

ΣF-12030/36050

Technical Specifications



SigmaF-12030/36050

3000 W UP TO 12000 W FIBER LASER

	Σ F-24040 (Example)	
Item	Specification	Unit
Cutting area	24000 x 4000	mm x mm
Maximum stroke X and Y axis	24010 x 4010	mm x mm
X- and Y-axis positioning accuracy	±0.10	mm
X- and Y-axis repositioning accuracy	±0.02	mm
Maximum positioning speed X- and Y-axis	100	m/min
Max. simultaneous X- and Y-axis positioning speed	140	m/min
Maximum acceleration X-axis	4	m/s2
Maximum acceleration Y-axis	10	m/s2
Maximum simultaneous X- and Y-axis acceleration	10.7	m/s2
Maximum Z-axis acceleration	20	m/s2
Maximum sheet weight	20000	kg
Basic machine main dimensions	26500 x 5000 x 2100	mm x mm x mm
Maximum pressure oxygen cutting gas	10	bar
Maximum pressure nitrogen cutting gas	25	bar
Maximum pressure third cutting gas	25	bar
Minimum compressed air inlet pressure	6	bar
Maximum compressed air consumption	5	Nl/s

ELECTRICAL INSTALLATION REQUIREMENTS

Item	Specification	Unit
Power supply	3 x 380	V
Net frequency	50	Hz

For more information contact sales.europe@prclaser.com

www.prclaser-europe.be

PRC LASER EUROPE NV • Industriepark De Bruwaan 89B • B-9700 Oudenaarde, Belgium • Phone (+32) 55 30 31 96 WB-PRC LASER SERVICE GmbH • Münchner Str. 15b • DE-85604 Zorneding, Germany • Phone (+49) 8106 306 26-0 PRC LASER CORPORATION • 4279-K Crosspoint Drive • Ladson, South Carolina 29456, USA • Phone (+1) 973 347 01 00



ΣF-12030/36050

Technical Specifications

- Large Bed Laser cutting machine, with cutting table lengths from 12m up to 36m (in steps of 3m), and table widths from 3m up to 5m (in steps of 0.5m).
 *Note: Technical specs in the table on page #1 are an example for a cutting
- Designed for large parts manufacturing: such as in the ship building industry, truck & bus manufacturing, large metal structures (e.g. for building construction, storage equipment, etc...) and other industries.
- Double-drive gantry flying optics laser cutting system.
 The lightweight gantry bridge has been optimized to have an extreme high stiffness and allows the machine to reach very high dynamics without compromising the accuracy of the parts over the entire span of the width of the working range.
- Heavy and rigid machine frame structure.

table size of 24 x 4 m.

 Optimized long X-axis motion and guiding system design, with box-beam support rails, manufactured separately, and combined together for final machining, to ensure high precision and accuracy, as well as ease of installation with the highest precision.

Further, high-precision guiding rails and racks are mounted and fixed on the welded box-beam support structure for a stable and reliable operation, taking the accuracy of the machine to the next level of precision, thereby creating the conditions for large-span bridge high-speed motion with the highest precision and accuracy.

- Designed for High Power Fiber laser beam delivery (3000W to 12000W), to cut from thin to thick.
- Double Fiber Laser Beam Protection around the laser cutting area (Moving Bridge), assuring eye-safe laser processing.

For more information contact sales.europe@prclaser.com

www.prclaser-europe.be