

HD SERIES

Flexpoint® Industrial Laser Module



HIGH BEAM QUALITY UNDER HARSH CONDITIONS - THE RUGGEDIZED SOLUTION FOR ALIGNMENT AND POSITIONING TASKS

The FLEXPOINT® HD series offers a variation of beam shapes - elliptical and circular dots, line and cross-hair DOE - with green (520nm) or red (635nm) wavelength. The module is available with a M12 connector for easy electrical connection and an easy-to-use, toolless focusing mechanism. All FP-HD laser modules are IP67 certified and can be ordered with a wide range of accessories like power supply, mounts, a USB-M12 connector cable and mobile power pack. The module can be set to laser class 1 or 2 so that no laser safety eyewear is necessary. Higher output powers and laser classes are also available. The HD series is the right module for industrial positioning and alignment tasks in harsh conditions such as in the timber and metalworking industry.

FEATURES

- / Dot, line or cross-hair laser beam in bright red (635nm) or green (520nm)
- / IP67 certification - suitable for harsh conditions
- / Adjustable focus without tool - easy to use
- / Can be factory set to maximum laser class 2 (no laser safety eyewear necessary)
- / 5V and 24V Modulation available

APPLICATIONS

- / Positioning tasks
- / Industrial alignment
- / Timber industry
- / Metal industry
- / Positioning in CNC machines

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FLEXPOINT® INDUSTRIAL LASER MODULE

HD Series



SPECIFICATIONS

	Dot laser	Line laser	Crosshair laser
Model	FP-HD-D	FP-HD-L	FP-HD-DOE
Available beam shape	circular, elliptical		
Available fan angle at 520nm and 635nm [°]		10 to 90	2 to 60
Wavelength [nm]	520 or 635		
Output power [mW]	<1- 30		<1- 40
Operating voltage [VDC]	520 nm: 10 - 30 635 nm: 4.5 - 30		
Operating temperature [°C]	-20 to +50		
Focussing range [m]	0.1-10 (or fixed focus to defined working distance (factory set))		
Modulation (Option M)	Digital Modulation up to 10kHz active low (higher frequencies up to 1MHz on request) 0V = Laser on, 5V = Laser off 24V Modulation available: 24V = Laser off		
Modulation (Option MI)	Digital Modulation up to 10kHz active high (higher frequencies on request) 0V = Laser off, 5V = Laser on 24V Modulation available: 24V = Laser on (Ordering Code: MI24)		
Power adjustment (Option D/DI)	Dimmable By control wire 0-5V D: active low, 5V = Laser off DI: active high, 5V = Laser on		
Laser class	Output power can be factory set to laser class 1 or 2 (may change while focusing)		
Additional protections	IP67 according to DIN-EN 60529:2014-09 Reverse voltage protection		
Housing	Aluminium, red anodized, potential free		
Accessories	Mount, M12-USB-12V Connecting Cable, FP-PS-HD12-power-supply, FP-12V-M12 Mobile Power Pack, DOEs to create various beam pattern		
Connector	M12 connector, Binder series 713 Pin 1: VCC Pin 2: Option D/DI or M/MI/M24/MI24 Pin 3: GND Pin 4: D/DI when MD required (Dimmable in case digital Modulation and Dimmable are both needed otherwise not connected) Option: 2m cable with open leads instead of M12 connector		

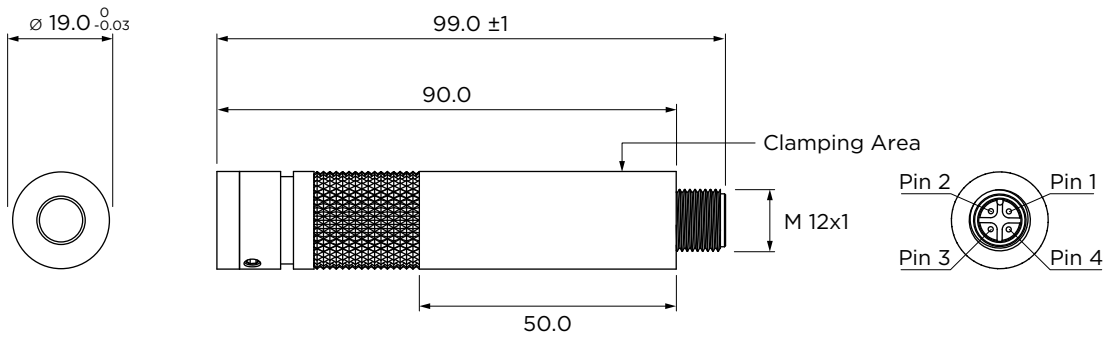
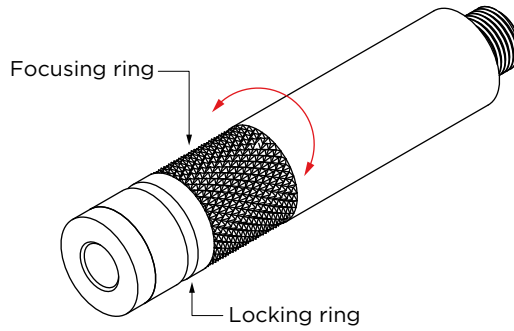
FLEXPOINT® INDUSTRIAL LASER MODULE

HD Series



TECHNICAL DRAWING

HD series with dot shaped beam, focusable



FP-HD-D-F

Units: mm

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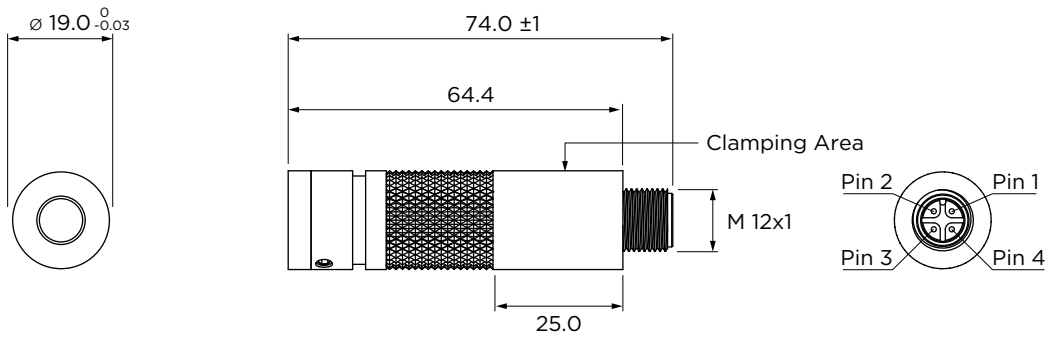
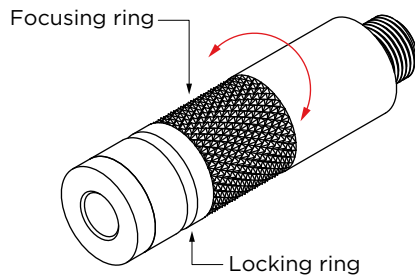
FLEXPOINT® INDUSTRIAL LASER MODULE

HD Series



TECHNICAL DRAWING

HD series with line shaped beam or DOE, focusable



FP-HD-L-F, FP-HD-DOE-F

Units: mm

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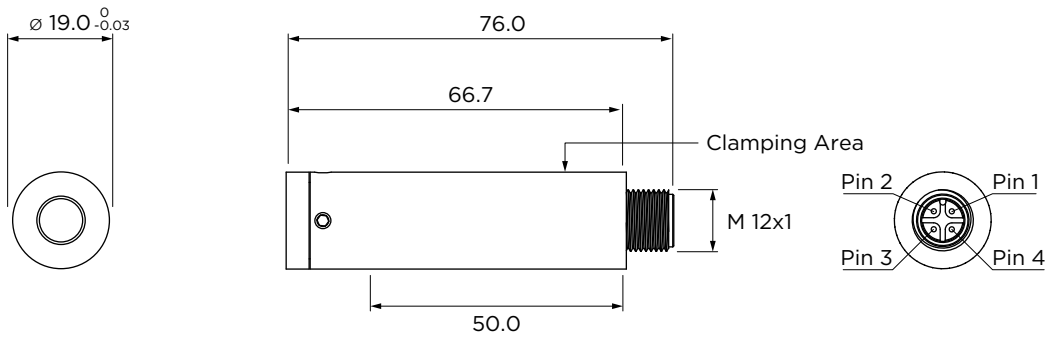
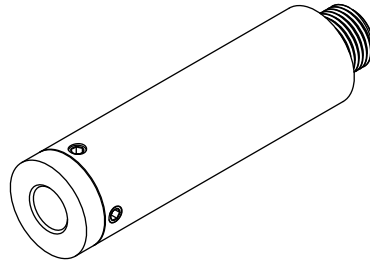
FLEXPOINT® INDUSTRIAL LASER MODULE

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TECHNICAL DRAWING

HD series, fixed focus (preset at factory)



FP-HD-FIX

Units: mm

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ORDERING CODE

	Series	Wave-length [nm]	Output Power [mW]	Power Options	Beam Specifications	Focus	Options
FP-HD	- X	- X	- X	- X	- X	- X	- X
	D L DOE	520 635	1-30 (D, L) 1-40 (DOE)	D or DI M or MI M24 or MI24	Beam Profile for D: C E Fan Angle for L [°] 10 to 90 DOE Type for DOE see datasheet	F FIXxxx C	Spot size other

Foot Note / Abbreviations

D/DI = Dimmable by third wire (Power Adjustment, 0-5V) M = Digital Modulation (0V = Laser on, 5V = Laser off)
 MI = Digital Modulation inverted (0V = Laser off, 5V = Laser on) M24/MI24 = 24V Modulation active low or active high
 F = Focusable FIXxxx = Focused to xxx mm, cannot be changed C = Collimated
 C = Circular E = Elliptical

Example: FP-HD-D-635-30M-E-F

PRODUCT CHANGES

LASER COMPONENTS reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application.

ORDERING INFORMATION

Products can be ordered directly from LASER COMPONENTS or its representatives.
 For a complete listing of representatives, visit our website at www.lasercomponents.com
 Custom designed products are available on request.