

# gSENS LWG 720

## Robust length / angle sensor for mobile machinery

### Applications

- Mobile Cranes
- Telehandlers
- Boom Trucks
- Knuckle Boom Cranes

### Special Features

- Lengths up to 15m
- Redundant length and angle outputs
- Compensation for cross sensitivity and temperature coefficient
- Configurable vibration suppression parameters for angle
- MEMS technology for angle measurement and Hall Effect technology for length measurement
- Supply line is protected against reversed polarity and load dump
- Signal transfer to anti-two block switch (A2B)



gSENS LWG 720

### Description

Length / angle sensors reliably monitor the lengths and angles of extended telescopic booms.

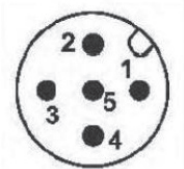
gSENS LWG 720 length-/angle sensors ensure highest operational reliability. With an aluminum die casting housing, shock and vibration resistance acc. to IEC 60068 and electromagnetic compatibility acc. to IEC 61000, this robust sensor withstands the harshest environmental conditions.


Its compact design guarantees easy installation on a variety of crane types. gSENS LWG 720 measures lengths up to 15m and is available as a redundant version. In addition, the connection of an A2B is possible via the length sensor cable. As output signals, CANopen and 4...20mA can be configured.

## Technical Specifications

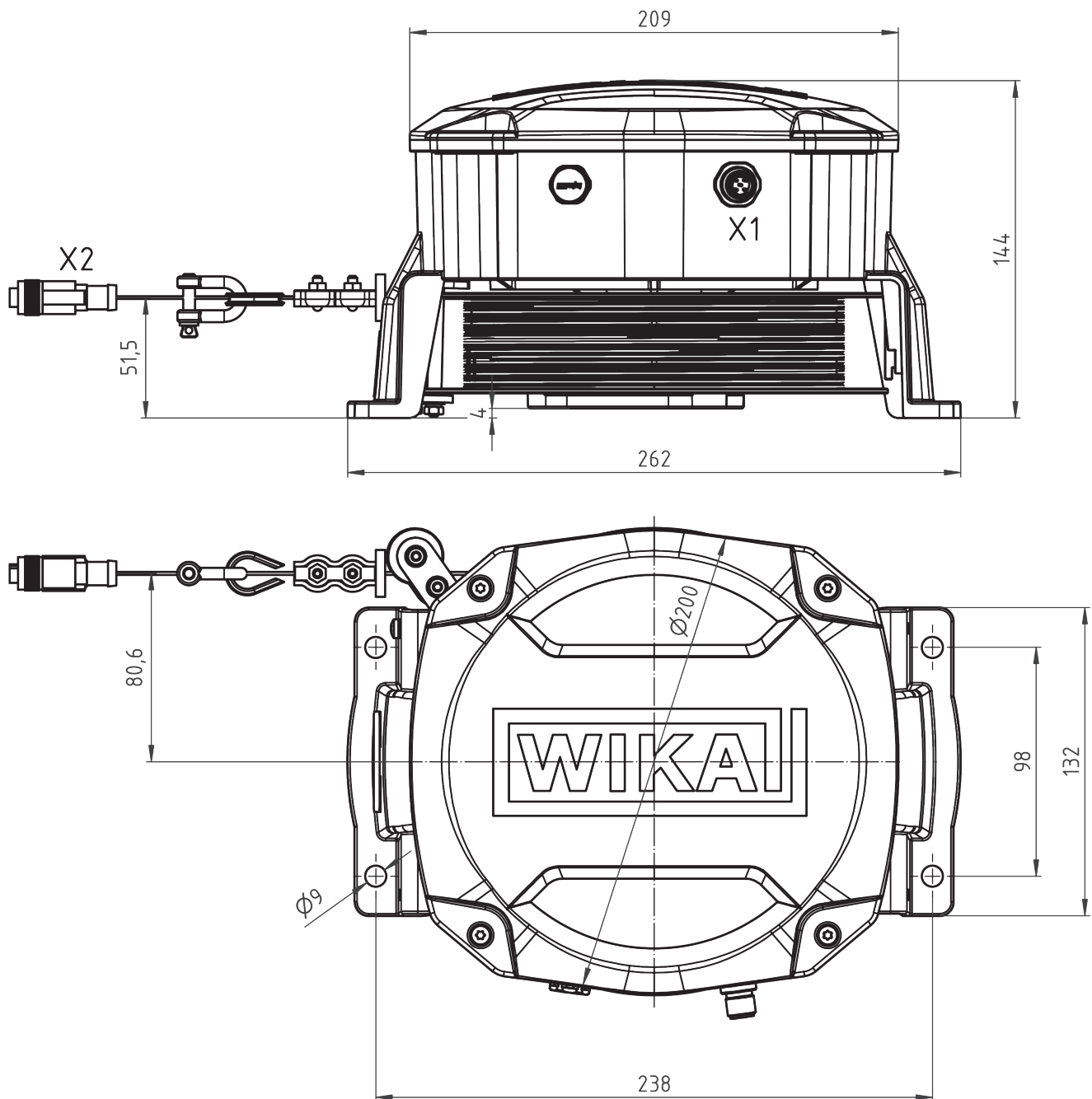
gSENS LWG 720		
Product series	LWG 720 CANopen	LWG 720 4...20mA
Operating voltage	8...36 VDC	
Output signal	CANopen	4...20mA
Hall-off speed	1m/s	
Length measurement range	0...15m	
Length accuracy (at 25°C)	±0.5%FS	
Length repeatability	±0.1%FS	
Inclinometer measurement range	-180°...+180°	0°...+90° (4...20mA) -22.5°...+112.5° (0...24mA)
Inclinometer accuracy (at 25°C)	±0.3°	
Inclinometer temperature drift	±0.01°/°C	
Electrical connection	Male flange connector M12, 5-Pin	
Housing	Die-cast aluminum	
Protection rating	IP66	
Shock / vibration resistance	acc. to IEC 60068-2-27/ IEC 60068-2-64	
Electromagnetic compatibility	acc. to IEC 61000-6-2 / IEC 61000-6-4	

## Pin Assignment

Male Flange Connector M12 5-Pin	Pin no.	Assignment (CANopen)	Assignment (4...20mA)
	1	Shield	Power
	2	Power	GND
	3	GND	Length
	4	CAN_H	Angle
	5	CAN_L	A2B

Cable Plug YTD12K3T, 3-Pin	Pin no.	Assignment
	1	A2B Signal
	2	GND
	3	N.C.

## Dimensions



## Product Code Description

Part #	Product Name	Length Range	Angle	Slipping	Redundant	Output
83902953	gSENS LG 720/3150-C1/01-015/015-GL -00	15m	×	×	×	CAN
83902955	gSENS LG 720/3151-C1/01-015/015-GL -03	15m	×	✓	×	CAN
83902956	gSENS LG 720/1150-I1/01-015/015-GL -00	15m	×	×	×	4..20mA
83902958	gSENS LG 720/1151-I1/01-015/015-GL -03	15m	×	✓	×	4..20mA
83902944	gSENS LWG 720/3150-C1/01-015/015-GL -00	15m	✓	×	×	CAN
83902946	gSENS LWG 720/3151-C1/01-015/015-GL -03	15m	✓	✓	×	CAN
83902945	gSENS LWG 720/3152-C5/01-015/015-GL -00	15m	✓	×	✓	CAN
83902952	gSENS LWG 720/1151-I1/01-015/015-GL -03	15m	✓	✓	×	4..20mA