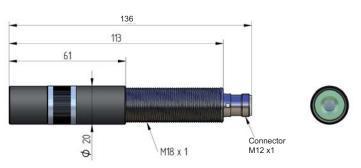
# Z1M18H-F-635-pe

New product for high-end applications, science, vision, analysis, measurement, medical science, bio photonics, alignment & more







#### **Features**

- Built-in micro controller and serial interface
- Analogue and concurrent TTL modulation up to 20MHz
- Logging of operating parameters like temperature, operation hours, ...
- · Simple, external hand focusing mechanism
- Thread mounted for simple and versatile mounting
- LED signal indicates laser operation and any malfunction
- Over voltage protection with surge/spike protection

#### Main characteristics

Wavelength / Optic	635nm / Elliptical point
Power / Laser class	1mW / Laser class 2 (EN 60825-1:2007)

#### **Optical specifications**

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)	< 1 mrad (with dot optic)
Pointing stability	< 15µrad / °C

### **Electrical specifications**

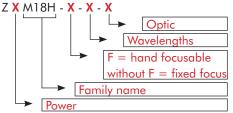
Supply voltage	5-30VDC
Modulation	APC: TTL up to 1MHz; sinusoidal waves up to 5 MHz
Protection	reverse polarity and transient/ESD, over temperature protection and LED pre-failure indicator
Connection	M12 plug, 4-pin

## **Mechanical specifications**

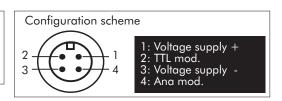
Dimensions	136mm x Ø 20mm (focusable version)
Housing	Laser: M18 industry housing, gold-plated brass Optic head: anodised aluminium
Protection category	IP 67, fully waterproof
Weight	ca. 87g
Electrical isolation	potential-free housing

### **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)







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