



# S85

## 951511020

### S85-MH-5-Y13-OOIVY

LASER DISTANCE SENSOR FOR PRECISE MEASUREMENT  
UP TO 20 M WITH A MILLIMETER OF RESOLUTION AND  
REPEATABILITY THROUGH THE TIME OF FLIGHT  
TECHNOLOGY

## OVERVIEW

- Time of Flight technology
- Class 2 visible red LASER for an easy alignment with the target
- Measuring range up to 10m or 20m in the advanced model
- 1 mm resolution, 7 mm accuracy, 1 mm repeatability
- 4-20 mA or 0-10 V scalable analog output and 2 digital outputs
- RS485 serial interface in the advanced model
- Standard M12 connector
- IP67 Industrial metal housing

## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	20m
Resolution	1mm
Sensitivity adjustment	Teach-in

### Application

Function Principle	Distance sensor - Time of Flight
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Description	Large case vertical mount
Optic position	Radial 90°
Functions	Distance sensor - Time of Flight

Outputs

Output type	NPN/PNP, 4...20mA, 0...10V, RS485
Response time	15ms (fast) 30ms (medium) 45ms (slow)

Electrical data

Operating Voltage	24VDC± 20%
No-Load supply current	≤ 3W
LED indicators	Yellow (outputs Q1, Q2) Green/Red (Power/out of range) 5-digits multi display
Short-circuit protection	YES
Reverse Polarity Protection	Yes
Emission	LASER Red (658nm)
Interference to external light	according to EN 60947-5-2 : 2020
Impulsive Overvoltage Protection	Yes
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Contact resistance	500 Vac 1 min., between electronics and housing

Mechanical data

Dimensions	37x62x60
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Housing Material	Metal cast die zinc
Connections	M12 plug
Active Head Material	PMMA
Storage temperature	- 25°C...+70°C
Material	Metal - Zamak / PMMA
Diameter/Dimension	Cubic

#### Test/Approvals

Approvals	CE cULus
Shocks and vibrations	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)

#### Generical Data

Dimensions	37x62x60
Operating Temperature	- 15°C...+ 50°C
Mechanical Protection	IP67

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