

gSENS LWG 2xx / 3xx / 5xx Length-/Angle Sensor Cable reel

Application

- Telescopic crane

Special Features

- Angle sensing
- Signal transfer for additional sensors via length sensor cable
- Output: CANopen
- Electromagnetic compatibility to EN 61000-6-2
- Redundant, gold-alloy-plated slipring
- Easy installation



gSENS LWG 522 / 1206

Description

The LWG series 2xx/3xx/5xx length and angle sensors are designed to reliably monitor the lengths and angles of extended telescopic booms up to 55 meters and offer unparalleled flexibility with their individually configurable settings.

The sensors are designed for quick and straightforward installation, built to withstand harsh environments, and offer output options of CANopen, CANopen Safety or 4 ... 20 mA for seamless integration.

In addition, this series of spring cable reels route the measured data and control signals via a special electrical cable and tapped via a multi-pole gold-alloy-plated slipring.

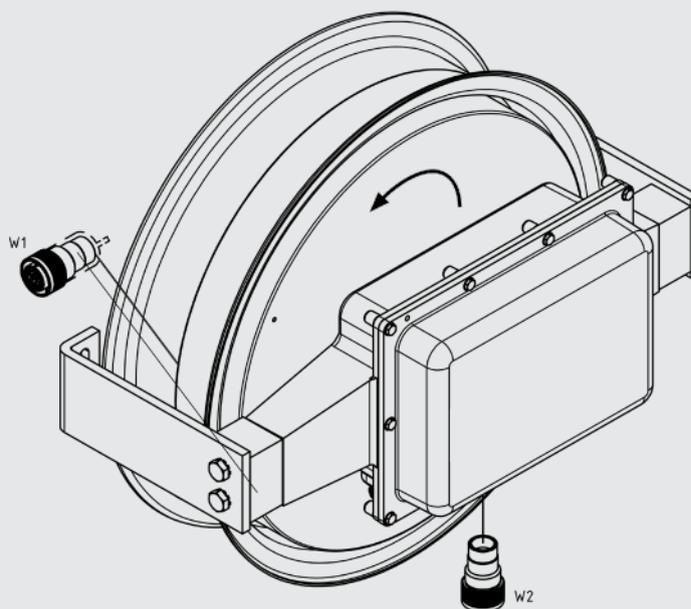
They comply with EN 61000 standards for electromagnetic compatibility and meet IEC 60068 standards for shock and vibration resistance. With an IP 66/67 rating, they ensure protection against dust and water ingress.

Capable of precise angle and length measurements, the sensors are available with a redundant configuration for added functional safety and therefore ready for EN ISO 13849 compliance up to PLd.

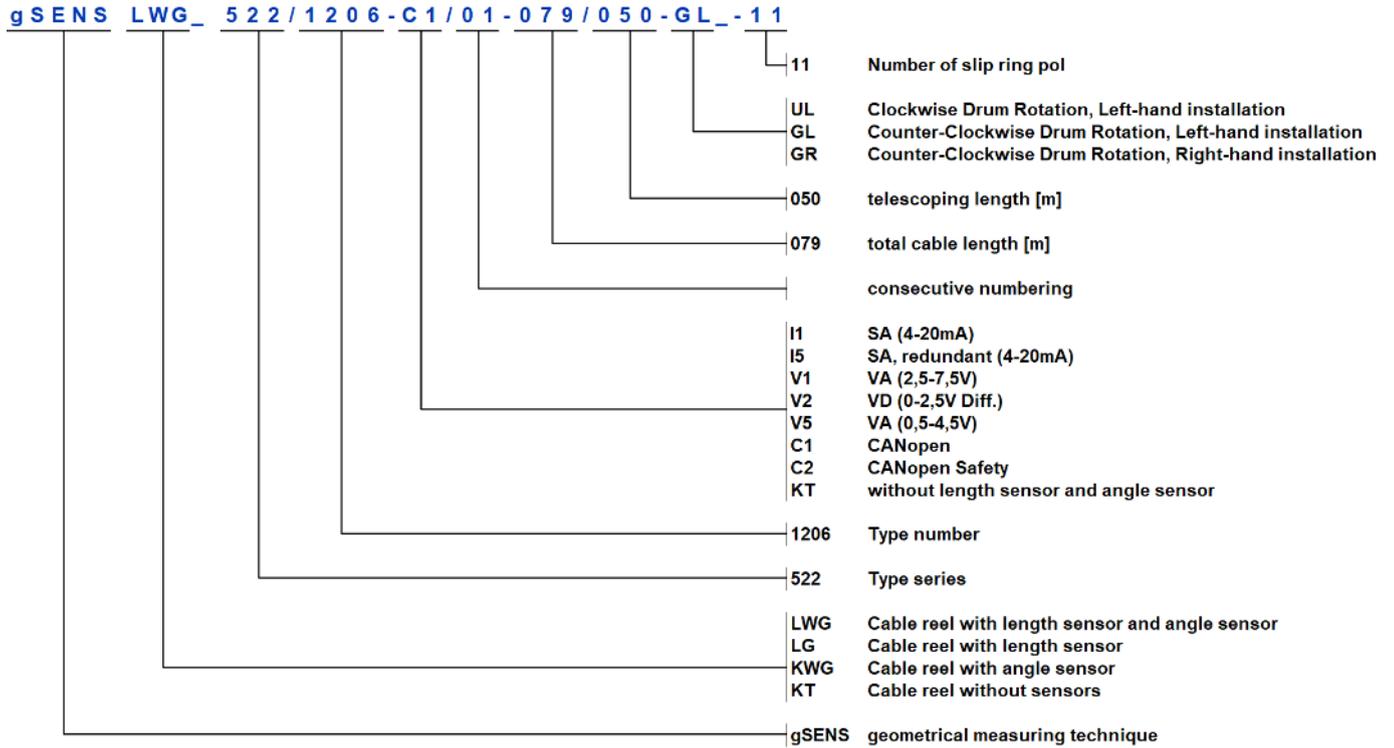
The LWG series 2xx/3xx/5xx sensors are the ideal choice for ensuring the highest operational reliability in your telescopic boom applications. Experience the perfect blend of precision, durability, and ease of use with our state-of-the-art sensors – Made in Germany.

Technical Data

gSENS LWG 522/1206	
Telescoping length	up to 55 m
Total cable length	up to 80 m
Angular range	-180 ... +180°
Signal output	CANopen Safety / 4 ... 20 mA
Supply Voltage	9 ... 36 V DC
Resolution	
Length sensor	0,15 mm
Angle sensor	0,01°
Accuracy	
Length sensor	1% FS
Angle sensor	0,1°
Slip ring	
Number of slip ring	up to 11
Contact rating	max. 3 A per slip ring
Contact resistance	< 20 mΩ
Temperature range	
Operation	-40 ... +70°C
Storage	-40 ... +85°C
Vibration (EN 60068-2-6)	Class 5M3 acc. EN 60721-3-5:1997 5-8 Hz; 7,5mm; 8-200 Hz, 2g; 200-500 Hz 4g, 1 Octave/min each, 40 Sweeps
Shock (EN 60068-2-27)	Class 5M3 acc. EN 60721-3-5:1997 30g, 11ms half-sine
Protection class	IP 66
CE Marking	EN 61000-6-1, -2, -3, -4
MTBF	31.9 years
Housing material	Sheet steel / Aluminium die-cast; surface black powdered



Product code description



We reserve the right to make technical changes without prior notice. The individual specifications in this datasheet are warranted properties if they are expressly confirmed by us in writing in the respective case.

© WIKA Mobile Control GmbH & Co. KG, alle rights reserved.

03/2025

Page 4 of 4

www.wika-mc.com

WIKA Mobile Control GmbH & Co. KG
 Hertzstr. 32-34 · 76275 Ettlingen · Germany
 Tel. +49 7243 709-0 · sales.wmc@wika.com

WIKA Mobile Control, LP
 1540 Orchard Drive · Chambersburg, PA · USA
 Tel. +1 717-217-2200 · sales.us-wmc@wika.com

