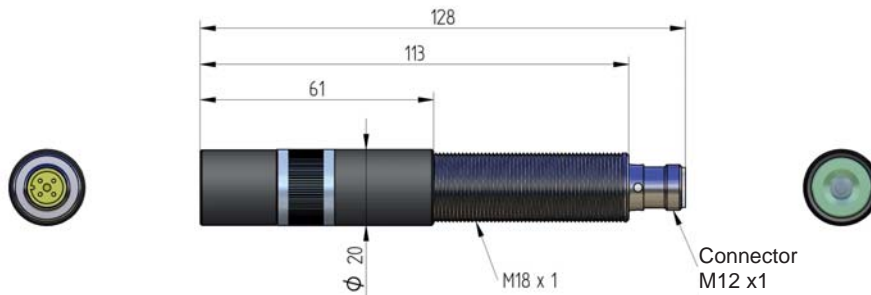


ZM18-H

Vision, Analysis & Measurement

Z-LASER

Brand new product for high-end applications



Features

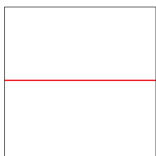
- 5-30VDC operation
- Power up to 200mW
- Red, infrared, blue laser wavelengths available
- Gaussian/uniform line optics and various DOE available
- Simple, external hand focusing mechanism
- Analogue and concurrent TTL modulation up to 20MHz
- IP67 rated, fully waterproof
- APC mode with current limit or constant current
- Logging of operating parameters like temperature, operation hours, ...
- Built-in micro controller and serial interface
- Thread mounted for simple and versatile mounting
- LED signal indicates laser operation and any malfunction
- Over voltage protection with surge/spike protection
- Reverse polarity protection

Applications

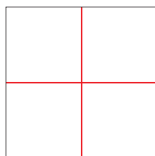
- Science
- Bio photonics
- Optical data transmission
- High-End adjusting and targeting system
- Lab application
- Machine Vision
- Machine construction
- Medical science
- Automotive industry
- 3D Measurement
- Metrology
- Spectroscopy
- Alignment / positioning

Some available Optics

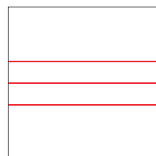
Line



Cross



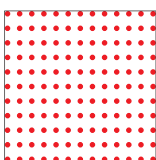
Parallel lines



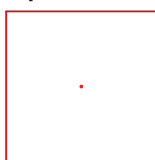
Dotted line



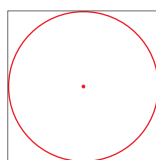
Dot matrix



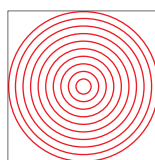
Square



Circle



10 Circles



1: voltage supply +
2: TTL mod.
3: voltage supply -
4: Ana mod.

Mounting

H8-M18



Specifications

Optical

Optical power stability	3% over operating temperature range
Wavelength vs. temperature	Typ. 0,15 - 0,30nm / °C depending on wavelength
Range of focus	100mm up to ∞
Divergence of beam (FWHM)	< 1mrad (with dot optic)
Pointing stability	< 15μrad / °C

Optics

Line (Gaussian profile)	60°, 90°, symmetrical or asymmetrical
Line (Non Gaussian profile)	10°, 20°, 30°, 45°, 60°, 90°
Point	elliptical or circular
DOE	see examples on front side

Standard wavelengths and power (other on request)

405nm, 440nm, 635nm, 640nm, 643nm, 660nm 785nm, 808nm, 850nm, 980nm	up to 200mW depending on wavelengths
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Electrical

Supply voltage	5-30VDC
Mode of operation	APC with current limiting or CC
Modulation	APC: TTL up to 1MHz; sinusoidal waves up to 5 MHz ACC: up to 20 MHz (diode depending)
Protection	reverse polarity and transient/ESD, over temperature protection and LED pre-failure indicator
Connection	M12 plug, 4-pin

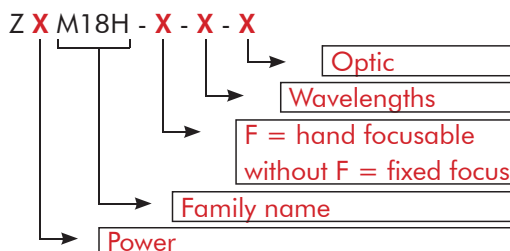
Mechanical

Dimensions	128mm x Ø 20mm
Housing	Laser: M18 industry housing, chromed brass Optic head: anodised aluminium
Protection category	IP 67
Weight	ca. 87g
Electrical isolation	potential free housing

Environmental conditions

Case temperature	-10°C up to +50°C (heat dissipation e.g. with mounting H8-M18)
Storage temperature	-10°C up to +80°C
Humidity	Max. 90%, non condensing
MTTF at 25°C	> 30.000h (635nm - 785nm) , > 5.000h (405, 440nm) > 100.000h (808nm - 980nm)

Order code:



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