

Industrial Laser Modules ILM12F / ILM12IP Series

Now with waterproof housing

The ILM12 laser modules were specifically developed for industrial positioning and alignment applications. Thanks to their M12x1 external thread, these lasers, which come in industrial housings made of stainless steel, are easy to integrate. All ILM12F lasers come with an adjustable focus to generate a crisp and thin line at the desired working distance.

All ILM12IP lasers have an IP67 waterproof housing. These laser modules are well prepared for outdoor applications. They have a collimated or customer specific fix focused beam.

The ILM12F laser modules project either dots, lines, or cross hairs at 520 nm (green) or 635nm (bright red).

Characteristics

- Dot laser
- Line laser
- Cross-hair laser
- 520 nm (green) or 635 nm (bright red)
- 4.5/10 – 30 VDC supply voltage
- M12 industrial housing and connector
- Lasers with laser class 1, 2 available (no laser safety eyewear necessary)

Applications

- Positioning tasks
- Timber industry
- Metal industry
- Textile industry
- Image processing
- Automotive industry



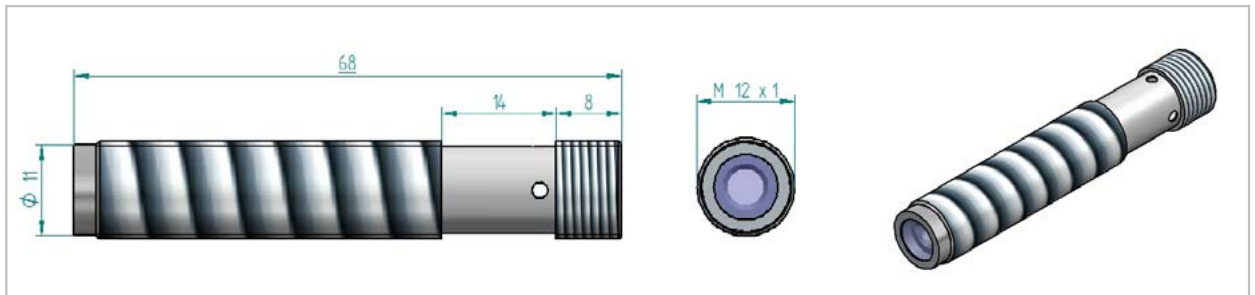
ILM12F
Connector and cable not included



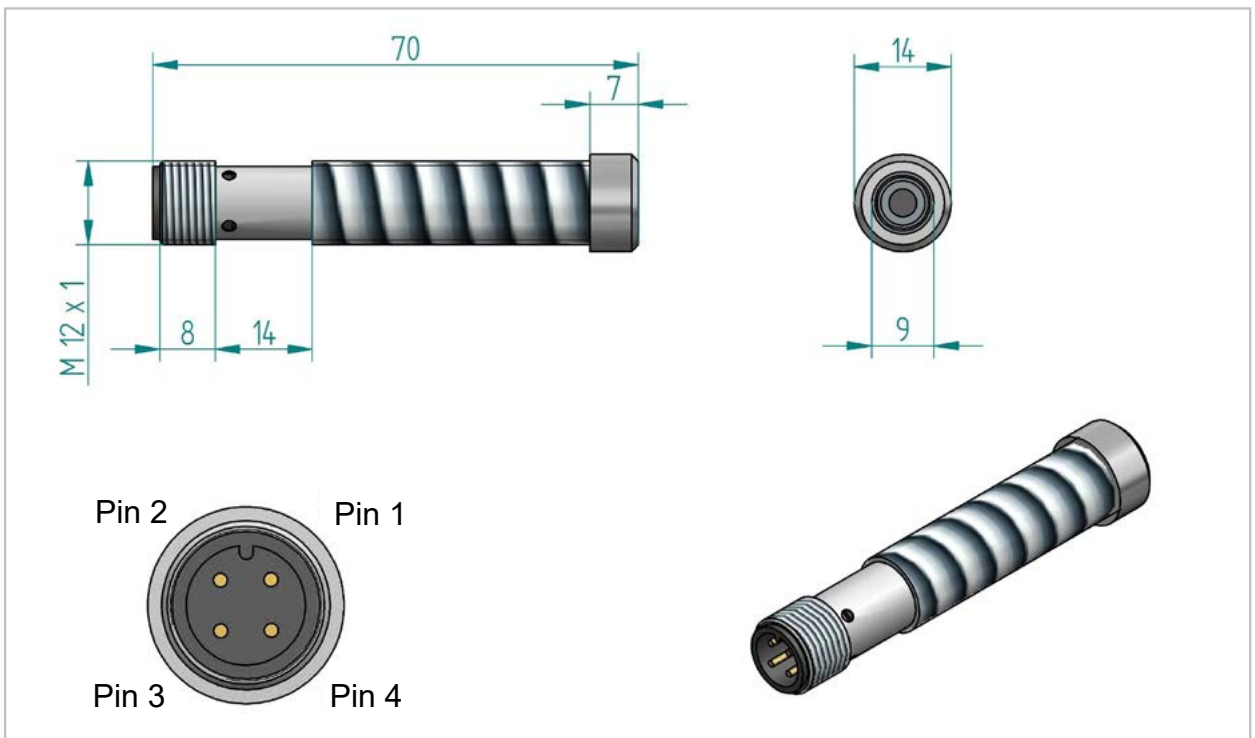
ILM12IP

IP67 add-on for ILM12F laser modules

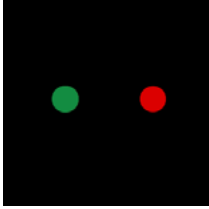

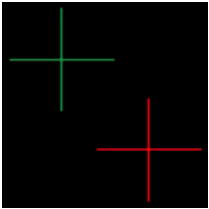
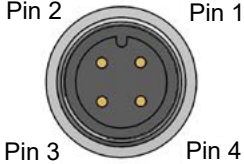
- For screwing onto the ILM12F module
- With front glass to protect the optics from dust and moisture
- IP67 rating when thread is potted (at user's own risk, without certification)



ILM12F

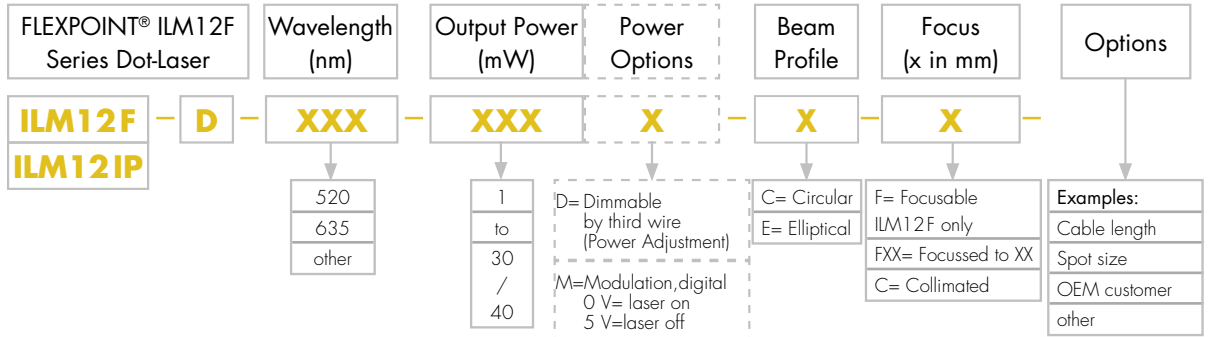


ILM12IP

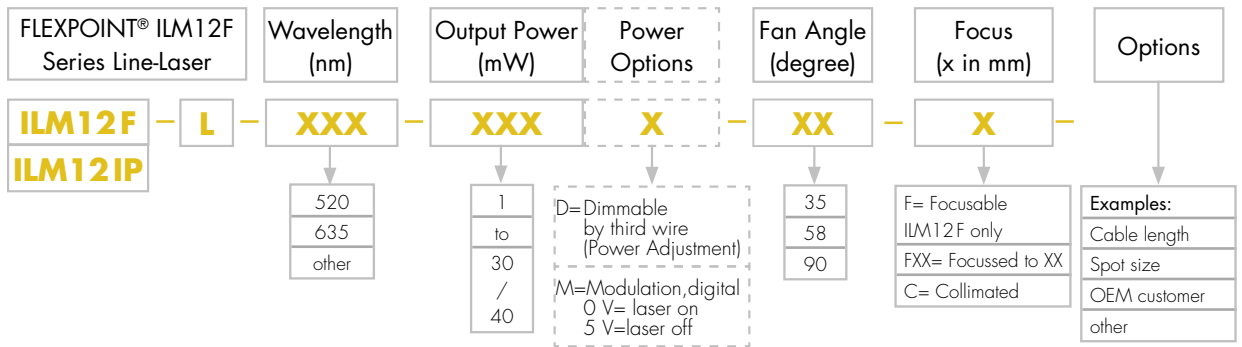
	Dot laser	Line laser	Crosshair laser
Model	ILM12F-D ILM12IP-D	ILM12F-L ILM12IP-L	ILM12F-DOE ILM12IP-DOE
			
Wavelength	520 nm (bright green) / 635 nm (bright red)		
Output power	520 nm: <1 - 30 mW / 635 nm: <1 - 40 mW		
Modulation (option)	digital, up to 10 kHz (active low, higher frequencies on request)		
Power adjustment (option)	by control voltage 0 – 5 V (active low)		
Focussing range	0.1 – 10 m (ILM12F) / ILM12IP: collimated or fix focus		
Beam pointing error	< 5 mrad		
Pointing stability	10 µrad/°C		
Operating voltage	10 – 30 VDC (520 nm) / 4.5 – 30 VDC (635 nm)		
Operating temperature	0° up to 50 °C		
Storage temperature	-10° up to +60 °C		
Housing	stainless steel with thread M12x1, potential free		
Dimensions	ILM12F: 68 mm x M12 / ILM12IP: 70 mm x M12		
Protection class	IP 54 (ILM12F) / IP67* (ILM12IP)		
Connector	 <p>Binder series 713 Pin 1: VCC Pin 2: Option M/MI or D/DI if ordered one of them, option D/DI if ordered both Pin 3: GND Pin 4: Option M/MI if ordered both modulation options Option: 2 m cable instead of M12 connector</p>		
Accessories	Connector with 2/5/10 m cable, universal power supply, battery pack		

*according to DIN-EN 60529:2014-09

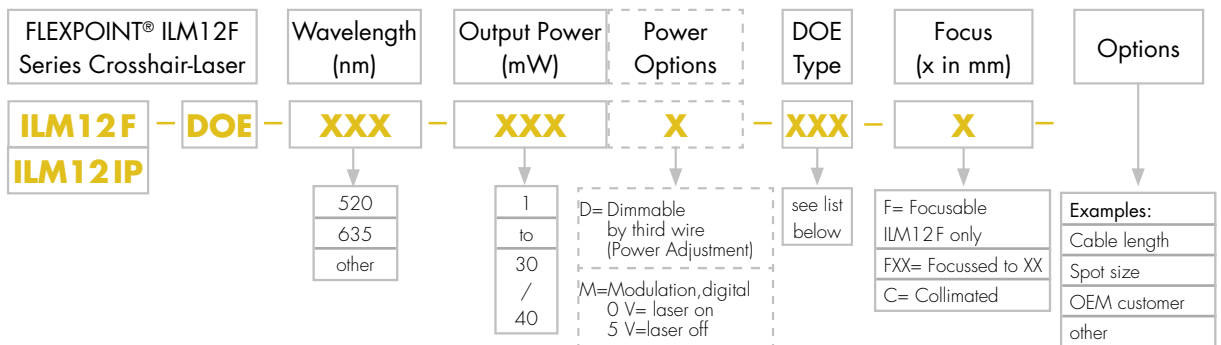
Ordering Code FLEXPPOINT® ILM12F Series Dot Lasers



Ordering Code FLEXPPOINT® ILM12F Series Line Lasers

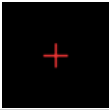



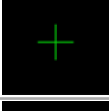



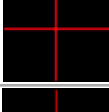
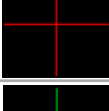



Ordering Code FLEXPPOINT® ILM12F Series Crosshair Lasers



Crosshair



DOE Item #	Description	Pattern Size @ 100 mm Distance		Image
		a	Pattern Angles (@ 635 nm) α	
DOE-214	Cross - 2 635 nm	3.5 mm	2°	
DOE-205	Cross - 5 635 nm	9 mm	5°	
DOE-239	Cross - 5 520 nm	10.5 mm	5°	
DOE-218	Cross - 15 635 nm	26 mm	15°	
DOE-289	Cross - 15 520 nm	26.4 mm	15°	
DOE-247	Cross - 25 635 nm	44 mm	25°	
DOE-212	Cross - 25 520 nm	45.1 mm	25°	
DOE-249	Cross - 45 635 nm	83 mm	45°	
DOE-280	Cross - 60 635 nm	116 mm	60°	
DOE-299	Cross - 75 650 nm	153.5 mm	75°	
DOE-342	Cross - 52 520 nm	97.6 mm	52°	

Accessories for ILM12F Lasers

FP-PS-HD-12 Heavy Duty Power Supply

This Power Supply can be used worldwide with all types of the ILM12 series. It is not to be used with other equipment than specified.

FP-PS-HD-12 Power Supply

Content of delivery	Power supply, 4x plug adapter (Europe, UK, USA, Japan)
Operating voltage	100 – 240 VAC / 50 – 60 Hz
Output voltage	12 VDC
Output current	10 mA – 1200 mA
Cable length	1.8 m, AWG 18
Connector	M12 female (Pin 1: + / Pin 3: GND)
Operating temperature	0 °C to + 40 °C



LT-PLM-AP-10: Battery pack for mobile applications

This battery pack power supply can be used in mobile applications with all types of the ILM12 series. It is not to be used with other equipment than specified. The battery pack and the Charger are designed for indoor use only.

LT-PLM-AP-10 battery pack

Content of delivery	battery pack, charger, M12 cable
Input voltage	100 – 240 VAC / 50 – 60 Hz
Output voltage	10 VDC
Capacity	800 mAh
Battery technology	NiMH
Operating temperature	-20 °C to + 60 °C
Connector	M12 (Pin 1: + / Pin 3: GND)
Cable length	1.5 m
Dimensions	80 mm x 75 mm x 30 mm



M12 Connecting Cables

Available lengths: 2 m/5 m/10 m

Cordset, single-ended, M12 female connector with self-locking threaded joint and molded cable