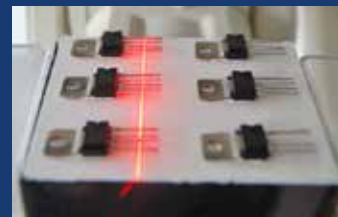


# Z-LASER

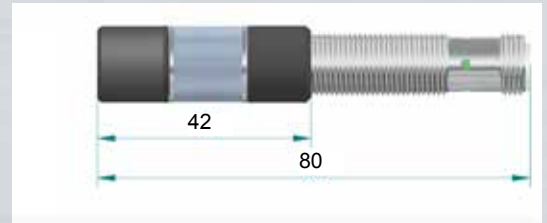
## ZM12DM

- » Red or infrared wavelengths available
- » Optical output power up to 80mW
- » 5 to 30VDC supply voltage with reverse polarity protection
- » Digital TTL Trigger up to 100kHz
- » Simple, external hand focusing mechanism
- » Compact M12 thread for various installations and mounting
- » Overvoltage protection with surge/spike protection
- » Potential-free housing

Machine Vision  
3D Measurement  
Metrology  
Automotive  
Wood  
Food & Beverage  
Medical  
Metal  
Stone



# ZM12DM



Mechanical specifications	
Dimensions	80mm x Ø 15mm (focusable version) / 76mm x Ø 15mm (fixed focus)
Housing	M12 industry housing, chromed brass Optic head: Anodised aluminium
IP rating	IP67
Electrical isolation	Potential-free housing
Connection	M12 plug, 4-pin
Electrical specifications	
Supply voltage	5 to 30VDC
Operation mode	APC
Modulation	TTL up to 100kHz
Protection	Reverse polarity and transient protection / ESD, over temperature protection and LED pre-failure indicator
Optical specifications	
Wavelength	635nm, 640nm, 643nm, 660nm, 785nm, 830nm, 850nm
Output power	Up to 80mW
Wavelength vs. temperature	Typ. 0.20 - 0.30nm / °C depending on wavelength
Power stability	±3% over operating temperature range
Focus range	100mm up to 10.000mm
Pointing stability	< 10µrad / °C
Boresight error	< ± 10mrad
Line (Gaussian profile)	5°, 10°, 15°, 20°, 30°, 90°, symmetrical
Line (homogeneous intensity profile)	10°, 20°, 30°, 40°, 45°, 60°
Dot	Elliptical
Environmental conditions	
Case temperature	-10°C up to +50°C (heat dissipation e.g. with mounting H8-M12)
Storage temperature	-10°C up to +70°C
Humidity	Max. 90%, non-condensing
MTTF at 25°C	> 30,000h (635nm to 660nm), > 100,000h (785nm to 850nm)

CE CE-Conformity according to the directives 2004/108/EC and 73/23/ECC excluding connection type.

Accessories	Gaussian profile	Optics	
	<th>Homogeneous profile</th> <td></td>	Homogeneous profile	
		<th>Order code</th>	Order code
		<p>Z X M12DM - X - X - X</p> <p>Power   Wavelength   Optic</p> <p>F = hand focusable without F = fixed focus</p> <p>Product family name</p>	