

Robust
Compact
Reliable

gSENS LWG 610

A key component for mobile machines with telescoping booms



Unparalleled performance and technology: The ultimate compact length/ angle sensor

Telescopic booms are an integral part of mobile machines including cranes and lifting equipment.

The gSENS LWG 610 reliably monitors the length and angle of extended telescopic booms.

For use in harsh environmental conditions, there's no better choice than the gSENS LWG 610.

Highly competitive:

The gSENS LWG 610 excels in three respects:

- Performance
- Technology
- Price

General product attributes

- Lightweight, small, compact
- Typical accuracy of $\pm 0.15^\circ$ over 360°
- Temperature drift: 0.1% per 10°K
- Supply line protected against reverse polarity and load dump
- Outputs protected against short-circuits to ground and power supply
- Ingress protection class: IP 65
- Electromagnetic compatibility (EMC) acc. to EN 61000-6-2 (generic standards: immunity for industrial environments)



Options

- Max. measured length: 10, 14 or 15 meters
- Installation location: right or left
- Interface: CANopen or 4 to 20 mA
- Available in a redundant version (as gSENS LWG 620)
- Cable types:
 - Steel wire rope
 - 2-conductor cable for connecting a hoist limit switch
 - 3-conductor cable for signal transmission
- Versions:
 - For angle and length measurement
 - For length measurement only
- Can be integrated in any system
- Compatible in the qSCALE lx system



↗ For all mobile machines with telescopic booms

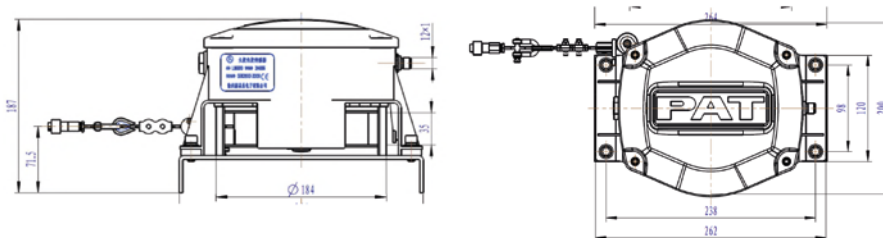
- Small telescopic booms
- Mini crawler cranes
- Truck loading cranes
- Telehandlers
- Reach stackers
- Wrecker / Towing cranes
- Pick-and-carry cranes



Technical specifications

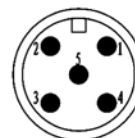
Description	gSENS LWG 610
Length of wire rope	up to 25 m
Operating voltage	9 to 36 V DC
Output signal	CANopen
Measured length	0 to 15 m
Measurement cable	2 x 0.22 mm ² or 3 x 0.22 mm ²
Length accuracy	< 1.2% FS
Inclination Angle	0 ~ 360°
Angle accuracy	< ± 0.5°
Cable rating	40 V / 2 A
Operating temperature range	-20° to +85°C
Storage temperature range	-25° to +85°C
Weight	3.5 kg
Housing material	Industrial plastic
Ingress protection class	IP 65 acc. to IEC 60529
EMC	IEC 61000-6-2 / IEC61000-6-4
Shock/ vibration	IEC 60068-2-27 / IEC 60068-2-64

Dimensions



Pin assignments

M12x1 5-Pins	
Pin 1	Shield
Pin 2	Power supply
Pin 3	Ground
Pin 4	CAN_H
Pin 5	CAN_L

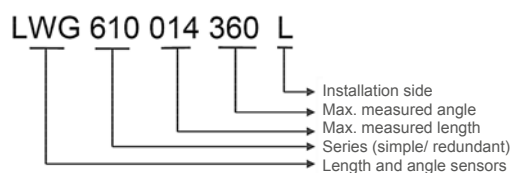


Available versions

WMC art. no.	Type	Max. measured length	Installation side	Cable type	Interface
83900079	LWG610-014360L-132-Na	14 m	L	2-conductor cable	CAN
83900370	LWG610-014360L-133-Na	14 m	L	3-conductor cable	CAN
83900371	LWG610-015360R-130-Na	15 m	R	Steel wire rope	CAN
83900399	LWG610-015360L-130-Na	15 m	L	Steel wire rope	CAN
83900402	LWG610-010360L-133-Na	10 m	L	3-conductor cable	CAN

Other versions available on request.

Product code Description



Worldwide

Check out our global partner network online:
www.wika-mc.com

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We make lifting loads safer!

Drawing on many years of experience, we design and produce dependable safety solutions for lifting heavy loads. As a leading specialist in this field, we define innovative standards for enabling reliable communication between machines and their operators in harsh environments.

We develop and integrate application software, mobile controllers and robust sensors that maximize your safety and the availability of your mobile machines.

In our role as system integrator, we also guide you through all project phases: from analysis and concept evaluation across system design and project planning to prototype testing and launch under field conditions. Our safety experts also support certification processes and are available to provide assistance across all phases of lifecycle management.