



## Laser Distance Sensor

### Y1TA100QXT3

URL: <https://www.sxplc.com/laser-distance-sensor-y1ta100qxt3>

### Product data sheet

Optical Data	
Working Range	0.1 ... 10.1 m
Measuring Range	10 m
Resolution	1 ... 12 mm
Linearity	0.5 %
Linearity Deviation	50 mm
Switching Hysteresis	3 ... 20 mm
Light Source	Laser (red)
Wavelength	660 nm
Service Life (T = +25 °C)	100,000 h
Laser Class (EN 60825-1)	2
Max. Ambient Light	10,000 Lux
Beam Divergence	< 2 mrad
Light Spot Diameter	see Table 1
Reflector required	no
Electrical Data	
Supply Voltage	18 ... 30 V DC

Current Consumption (U <sub>b</sub> = 24 V)	< 100 mA
Switching Frequency	50 Hz
Measuring Rate	1 ... 100 /s
Response Time	10 ... 200 ms
On-/Off-Delay	0 ... 10,000 ms
Temperature Drift (-10 °C < T <sub>u</sub> < 50 °C)	< 0.2 mm/K
Temperature Drift (T <sub>u</sub> < -10 °C, T <sub>u</sub> > 50 °C)	< 0.4 mm/K
Temperature Range	-25 ... 60 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 2.5 V
Switching Output/Switching Current	200 mA
Analog Output	0...10 V
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
FDA Accession Number	0710891-002
Mechanical Data	
Setting Method	Menu (OLED)
Housing Material	Plastic, ABS
	Plastic, PC
Optic Cover	Plastic, PMMA
Degree of Protection	IP68
Connection	M12 × 1; 4-pin
Weight	80 g
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	346.68 a

Output	
Error Output	yes
PNP NO	yes
Configurable as PNP/NPN/Push-Pull	yes
Analog Output	yes

