

## Technical data sheet Optical guidance sensor

Part no.: 50137477

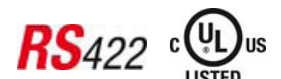
OGS 600-140/D2-M12.8

### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Diagrams
- Notes
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Figure can vary



## Technical data

### Basic data

Series	OGS 600
Application	Optical guidance
Trace types	Dark trace on light background
	Light trace on dark background
	Retro-reflective trace

### Optical data

Working range	10 ... 70 mm
Light source	LED, Red
LED light wavelength	634 nm
Transmitted-signal shape	Pulsed
Detection width for complete trace	115 mm

### Measurement data

Measurement value resolution	1 mm, Working distance 35 mm
Linearity error	0 ... 5 mm, Working distance 35 mm
Output value for edges	170 ... 1,330
Maximum output value	0 ... 1,500

### Electrical data

Protective circuit	Polarity reversal protection
	Short circuit protected

### Performance data

Supply voltage $U_B$	18 ... 30 V, DC
Average power consumption	4 W

### Outputs

Number of digital switching outputs	1 Piece(s)
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### Switching outputs

Type	Digital switching output
Voltage type	DC
Switching current, max.	100 mA
Switching voltage	high: $\geq(U_B - 2V)$
	Low: $\leq 2V$

### Switching output 1

Switching element	Transistor, PNP
Switching principle	Trace monitoring / contrast monitoring, adjustable

### Inputs/outputs selectable

Number of inputs/outputs selectable	1 Piece(s)
Voltage type, outputs	DC
Switching voltage, outputs	high: $\geq(U_B - 2V)$
	Low: $\leq 2V$
Voltage type, inputs	DC
Switching voltage, inputs	high: $\geq 8V$
	Low: $\leq 2V$

### Input/output 1

Function	Activation input
	Deactivation input
	Trace monitoring / contrast monitoring, adjustable

### Timing

Cycle time	10 ms
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### Interface

Type	RS 422
<b>RS 422</b>	
Function	Process
Transmission speed	19,200 ... 115,200 Bd
Start bit	1
Data bit	8
Stop bit	1
Parity	Uneven parity bit
Data encoding	Binary

### Connection

Number of connections	1 Piece(s)
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### Connection 1

Function	Data interface
	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

### Mechanical data

Design	Cubic
Dimension (W x H x L)	34.5 mm x 47.5 mm x 216 mm
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	245 g
Housing color	Red
Type of fastening	Supplied mounting bracket

### Operation and display

Type of configuration	Software
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### Environmental data

Ambient temperature, operation	-15 ... 50 °C
Ambient temperature, storage	-30 ... 60 °C

### Certifications

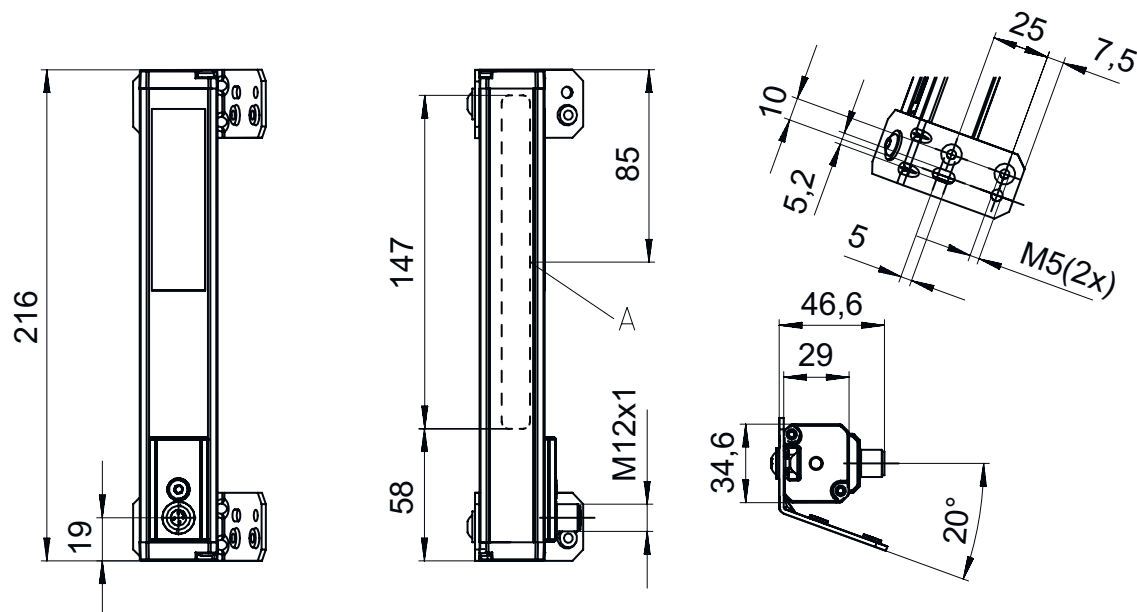
Degree of protection	IP 65
Protection class	III
Certifications	c UL US
Standards applied	EN 60947-5-2:2007+A1:2012

### Classification

Customs tariff number	85365019
eCl@ss 5.1.4	27270906
eCl@ss 8.0	27270906
eCl@ss 9.0	27270906
eCl@ss 10.0	27270906
eCl@ss 11.0	27270906
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820

# Dimensioned drawings

All dimensions in millimeters



A Integrated illumination

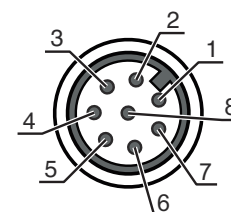
## Electrical connection

### Connection 1

<b>Function</b>	Data interface
	Signal IN
	Signal OUT
	Voltage supply
<b>Type of connection</b>	Connector
<b>Thread size</b>	M12
<b>Type</b>	Male
<b>Material</b>	Metal
<b>No. of pins</b>	8 -pin
<b>Encoding</b>	A-coded

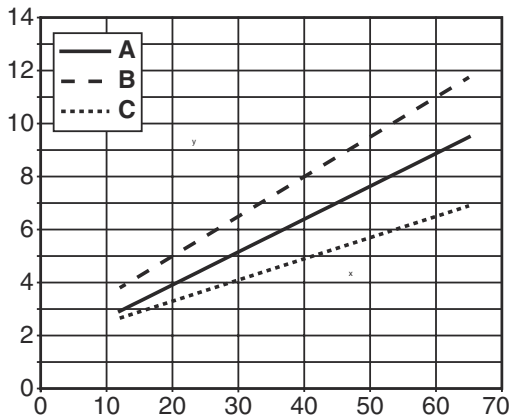
### Pin Pin assignment

Pin	Pin assignment
1	V+
2	SW IN/OUT
3	GND
4	OUT
5	Tx+
6	Tx-
7	Rx+
8	Rx-



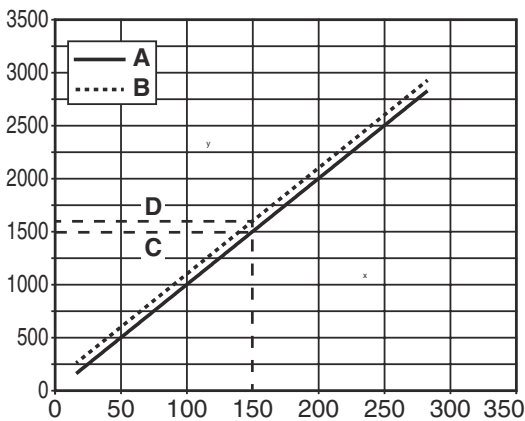
## Diagrams

Typical value of characteristic curve: linearity error



- x Floor-sensor distance [mm]
- y Linearity error [mm]
- A Typical value
- B max.
- C min.

Sensor characteristic curve with one trace



- x Position of the trace's left edge below the sensor [mm]
- y Edge position
- A Measurement value of left edge
- B Measurement value of right edge
- C Position of left edge
- D Position of right edge

## Notes



**Observe intended use!**




- ⌘ This product is not a safety sensor and is not intended as personnel protection.
- ⌘ The product may only be put into operation by competent persons.
- ⌘ Only use the product in accordance with its intended use.

**For UL applications:**



- ⌘ For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).
- ⌘ Max. ambient temperature: 50°C
- ⌘ "Only for use in NFPA 79 applications"
- ⌘ "Only suitable for indoors"

**Accessories****Connection technology - Connection cables**

	<b>Part no.</b>	<b>Designation</b>	<b>Article</b>	<b>Description</b>
	50135121	KD U-M12-8A-P1-020	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PUR

**Note**

A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.