

High-end laser module, various options and customization

ZM18H-F blue



Features:

- 5-30VDC operation with reverse polarity protection
- Blue wavelengths with optical output up to 80mW
- Gaussian/uniform line optics and DOE projections - wide range of optics available
- Simple, external hand focusing mechanism
- Analogue and concurrent TTL modulation up to 1MHz
- IP67 rated, fully water proof
- Integrated micro controller and serial interface
- M18 thread mounted for simple and versatile mounting
- Over voltage protection with surge/spike protection
- Quick installation by M18 thread e.g. for Sensor mountings
- LED signal indicates laser operation and any malfunction
- Over voltage protection with surge/spike protection
- Potential-free housing for trouble-free installation

Applications:

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

Techn. Drawing:

Focusable version

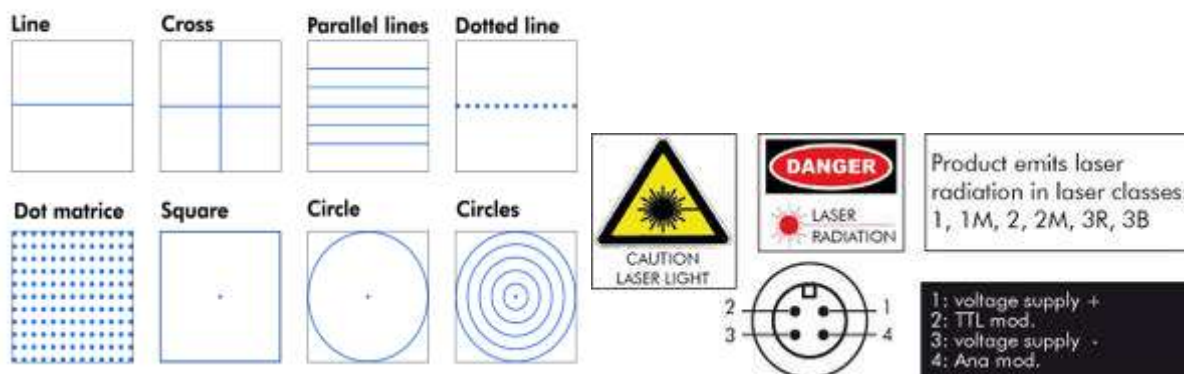
Fixed focus version



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Some available Optics:



Special Mountings: H6-M18 , H8-M18

Optical

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	< 15 μ rad / °C

Optics

Line (Gaussian profile)	3°, 5°, 10°, 15°, 20°, 30°, 90°, symmetrical or asymmetrical
Linie (homogeneous intensity profile)	10°, 20°, 30°, 45°, 60°, 75°, 90°
Point	elliptical or circular
DOE	see examples on front side

Standard wavelengths and power (other on request)

404nm, 450nm	up to 80mW optical power depending on wavelengths
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Electrical

Supply voltage	5-30VDC
Mode of operation	ACC
Modulation	ACC: up to 1MHz (diode depending)
Protection	Protection reverse polarity and transient/ESD, over temperature protection and LED pre-failure indicator
Connection	M12 plug, 4-pin

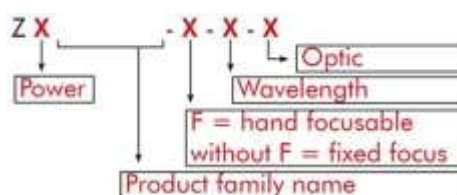
Mechanical

Dimensions	138mm x Ø 20mm (focusable version)
Housing	Laser: M18 industry housing, gold-plated brass Optic head: anodised aluminium
Protection category	IP 67
Weight	ca. 102g (focusable version)
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	> 5.000h (404, 450nm)

Order code:



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M18H



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