Hypertherm®

Duramax™ Robotic Torches

The industry's only air plasma torches designed specifically for robotic cutting and gouging.

Three torch angles – 180°, 90°, 45° – provide maximum versatility

- Choose the right torch for the application – whether you need to reach inside a part, bevel cut, or even gouge.

Designed for precise positioning

- Flats, grooves, and dowel sockets on the torch body prevent rotational or horizontal slip.
- Torch positioning marks for easy realignment.

Compact size for easier programming

- The 90° torch measures only 20.1 cm (7.9") long and 9.9 cm (3.9") tall, including consumables.

Durable torch lead to withstand repetitive motion

- Powermax® torch leads are lightweight and flexible to hold up under the torque and repetitive motion of robotic cutting.
- Approximately 7.5 cm (3") bend radius.
- FastConnect™ torch quick disconnect measures 4.2 cm (1.65") in diameter, making through-arm installations possible on some robots.

Clamp designed for easy integration

- Optional aluminum clamp has threaded holes and bolt holes for integration with a variety of mounting arms.

Mechanical teach tool aids programming

- Optional mechanical teach tool allows you to touch the plate while programming cutting and pierce heights.

Compatible with:	Powermax65	Powermax85	Powermax105
Recommended cut capacity	3/4" (20 mm)	1" (25 mm)	1-1/4" (32 mm)
Pierce capacity with automatic torch height control	5/8" (26 mm)	3/4" (20 mm)	7/8" (22 mm)
Pierce capacity without automatic torch height control	1/2" (12 mm)	5/8" (16 mm)	3/4" (20 mm)

The best-selling Powermax air plasma systems deliver high performance for robotic applications:

- CNC interface with adjustable voltage divider and optional serial communications port
- Optional FineCut® consumables for high-quality cuts on thin metal
- Quick-disconnect work lead
- Smart Sense™ technology to automatically adjust gas pressure
- Hypertherm Certified™ reliability

Flats Inch marking Heat- and impact-resistant barrel

Dowel sockets Metric marking

Compatible with Duramax consumables

90° Duramax robotic torch assembly
20.1 cm (7.9") x 9.9 cm (3.9")

45° Duramax robotic torch assembly
19.6 cm (7.7") x 7.1 cm (2.8")

180° Duramax robotic torch assembly
19.1 cm (7.5") x 3.5 cm (1.375")

PARTS LIST

Power supply	Part number
Powermax65 with CPC and voltage divider – 200 – 600 V CSA	083266
Powermax65 with CPC, voltage divider, and serial port – 200 – 600 V CSA	083267
Powermax85 with CPC and voltage divider – 200 – 600 V CSA	087104
Powermax85 with CPC, voltage divider, and serial port – 200 – 600 V CSA	087105
Powermax105 with CPC and voltage divider – 200 – 600 V CSA	059371
Powermax105 with CPC, voltage divider, and serial port – 200 – 600 V CSA	059372
Powermax65 with CPC and voltage divider – 400 V CE	083268
Powermax65 with CPC, voltage divider, and serial port – 400 V CE	083269
Powermax85 with CPC and voltage divider – 400 V CE	087106
Powermax85 with CPC, voltage divider, and serial port – 400 V CE	087107
Powermax105 with CPC and voltage divider – 400 V CE	059411
Powermax105 with CPC, voltage divider, and serial port – 400 V CE	059412
Powermax105 with CPC and voltage divider – 230-400 V CE	059391
Powermax105 with CPC, voltage divider, and serial port – 230-400 V CE	059392
Powermax105 with CPC and voltage divider – 380 V CCC	059431
Powermax105 with CPC, voltage divider, and serial port – 380 V CCC	059432 or 059433*

*Denotes no power cord

Duramax robotic torch	Part number
90° torch, 7.6 m (25') lead	059465
45° torch, 7.6 m (25') lead	059464
180° torch, 7.6 m (25') lead	059466

Component options – work cables		Part number
Powermax65	Hand clamp, 7.6 m (25')	223125
	C-style clamp, 7.6 m (25')	223194
	Ring-terminal cable, 7.6 m (25')	223200
Powermax85	Hand clamp, 7.6 m (25')	223035
	C-style clamp, 7.6 m (25')	223203
	Ring-terminal cable, 7.6 m (25')	223209
Powermax105	Hand clamp, 7.6 m (25')	223254
	C-style clamp, 7.6 m (25')	223287
	Ring-terminal cable, 7.6 m (25')	223284

Component options – control cables	Part number
CNC cable, spade plug, no divided arc voltage	023206
CNC cable, spade plug, for divided arc voltage	228350
Serial communication cable, unterminated	223236

Accessories	Part number
Clamp assembly kit	228806
Teach tool kit	229456

Hypertherm®

Cut with confidence®

Clamp assembly kit Teach tool kit