

# DP10F/DP20F/DP30F

## Basic systems 9 W/18 W/27W

The innovative pulsed fibre lasers offer unprecedented efficiency and compactness. The small dimensions of the laser head, deflector unit and supply unit make integration much easier in, for example, small machines. The high level of pulse-to-pulse stability during material processing is a further advantage of this new type of light source.

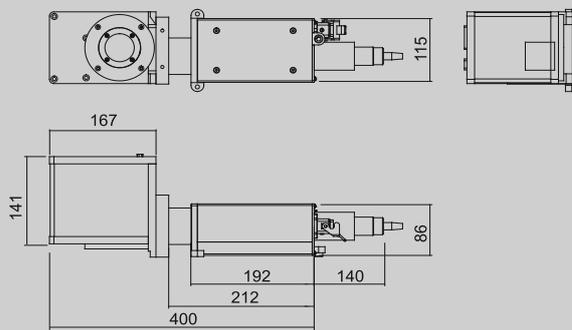
### Advantages

- Long working life of the laser diodes means little servicing
- Small compact air-cooled lasers
- Excellent laser beam quality
- Output power 9 W/18 W/27 W
- Single-phase mains connection

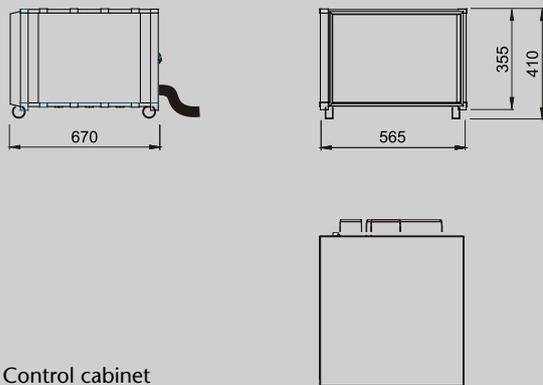


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## Basic systems 9 W/18 W/27W



Laser head with standard scan head and lens



Control cabinet

System	DP10F	DP20F	DP30F
Marking field	110 x 110 mm <sup>2</sup> (f=160 mm)		
Marking speed	up to 5000 mm/s up to 500 characters/s		
Line width	typical 50 µm		
<b>Laser</b>			
Laser type	Pulsed Yb Fiber Laser, 1060 -1070 nm, diode pumped		
Power (QS)	typ. 9 W (20 kHz)	typ. 18 W (20 kHz)	typ. 27 W (30 kHz)
Power stability	+/- 2.5 %		
Pulse frequency	20 - 100 kHz		30 - 100 kHz
Pulse energy	0,45 mJ (20 kHz)	0,90 mJ (20 kHz)	0,90 mJ (30 kHz)
Pulse width	110 ns (20 kHz)		110 ns (30 kHz)
Fiber cable length	4 m	2 m	
<b>Control</b>			
PC	CompactPCI-PC		
Operating system	MS Windows XP		
Laser control	FOBAGRAF with Import functions of plt/dwg/dxf/ai/jpg/tif/pcx/bmp ...		
Interfaces	serial, digital I/O, Ethernet, USB		
<b>Installation</b>			
Electrical	L/N/PE, AC 100 - 138 V, 187 - 240 V, adjustable, 50/60 Hz		
Power consumption	typical 300 W	typical 500 W	typical 600 W
Cooling system	Air		
Temperature (f=duty cycle)	15 - 40 °C (50 % f)	15 - 40 °C (50 % f)	15 - 35 °C (50 % f)
	15 - 40 °C (100 % f)	15 - 35 °C (100 % f)	15 - 32 °C (100 % f)
Humidity	90 % (up to max. 20 °C) 30 % (up to max. 40 °C) non-condensing		
Weight	Laser head approx. 5 kg <sup>1)</sup> OEM-Components approx. 30 kg Control cabinet approx. 45 kg <sup>2)</sup>		
Degree of protection	Laser head IP54 Control cabinet IP43		
Safety	Class IV Laser		
<b>Options</b>			
Pointer	Adjustment aid		
High-speed scan heads			
Changeable lens			

<sup>1)</sup> without F-Theta lens

<sup>2)</sup> with OEM-Components