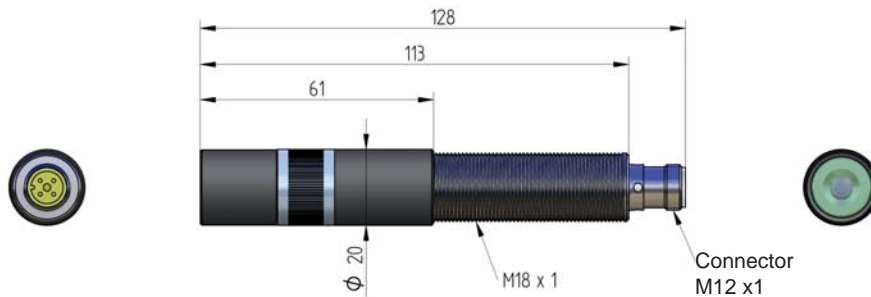


# ZM18-S

## Analysis / Measurement

# Z-LASER

Brand new product for high-end applications



### Features

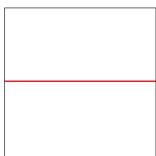
- 9-30VDC operation with reverse polarity protection
- Power up to 200mW
- Red, infrared wavelengths available
- Gaussian/uniform line optics and various DOE available
- Simple, external hand focusing mechanism
- Analogue intensity control (up to 32 steps) with digital TTL Trigger up to 1 KHz
- IP67 rated, fully waterproof
- Thread mounted for simple and versatile mounting
- LED laser operation and pre-failure indicator
- Over voltage protection with surge/spike protection
- Quick installation by M18 thread for Sensor mounting or **Z-LASER** standard mounting H8-M18
- Wide range of diodes and optics
- Potential-free housing for trouble-free installation

### Applications

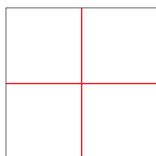
- Positioning
- Textile industry
- Food industry
- Medical science
- Automotive industry
- Science & Research
- Machine Vision
- Metrology
- 3D Measurement

### Some available Optics

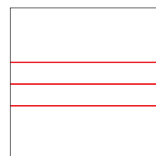
Line



Cross



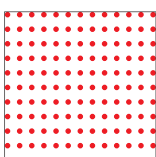
Parallel lines



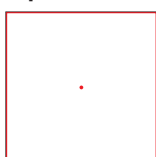
Dotted line



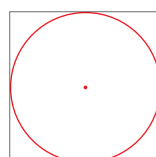
Dot matrix



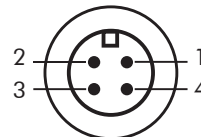
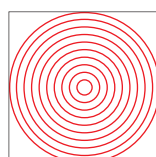
Square



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. 0,20 - 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)

635nm, 640nm, 643nm, 808nm, 980nm	up to 200mW depending on wavelengths
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## Electrical

Supply voltage	9-30VDC
Mode of operation	APC with current limiting
Modulation	Analogue intensity control (up to 32 steps) and digital TTL Trigger up to 1 kHz
Protection	reverse polarity and transient/ESD, over temperature protection and LED pre-failure indicator
Connection	M12 plug, 4-pin

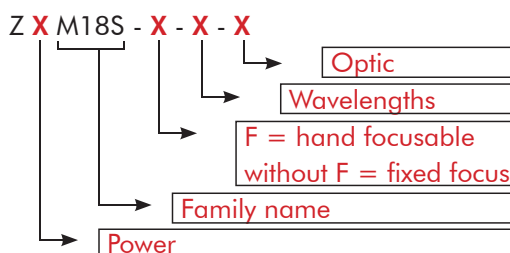
## Mechanical

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 (635 - 643nm), > 100.000h (808 - 980nm)

## Order code:



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