Datasheet

- field of application:
  feed rate measurements, steel industry,
  collision prevention and length measurements
- up to 10 measuring devices can be controlled
  via RS422 or Profibus interface
- 2 digital outputs can be configured through
  different switch positions. One additional
  output sends a signal if an error occurs.
- status display via four LEDs

Mechanical Data

Type	WDL1-M15	WDL1-M30	WDL1-MH15	WDL1-MH30
Variation			with heating	
Dimensions	150 x 80 x 55 mm			
Laser Dot				
at 10 m	Ø8 mm			
at 50 m	Ø25 mm			
at 100 m	Ø40 mm			
Material				
Housing	aluminum			
Laser	visible, red			
Weight	690 g		720 g	
Measuring Range				
on Reflecting Foil	5 … 150 m			
on Natural Surface	~0.05 … 65 m			
Accuracy	±1.5 mm	±3 mm	±1.5 mm	±3 mm
Repeatability	±0.4 mm	±0.5 mm	±0.4 mm	±0.5 mm
Resolution	0.1 mm			
operating temperature	-10°C … +50°C		-40°C … +50°C	
IP-Rating	IP65			

Accessory	configuration software
	    supports most common languages and can be
	    requested at any time free of charge.
	further available on request			

Electrical Data

Type	WDL1-M15	WDL1-M30	WDL1-MH15	WDL1-MH30
Power Supply	9 … 30 VDC		24 … 30 VDC	
Measuring Rate	< 6 Hz			
Error Due to Analog Output	±0.2 %			
Connection	-> SUBD; 15 pins			
Interfaces				
standard	-> 1 serial interface RS232 7 RS422 -> 1 analog output 0.4 … 20 mA, programmable -> 3 digital output 2 programmable, 1 error indicator -> 1 digital input for external trigger			
optional	-> Profibus			

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Measure   Indicate   Control   Sensors   Mechanics   Accessory
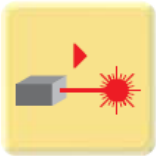
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Datasheet

Precise and Robust

The **WDLX-M** is an optical maintenance-free measuring device which you can use to detect positions of inaccessible objects with natural or reflecting surfaces and objects with very high surface temperatures – equally easy and exact are absolute measurements of distances up to 150 m with an accuracy of 1.5 mm, even in harsh surroundings.
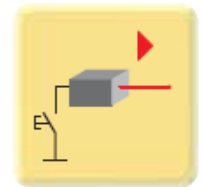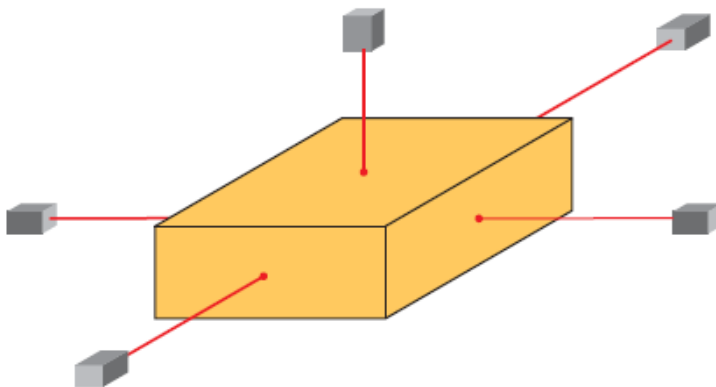Additionally, the device is placed inside a robust aluminum housing (IP-rating: IP65) and optionally a heating system. Thanks to this, the **WDLX-M** is suited for outdoor applications and conducts reliable measurements even in extremely low surrounding temperatures of up to -40 °C.

Another advantage of the **WLDX-M** device is its flexible applications and further functions in various fields in heavy industry, for example automobile, paper metal and textile industry.

In this case you can activate the Automatic Mode where automatic measurements are conducted and the outputs are switched according to the saved configuration upon start-up of the device. Therefore no cumbersome control is necessary

Additionally you can start an external measurement or synchronized measurements of many measuring devices through a digital input.
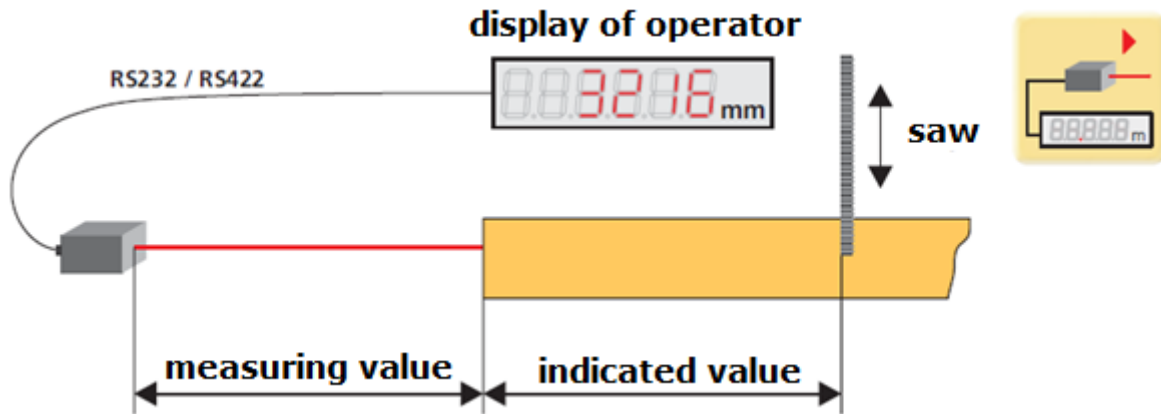
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Measure   Indicate   Control   Sensors   Mechanics   Accessory

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Flexible Value Output

The measured value output of the **WDLX-M** has a flexible layout. There is one serial interface RS232, RS422 and one analog output available as standard.
You can connect an external display directly via serial interface RS232 or RS422 in order to view the measuring result with millimeter accuracy. Afterwards gain, offset and display format can be configured easily.

Additionally, you can connect the measuring device via a 15 pin D-sub plug. Alternatively you can run a cable directly into the device through a cable gland and connect it to the internal terminals.
Optionally the connection to a Profibus-Master is also possible.

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Measure Indicate Control Sensors Mechanics Accessory