

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 Basic C workbenches.

However, you can also integrate the AL into your existing machine assembly. Nd:YAG laser sources are available with 100 to 300 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.



AL 200 with resonator



Detail view: AL 300

Technical data

	AL 100	AL 120	AL 150	AL 200	AL 300
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
Average power	100 W	120 W	150 W	200 W	300 W
Peak pulse power	7 kW	9 kW	9 kW	9 kW	9 kW
Pulse energy	80 J	90 J	90 J	90 J	90 J
Pulse duration	0,5-20 ms				
Pulse frequency	0-50 Hz			0-100 Hz	
Operating mode	Pulsed				
Welding spot Ø	0.2-2.0 mm With micro welding function (optional) < 100 µm				
Focusing objective	Selectable (straight objective or turn/tilt objective)				
Pulse shaping	Adjustability of power curve within a laser pulse				
Display and operation	Removable touch display (for laser and motion system)				
OBSERVATION LENS	Leica microscope attachment with eyepieces for glasses wearers 10×, optional 16×.				
POWER SUPPLY UNIT					
W × D × H (basic component)	450 × 850 × 860 mm				
Weight	135 kg		150 kg		
LASER BEAM SOURCE					
With focusing unit (length × Ø)	820 × 120 mm	990 × 120 mm		1100 × 120 mm	
Weight	approx. 20 kg	approx. 28 kg		approx. 30 kg	
EXTERNAL CONNECTIONS					
Electrical connection	200-240 V / 50-60 Hz / 16 A		3 × 400 V / 50-60 Hz / 3 × 16 A		
External cooling	optional				
OPTIONS	Turn and tilt objective Micro welding function Rotary axis module with chuck, tiltable, for horizontal to vertical rotation Camera system for demonstrating and observing the welding process Ergo wedge Programmable laser wire feed system AL-DV				



AL-T Basic C with AL 120-300: AL-IN



Removable touch-display