IPF ELECTRONIC

Data sheet **PTSI0185** • Subject to alteration! Version: 03.12.2020

PTSI0185
LASER SENSORS • DISTANCE MEASUREMENT

sensor laser, diffuse-reflection sensor, 80x25x140mm, Sn:200-425mm, Resolution 60µm, Triangulation, 24V DC, 3x PNP/NPN NC/NO, 0-10V, 8pin, IP54, Aluminum Anodised+Glass, 0.2kHz, RS-232, Laser diode, red light, Line, Parameterization

MECHANICAL FEATURES

Ambient temperature	-10 °C ... 50 °C
Degree of protection (IP)	IP54
Design	Cuboid
Housing coating	Anodized
Housing material	Aluminum
Material of optical surface	Glass
Sensor height	80.5 mm
Sensor length	25 mm
Sensor width	140 mm
Storage temperature	-20 °C ... 85 °C
Volume	Large

ELECTRICAL FEATURES

Absolute linearity deviation	0.12 mm
Hierarchical management	Slave
Measuring method for optical distance measurement	Triangulation
Measuring range length	200 mm ... 425 mm
No-load current	100 mA
Number of pins	8
Number of switching outputs	3
Range	425 mm
Rated switching current	100 mA
Reverse polarity protection	+
Scanning function	Light-/dark-on mode
Scanning principle	Reflection sensor
Setting procedure	Parameterization
Short-circuit protection	+
Standard for interfaces	RS-232
Supply voltage	24 V ... 24 V
Switching frequency	200 Hz
Type of analog output	0 V ... 10 V
Type of switching function	Normally closed contact/normally open contact
Type of switching output	PNP/NPN

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ELECTRICAL FEATURES

Voltage type	DC
With LED display	+

OPTICAL FEATURES

Light source	Laser diode, red light
Wavelength of the sensor	670 nm
Resolution	60 µm
Light beam form	Line
Light spot, laser focus	4 mm²
Light spot range	3 mm² ... 3 mm²
With background lighting	+
Laser class	Class 2
Laser line geometry	1x3

OTHER FEATURES

Relative linearity deviation	0.12 %

Other

Packaging dimensions	138.0mm x 95.0mm x 210mm
Shipping weight	
Tariff code	85365019

Classification

ipf product group	705
eClass 8.0	27270801
eClass 9.0	27270801
eClass 9.1	27270801
ETIM-5.0	EC001825
ETIM-6.0	EC001825
ETIM-7.0	EC001825

Connection

Pin	Signal	
1	L-	L-
2	+3.3VDC	L+
3	SS	
4	MISO	
5	MOSI	
6	SCLK	
7	+3.3VDC	L+

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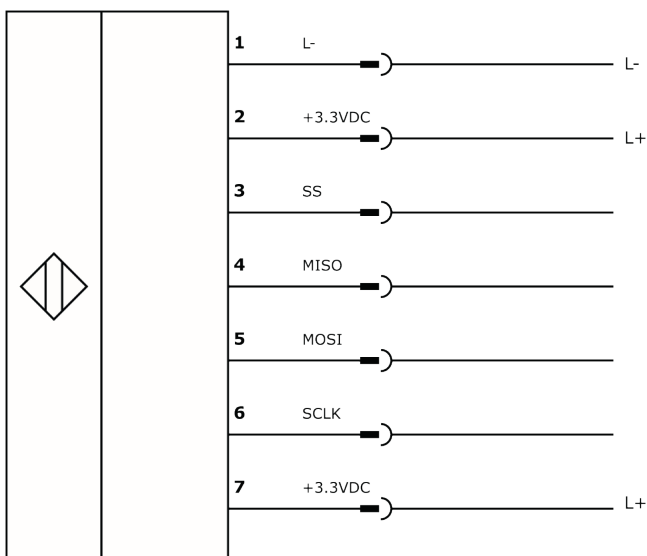
Dimensional drawing
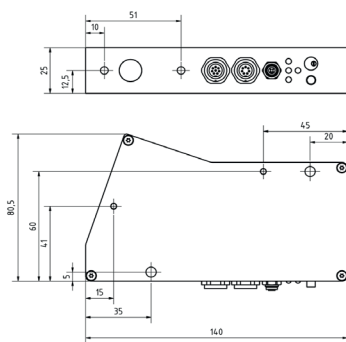
Installation

Mounting / installation may only be carried out by a qualified electrician!

Disposal

Software

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com

Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
Never use these devices in applications where the safety of a person depends on their functionality.
LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.

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