

gSENS LWG 720

Robust length / angle sensor for mobile machinery

Applications

- Mobile Cranes
- Telehandlers
- Boom Trucks
- Knuckle Booms

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.

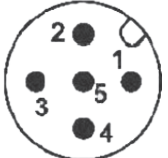
gSENS LWG 720 length-/angle sensors ensure highest operational reliability. With an aluminum die casting housing, shock and vibration resistance acc. to IEC 60068 and electromagnetic compatibility acc. to IEC 61000, this robust sensor withstands the harshest environmental conditions.


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

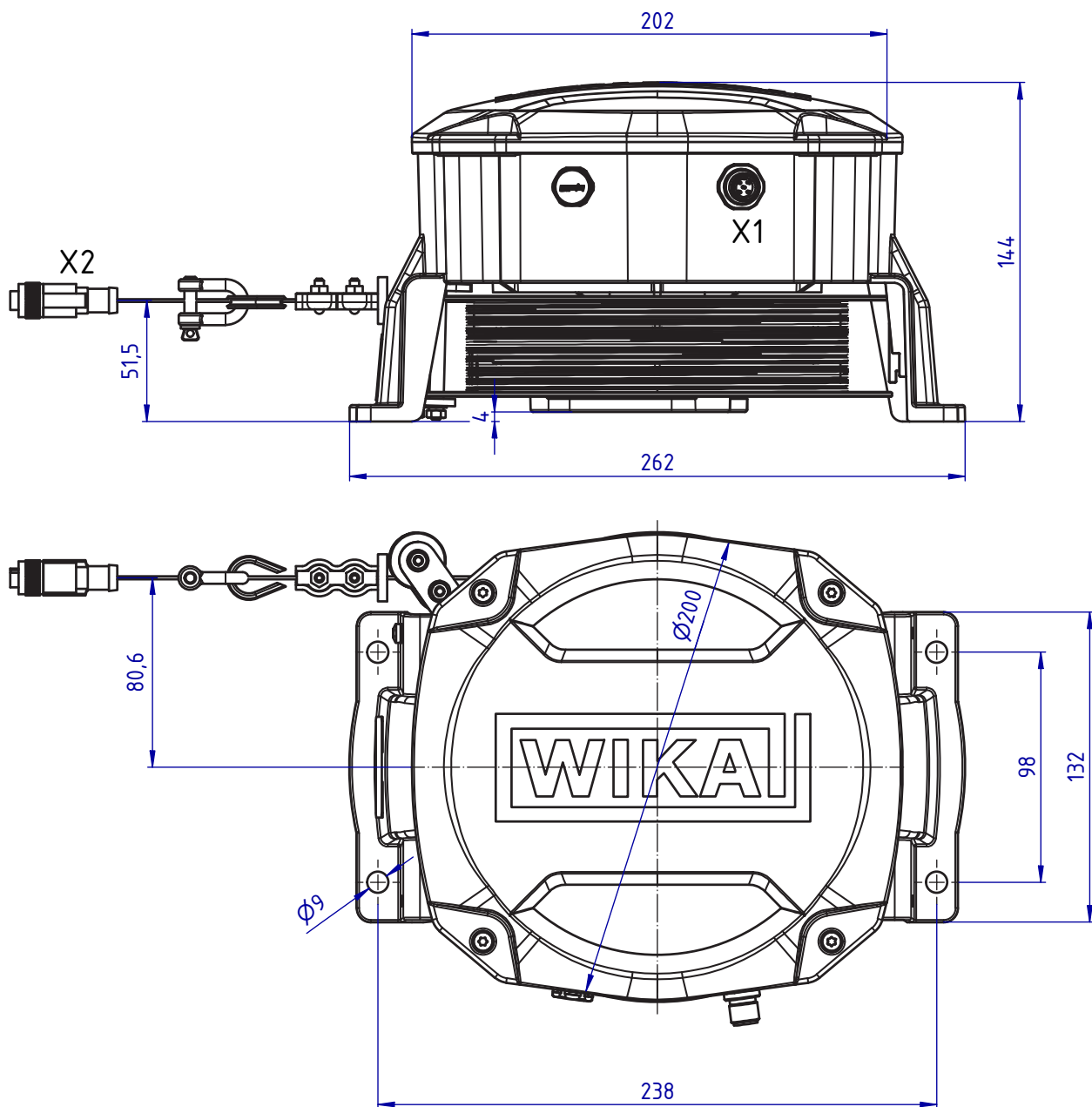
gSENS LWG 720		
Product series	LWG 720 CANopen	LWG 720 4...20mA
Operating voltage	8...36 VDC	
Output signal	CANopen	4...20mA
Hall-off speed	1m/s	
Length measurement range	0...15m	
Length accuracy (at 25°C)	±0.5%FS	
Length repeatability	±0.1%FS	
Inclinometer measurement range	-180°...+180°	0°...+90° (4...20mA) -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	Aluminum die cast	
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

LWG type	Part number	Description	Length	Angle	Redundant	Slipring	Output
LG 720/3150	83902953	gSENS LG 720/3150-C1/01-015/015-GL -00	15m	no	no	no	CAN
LG 720/3151	83902955	gSENS LG 720/3151-C1/01-015/015-GL -03	15m	no	no	3p	CAN
LG 720/3153	83902954	gSENS LG 720/3153-C2/01-015/015-GL -03	15m	no	yes	3p	CAN
LG 720/1150	83902956	gSENS LG 720/1150-I1/01-015/015-GL -00	15m	no	no	no	4...20mA
LG 720/1151	83902958	gSENS LG 720/1151-I1/01-015/015-GL -03	15m	no	no	3p	4...20mA
LG 720/1153	83902957	gSENS LG 720/1153-I5/01-015/015-GL -03	15m	no	yes	3p	4...20mA
LWG 720/3150	83902944	gSENS LWG 720/3150-C1/01-015/015-GL -00	15m	yes	no	no	CAN
LWG 720/3151	83902946	gSENS LWG 720/3151-C1/01-015/015-GL -03	15m	yes	no	3p	CAN
LWG 720/3152	83902945	gSENS LWG 720/3152-C2/01-015/015-GL -00	15m	yes	yes	no	CAN
LWG 720/3153	83902951	gSENS LWG 720/3153-C2/01-015/015-GL -03	15m	yes	yes	3p	CAN
LWG 720/1151	83902952	gSENS LWG 720/1151-I1/01-015/015-GL -03	15m	yes	no	3p	4...20mA
LWG 720/1153	83902950	gSENS LWG 720/1153-I5/01-015/015-GL -03	15m	yes	yes	3p	4...20mA