



## FIBER LASERS

PowerLine F Series  
for Marking and Micro Processing



## POWERLINE F 20/30/50/100

### Lasers for industrial material processing

PowerLine F series lasers are innovative fiber lasers with different power levels. All lasers in this model series deliver 1 mJ of pulse energy with high power output levels across a wide frequency range. The average power of our fiber lasers can be continuously adjusted.

The PowerLine F 50 and F 100 lasers can be operated with pulse frequencies of up to 200 kHz. These lasers are thus particularly suited to high-speed marking, scribing and edge isolation as well as structuring and cutting applications.

#### YOUR BENEFITS

- Low overall operating costs
- A range of power levels
- Dual-head configurations possible to increase the size of the marking area
- High flexibility thanks to different options (camera, positioning axes, etc.)



## POWERLINE F 20 VARIA

### Laser marking for particularly high demands

Thanks to variable pulse widths, the PowerLine F 20 Varia delivers outstanding results in highly demanding applications (e.g. corrosion-free marking). The excellent beam quality ensures the highest levels of precision and exceptional marking results on a consistent basis.

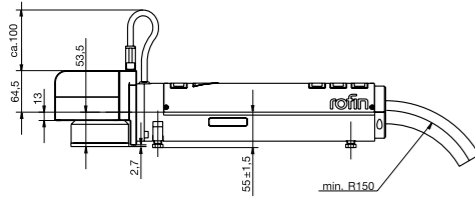
Not only can the PowerLine F 20 Varia deliver outstanding marking results at high speeds in applications where a lot of material (metal, for example) is removed; with its variable pulse widths, it can also handle delicate, high-precision work in high-speed applications.

#### PRODUCT FEATURES

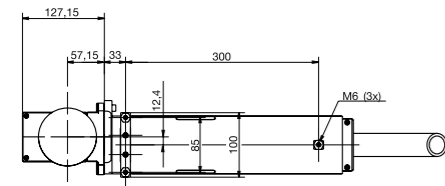
- High repetition rates from a few kHz to MHz
- Extremely flexible as a result of variable pulse widths
- Short rise time
- Dual-head configuration possible

# TECHNICAL DATA POWERLINE F 20, F 20 VARIA AND F 30

**Laser and galvo PowerLine F 20**

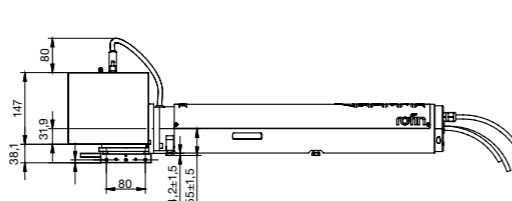


Side view

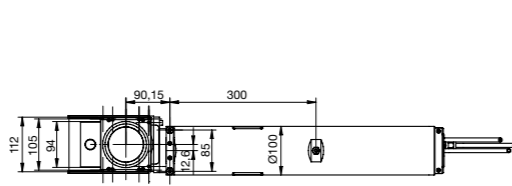


Bottom view

**Laser and galvo PowerLine F 20 Varia**

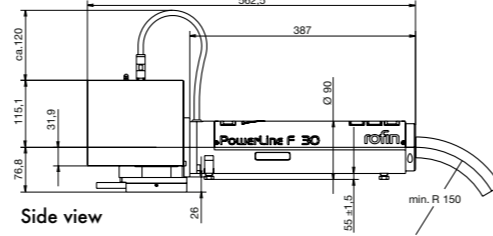


Side view

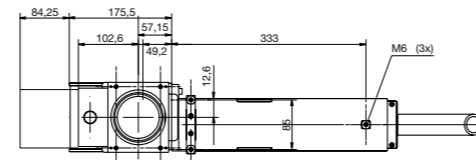


Bottom view

**Laser and galvo PowerLine F 30**

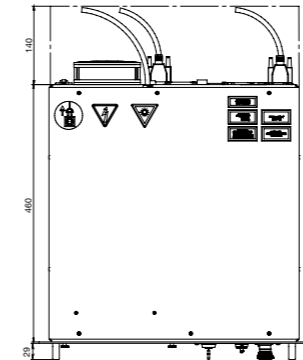


Side view

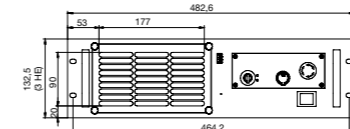


Bottom view

**Supply unit incl. PC PowerLine F 20 Varia**

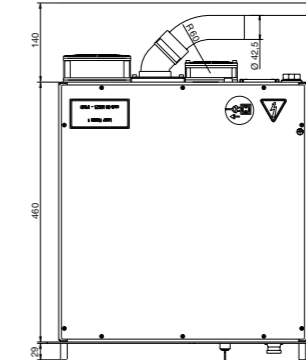


Top view

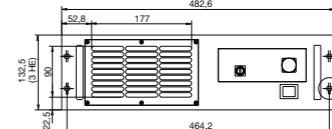


Front view

**Supply unit PowerLine F 20 / F 30**

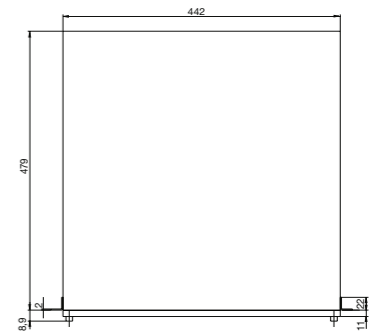


Top view

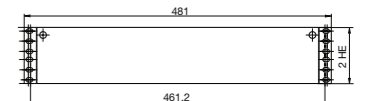


Front view

**PC PowerLine F 20 / F 30**



Top view



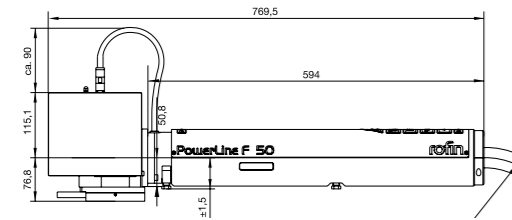
Front view

	<b>PowerLine F 20</b>	<b>PowerLine F 20 Varia</b>	<b>PowerLine F 30</b>
<b>Laser head</b>			
Wavelength (nm):	1064	1064	1064
Power class (W):	20	20	30
Pulse frequency (kHz):	20 - 100	2 - 1000	30 - 100
Pulse width (ns):	100 +/- (20 kHz)	4 - 200, adjustable	100 +/- 20 (30 kHz)
Dimensions (length, Ø, mm):	387, 90	594, 100	387, 90
Weight (kg):	approx. 5.5	approx. 7.5	approx. 5.7
Ingress protection:	IP 54	IP 54	IP 54
<b>Marking unit</b>			
Field size (mm):	120 x 120 (f=160 mm)*	120 x 120 (f=160 mm)*	120 x 120 (f=160 mm)*
Ingress protection:	IP 54	IP 54	IP 54
Weight (without objective) (kg):	approx. 3	approx. 3	approx. 3
<b>Supply unit (19") and PC</b>			
Supply unit dimensions (W x D x H, mm):	19" x 463 x 3 rack units	19" x 463 x 3 rack units	19" x 463 x 3 rack units
Supply unit weight (kg):	approx. 23.5	approx. 21	approx. 23.5
PC dimensions (W x D x H, mm):	19" x 479 x 2 rack units	PC integrated in supply unit	19" x 479 x 2 rack units
Software:	Windows Embedded 2009, Windows Embedded Standard 7	Windows Embedded 2009, Windows Embedded Standard 7	Windows Embedded 2009, Windows Embedded Standard 7
Power supply:	115 - 240 VAC, +/-10% VAC, 50/60 Hz	115 - 240 VAC, +/-10% VAC, 50/60 Hz	115 - 240 VAC, +/-10% VAC, 50/60 Hz
Power consumption supply unit incl. PC (W):	approx. 330	approx. 300	approx. 390
Ingress protection:	IP 20	IP 20	IP 20
Operating temperature (°C):	15 - 35	15 - 35	15 - 35
Air flow 19" supply unit (m³/h):	approx. 130	approx. 180	approx. 130
Length external cabling (m):	2.6	1.65	2.6

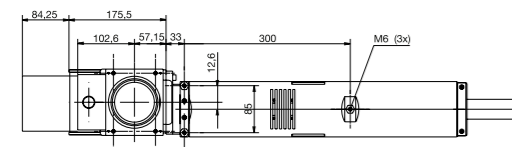
\* Other on request

## TECHNICAL DATA POWERLINE F 50 / F 100

### Laser and galvo PowerLine F 50

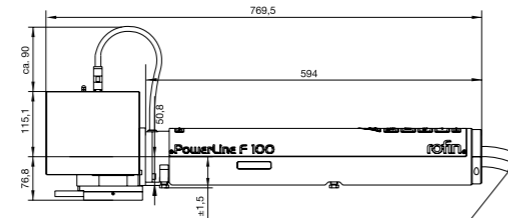


Side view

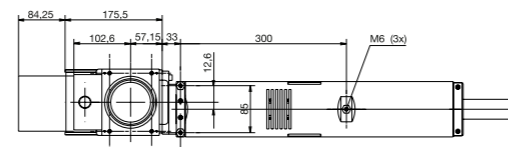


Bottom view

### Laser and galvo PowerLine F 100

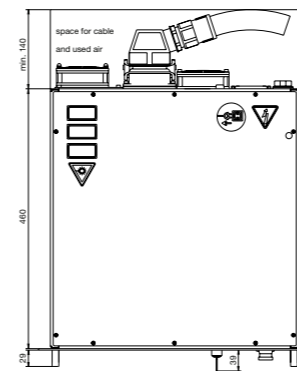


Side view

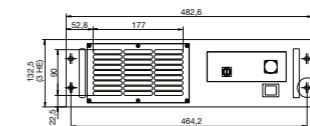


Bottom view

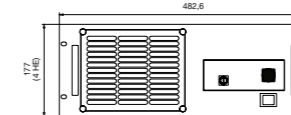
### Supply unit PowerLine F 50 / F 100



Top view

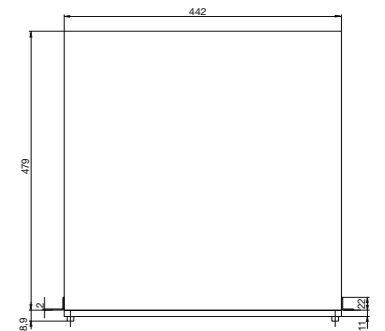


Front view PowerLine F 50

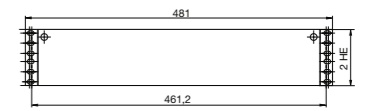


Front view PowerLine F 100

### PC PowerLine F 50 / F 100



Top view



Front view

Laser head	PowerLine F 50
Wavelength (nm):	1064
Power class (W):	50
Pulse frequency (kHz):	50 - 200
Pulse width (ns):	120 +/- 20 (50 kHz)
Dimensions (length, Ø, mm)	594, 100
Weight (kg):	approx. 8.6
Ingress protection:	IP 54

Marking unit	PowerLine F 50
Field size (mm):	120 x 120 (f=160 mm)*
Ingress protection:	IP 54
Weight (without objective) (kg):	approx. 3

Supply unit (19") and PC	PowerLine F 50
Supply unit dimensions (W x D x H, mm):	19" x 463 x 3 rack units
Supply unit weight (kg):	approx. 28
PC dimensions (W x D x H, mm):	19" x 479 x 2 rack units
Software:	Windows Embedded 2009, Windows Embedded Standard 7
Power supply:	115 - 240 VAC, +/-10% VAC, 50/60Hz
Power consumption supply unit incl. PC (W):	approx. 470
Ingress protection:	IP 20
Operating temperature (°C):	15 - 35
Air flow 19" supply unit (m³/h):	approx. 130
Length external cabling (m):	2.6

\* Other on request

Laser head	PowerLine F 100
Wavelength (nm):	1064
Power class (W):	100
Pulse frequency (kHz):	5.1 - 200
Pulse width (ns):	100 +/- 20 (100 kHz)
Dimensions (length, Ø, mm)	594, 100
Weight (kg):	approx. 8.6
Ingress protection:	IP 54

Marking unit	PowerLine F 100
Field size (mm):	120 x 120 (f=160 mm)*
Ingress protection:	IP 54
Weight (without objective) (kg):	approx. 3

Supply unit (19") and PC	PowerLine F 100
Supply unit dimensions (W x D x H, mm):	19" x 463 x 4 rack units
Supply unit weight (kg):	approx. 28
PC dimensions (W x D x H, mm):	19" x 479 x 2 rack units
Software:	Windows Embedded 2009, Windows Embedded Standard 7
Power supply:	115 - 240 VAC, +/-10% VAC, 50/60Hz
Power consumption supply unit incl. PC (W):	approx. 570
Ingress protection:	IP 20
Operating temperature (°C):	15 - 35
Air flow 19" supply unit (m³/h):	approx. 170
Length external cabling (m):	2.6

\* Other on request

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