

AL SERIES

FLEXIBLE FITTINGS

AL series lasers are extremely flexible when it comes to power, laser source and equipment. The AL can therefore be individually configured and optimally adapted to changing requirements.

AL series devices work excellently with AL-T workbenches.

However, you can also integrate the AL into your existing machine assembly. Nd:YAG laser sources are available with 75 to 500 watts of power. Your advantage: The laser power actually gets to the workpiece.

These compact laser welding devices can even perform very fine welding tasks. The cooling system is integrated into the laser on all devices. However, the AL 500 requires additional external cooling.



AL 300



AL 500

TECHNICAL DATA	AL 75	AL 120	AL 150	AL 200	AL 300	AL 500
LASER						
Laser type / wave length	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm	Nd:YAG, 1064 nm
Average power	75 W	120 W	150 W	200 W	300 W	500 W
Peak pulse power	7 kW	9 kW	9 kW	9 kW	9 kW	15 kW
Pulse energy	60 J	75 J	75 J	90 J	90 J	100 J
Pulse duration	0.5 - 20 ms					
Pulse frequency	-50 Hz		-100 Hz			
Operating mode	Pulsed					
Welding spot Ø	0.2 - 2.0 mm With micro welding function (optional) < 100 µm					0.2-2 / 0.5-2.5 / 1.0-3 mm
Focusing objective	150 mm, further according to lens data sheet					
Pulse shaping	Adjustability of power curve within a laser pulse					
Display and operation	Display with membrane keyboard Laser parameters can also be set using a multifunctional footswitch, Interface for triggering WINLaserNC software through an external PC					
OBSERVATION LENS	Leica microscope attachment with eyepieces for glasses wearers, 10x Optional 16x					
POWER SUPPLY UNIT						
W x D x H (basic component) in mm	820 x 400 x 910					1060 x 570 x 1000
Weight	120 kg					180 kg
LASER BEAM SOURCE						
With focusing unit (length x Ø)	900 x 120 mm			1100 x 120 mm		800 x 120 mm
Weight	approx. 18 kg			approx. 20 kg		approx. 25 kg
EXTERNAL CONNECTIONS						
Electrical connection	200-240 V / 50-60 Hz / 3 x 16 A		3 x 400 V / 50-60 Hz / 3 x 16 A			3 x 400 V / 50-60 Hz / 3 x 32 A
Extreme cooling					Prepared	Required
OPTIONS						
Turn and tilt objective						
Micro welding function (for AL 75-AL 300)						
Rotary axis module with chuck, tiltable, for horizontal to vertical rotation						
TV system for demonstrating and observing the welding process						
Ergo wedge						
LAfet® programmable laser wire feed system						