

TECHNICAL DATA ALPHA LASER ALV 100

Manufacturer:	ALPHA LASER GmbH Zeppelinstr. 1 D-82178 Puchheim
Dimensions: H x W x D	1200 mm x 650 mm x 995 mm
weight	approximately 200 kg
electrical connection	single phase 200V - 240V / 50 - 60 Hz / 10 A (wall socket) optionally: 115 V / 60 Hz / 16 A
Laser	
Laser crystal	Nd:YAG
Wave length	1,06 μm
Average power	100 W
pulse energy	75 J (Ws)
peak pulse power	9 kW
pulse duration	0.5 - 20 ms
pulse frequency	single pulse - 20 Hz
diameter of welding spot	0.2 - 2.0 mm, continuously variable
focus setting	integrated, motorized high-quality laser objective with long focal length for optimal welding characteristics
Optical Viewing System	Stereo-Microscope / model Leica 15 fold magnification / field of vision diameter 16 mm
Programming memory	8 groups, each with 16 parameter sets, in total 128 parameter sets are programmable
Pulse shaping	modulation of the intensity of the impulse
Operation / Footswitch	setting of all laser parameters is done with joysticks in the working chamber and 2 step foot control, optional: multifunctional-footswitch
Cooling air nozzle	in the working chamber
Cooling of the laser	integrated / water-air-heat exchanger. No external cooling water connection is necessary
Working Chamber	
Dimension W x D x H	590 mm x 450 mm x 550 mm
Max. load	50 kg
Movement of the work piece	motorized via Joystick
Positioning path	z: 250 mm x, y: 100 x 100 mm
Positioning speed	adjustable according to welding application
Protecting gas supply	double, can be locked and adjusted individually
Extraction	integrated / with a special mechanical filter class EU 13/K2
Application	compact welding laser for deposit welding

