



## The new Heavy Duty Sensor

for SDL 75, SDL 35, Laser serie

**Contactless distance measurement  
by transit time measuring method**

### Features

- Close-up range blanking for dirt and dust suppression at the face-plate
- Internal device temperature to read out via interface
- Continuous pilot light for easy adjustment
- Operating ambient temperature range  $-10^{\circ}\text{C}$  up to  $+50^{\circ}\text{C}$
- Measuring range up to 30 m onto black target (6%); 80 m onto white targets
- Measuring range up to 150 m onto reflection foil, 300 m onto triple prism
- Enclosure rating IP 65
- Configuration software inclusive
- CDRH- / UL-certification

### Fields of application

#### Steel industry

- Measurement and positioning of steel, aluminum and other mill products
- Positioning of cranes, trolleys und coils

#### Ports

- Distance measurement on cranes, trolley and containers
- Anti-collision



## Specifications

Specifications RS232 / RS422		SDL75-R4	SDL75-R2
Measurement range 1)	0.2 ... 45 m	x	x
	0.2 ... 80 m (white targets)	x	x
	0.2 ... 150 m (reflection foil)	x	x
	0.2 ... 15 m, object temp. ≤1200 °C	x	–
Measuring Resolution	0.1 mm	x	x
Measuring Accuracy 2)	± 2 mm under defined measuring condition	x	x
	± 3 mm (+15 °C to + 35 °C)		
	± 5 mm (–10 °C to + 50 °C)		
Repeatability	≤ 0.5 mm	x	x
Measuring Rate	240 ms ... 6 s else typically	x	x
	(10Hz :DW mode / 50Hz :DX mode)	–	x
Laser divergence	0.6 mrad	x	x
Laser classification	≤ 1mW under IEC 825-1, Laser class 2 (Red 650nm)	x	x
Supply voltage Uv	10 ... 30 V DC 3)	x	x
Power consumption	≤ 1.5 W 4)	x	x
Serial Interface	RS232 or RS422	x	x
	Baud rate 9600, format 8 n1, selection of measuring functions		
Analog output	4 ... 20mA programmable ( accuracy ± 0.15 % )	x	x
Measuring Value	1 ... 20 (Averaging output)	x	x
	0 ... 25 (measure time) 5)		
Temperature	Operation –10 °C to +50 °C	x	x
	Storage –20 °C to +70 °C		
Protection class	IP 65	x	x
Weight	About 500 g	x	x
Phys. Dimensions	155 x 90 x 50 mm (L x W x H)	x	x
Options	Profibus Interface, Heating, Cooling Eex Housing	x	x

1) Dependent on target reflectivity, stray light influences and atmospheric conditions.

2) Statistical spread 95%

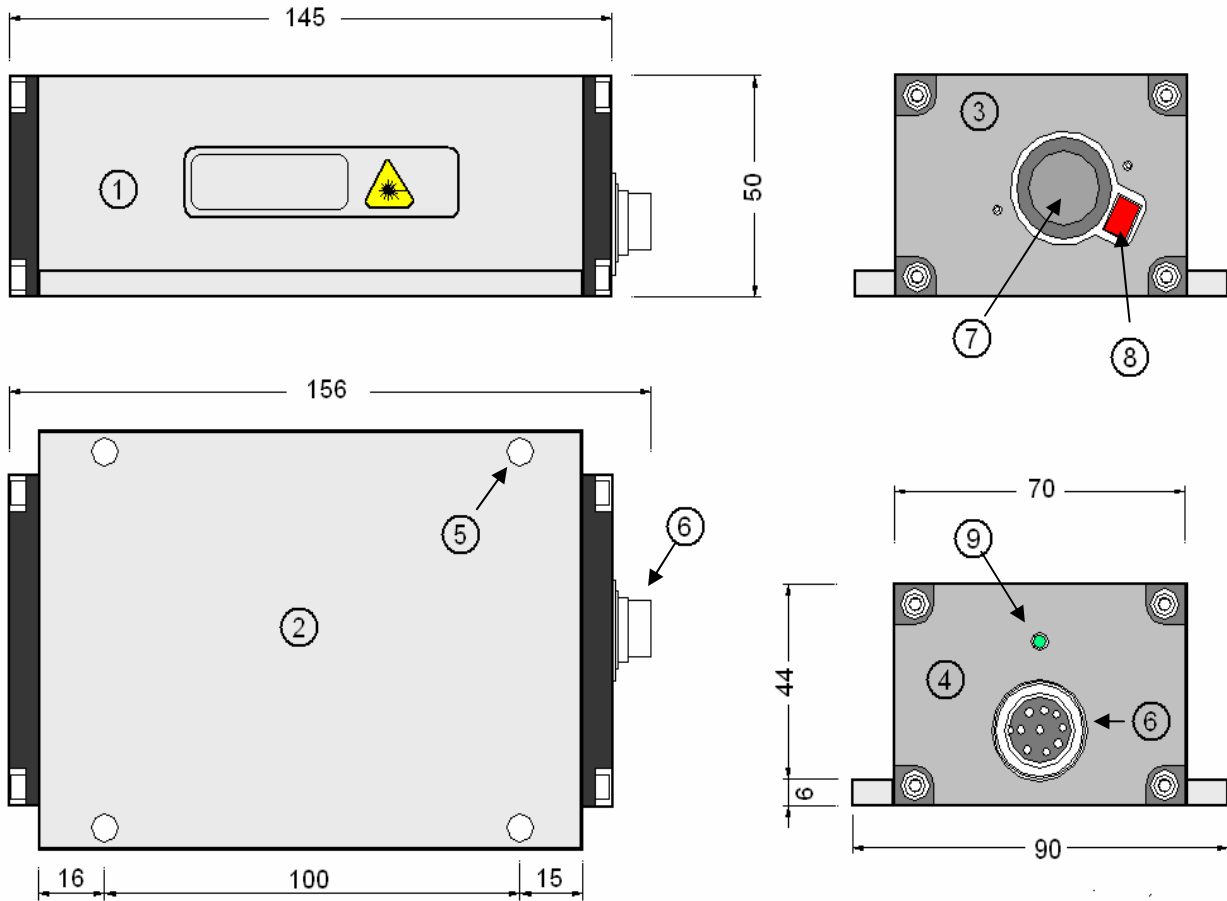
3) Limit values

4) Without load

5) Measuring time 1setp to 240 ms

## Dimensional drawings

### Dimensional drawing of SDL75 Sensor RS232/RS422



①	Laser sensor side
②	Sensor bottom
③	Sensor front
④	Sensor rear
⑤	Mounting Bolt 6mm
⑥	M16 connector
⑦	Receiver lens
⑧	Sender laser
⑨	Power LED lamp