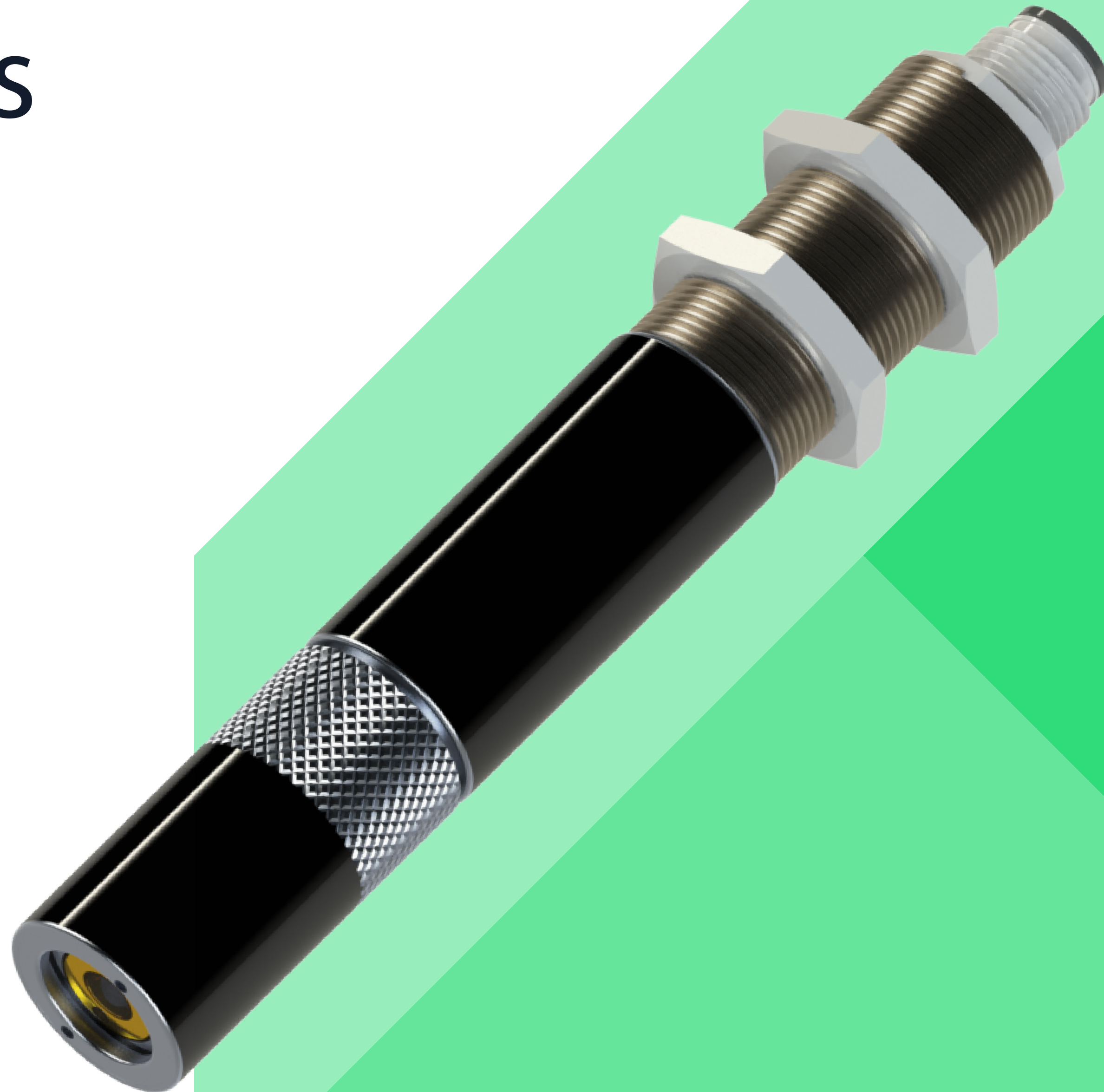
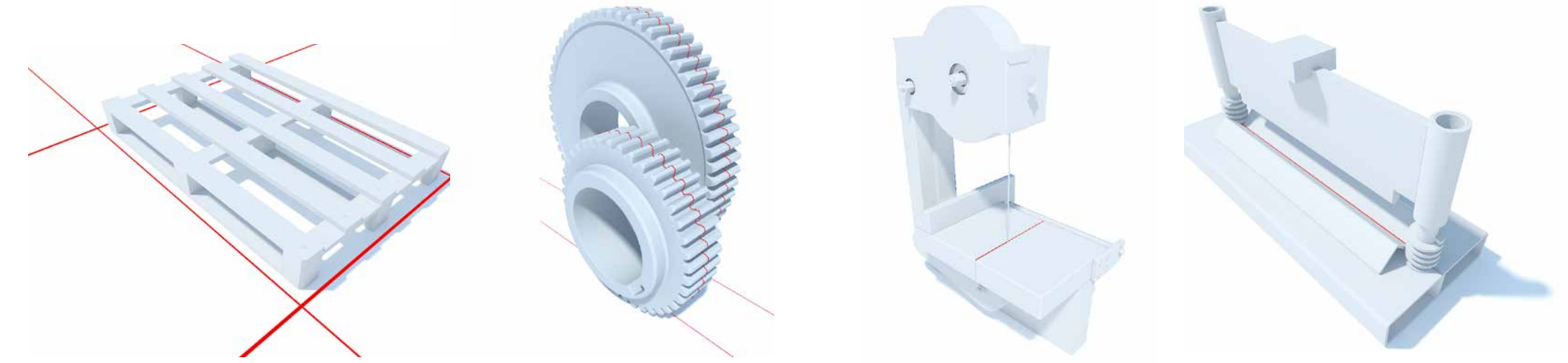


Delta VX Series

product datasheet



IP 67 | 9-24 VDC | Diode Technology | Digital Modulation | Point Line Cross



Definition of Safety Areas

3D Measurements

High-precision Positioning and Alignment of Details

Delta VX Series

The lasers of the Delta VX series are intended for meticulous positioning in applications for part processing. This laser series is equipped with green and red wavelengths and laser head sizes Ø20mm with M18x1 thread. The laser electronics are available in different versions depending on the requirements. The Delta VX series is offered with a digital modulation of up to 5 kHz and temperature protection against overheating. An easy-to-use focusing mechanics, optical output power up to 170mW, and IP67 water and dust protection are standard features of this product series. The power supply voltage of the laser is from 9V DC to 24V DC. The consumption depends on the power of the laser. As standard, a 2.5m long cable is attached to the laser but it can be extended to 5m / 10m / 15m.

SKU: / Order code

Model	Wavelength	Optical Power	Projection Profile	Projection Optics	Focus
DL-VX	XXX	XXX	XX	XX	XX
*Example: SKU: DL - VX - 520 - 10 - B2 - PL(60°) - MF					

Overview

- Thread M18 x 1
- Solid industrial enclosure
- Degree of protection: IP67
- Wavelength: 505nm - 640nm
- Power: up to 170mW
- Digital Modulation
- Thin & bright line
- Manual or Fixed focus
- Precision optics
- Temperature protection
- Electrical isolated

Application

- Alignment and positioning
- 3D contour mapping
- Process control
- Machine vision
- Measuring systems
- High-speed industrial inspection

Technical specifications

Wavelength (nm)	505	515	520				635	638	445
Optical power (mW)	≤35	≤35	≤10	≤20	≤50	≤80, ≤100	≤5, ≤35	≤100, ≤170	≤100
Laser class	2 ~ 2M	2 ~ 2M	1M ~ 2	2	2M ~ 3R	3R	2 ~ 2M	2M ~ 3R	2M ~ 3R
Technology	Diode	Diode	Diode	Diode	Diode	Diode	Diode	Diode	Diode
Operating temperature	-10° +60°	-10° +60°	-20° +60°	-20° +60°	-20° +60°	-10° +60°	-20° +60°	-20° +60°	-10° + 60°
Storage temperature	-40° +85°	-40° +85°	-40° +85°	-40° +85°	-40° +85°	-40° +85°	-40° +85°	-40° +85°	-20° +85°

Electrical specifications

Input voltage	9-24V DC	9-24V DC	9-24V DC	9-24V DC	9-24V DC	9-24V DC	9-24V DC	9-24V DC	9-24V DC
Operating current	60mA	75mA	50mA	60mA	120mA	170mA	45mA	120mA	90mA
Protection from high temperature	-	-	-	-	✓	✓	-	✓	✓
Electrical protection	Protection from polarity reversal, Overvoltage protection								
Electrical isolation	Potential-free housing								
Connection	4-pin M12 connector, cable length: 2,5m, 5m, 10m, 15m								
Input voltage polarity	PIN 3 Blue color (-) PIN1 Brown color (+)								

Optical specifications

Projection profiles	*(B1) Point *(B2) Line *(B3) Cross
Gaussian line	*(CL) 90° – 110° (gaussian lines profile)
Homogeneous line	*(PL) homogeneous lines with fan angle - 5°, 20°, 30°, 45°, 60°, 90°, 110°
Focus	*(MF) Manual focus
DOE projection	Grid, Crossed lines, Circle (on request)

Electrical variants

Digital modulation (PWM)	0V - 3,3V/5V/Vin, 5 kHz (upon request)
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Mechanical specifications

Dimensions (mm)	Laser head diameter: Ø20 Length: 135mm with manual focus
Weight (g.)	120
Material	Anodized aluminum
Protection rating	IP67

Laser Head Drawing

*All size are mm

