Z-LASER

Intelligent Solutions in Light

ZM18DM53

- » Red or infrared wavelengths
- » Optical output power up to 120mW / 200mW IR
- » Gaussian/uniform line, dot optic, and various DOE optics
- » Integrated cable for 4 to 6VDC supply voltage
- » Digital TTL Trigger up to 100kHz
- » M18 threaded body for simple and versatile mounting
- » Integrated microcontroller

Machine Vision

3D Measurement

Metrology

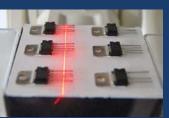
Medical





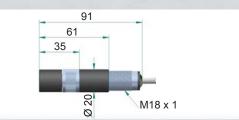








ZM18DM53



Line grid

Dot matrix

| Mechanical specifications | |
|--------------------------------------|--|
| Dimensions | 91mm x Ø 20mm (focusable version) / 76mm x Ø 20mm (fixed focus) |
| Housing | M18 industry housing, chromed brass Optic head: anodised aluminium |
| IP rating | IP67 |
| Electrical isolation | Potential-free housing |
| Connection | 2000mm cable, 3-wire |
| Electrical specifications | |
| Supply voltage | 4 to 6VDC |
| Operation mode | APC |
| Modulation | Up to 100kHz |
| Protection | Reverse polarity and transient protection / ESD, over temperature protection and LED pre-failure indicator |
| Optical specifications | |
| Wavelength | 640nm, 660nm, 785nm, 808nm, 830nm |
| Output power | Up to 120mW / up to 200mW IR |
| Wavelength vs. temperature | Typ. 0.20 - 0.30nm / °C depending on wavelength |
| Power stability | ±3% over operating temperature range |
| Focus range | 100mm up ∞ |
| Pointing stability | < 15µrad / °C |
| Line (Gaussian profile) | 3°, 5°, 10°, 15°, 20°, 30°, 90° |
| Line (homogeneous intensity profile) | 10°, 20°, 30°, 45°, 60°, 75°, 90° |
| Dot | Elliptical or circular |
| Environmental conditions | |
| Case temperature | -10°C up to +50°C (heat dissipation e.g. with mounting H8-M18) |
| Storage temperature | -40°C up to +80°C |
| Humidity | Max. 90%, non-condensing |
| MTTF at 25°C | > 30,000h (635nm to 660nm), > 100,000h (808nm to 980nm) |

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

