

# Draw-wire system SZG65 - WDGA SSI



# Typical areas of application include:

lift/elevators, lifting platforms, theatre stages, fork lifts and cranes.

**Measurement ranges:** 0 mm up to 1.250 mm,

#### Resolution measurement ranges:

Position per mm	Bit per revolution	
2.5	8	
5.1	9	
10.2	10	
20.4	11	
40.9	12	

**Deviation:** Less than 0.02 % of the final value. **Measuring wire:** 0.48 mm of thick nylon coated

high-grade steel wire. (incl. coating)

Wire connection:
max. wire speed:
Pull out strength:
System-unit housing:
eye, see drawing
7.5 m/sec.
approx. 0.14 kg
anodised aluminium/
steel case chrome-plated

Weight: SZG incl. encoder max. 1 kg
Life expectancy: at least 10 million cycles
Operating temperature: -20 °C up to +80 °C
Storage temperature: -30 °C up to +80 °C

Interface SSI

Clock input: via opto-coupler
Clock frequency: 100 kHz up to 500 kHz
up to 2 MHz on request
Data output: RS485/RS422 compatible

Output code: gray or binary SSI output: Angular-/position value

Parity bit: Angular-/position value optional (even/odd)

Error bit: optional Turn on time: <1.5 s

Positive direction  $DIR = +Ub \Rightarrow position configuration \sim length$ 

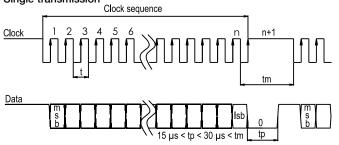
Set to zero: Set: Preset = apply +Ub for 2 s
Deactivate: Preset = GND

**Electrical Data:** 

Supply voltage: 10 VDC up to 30 VDC; 4.75 VDC up to 5.5 VDC

max. 80 mA
Power consumption: max. 0.8 W

Protocol SSI: Single transmission



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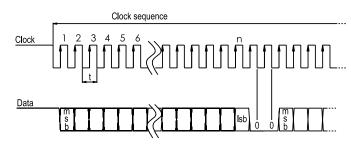
Tel.: +49 (0) 67 22/99 65-25 • Fax: +49 (0) 67 22/99 65-70 E-Mail: wdg@wachendorff.de • www.wachendorff.de

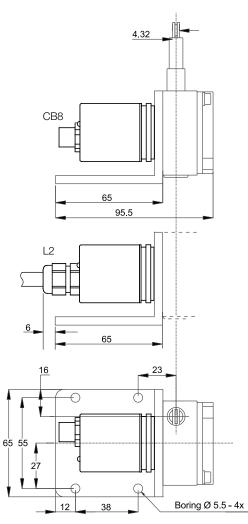
- Exceptionally rugged length sensor
- Measuring range: 0 1250 mm
- Interface: SSI
- IP65 absolute encoder WDGA SSI ready-mounted

### www.wachendorff-automation.com/szg65wdgassi

The draw-wire encoder SZG65 WDGA SSI was developed for use in harsh environments. The various methods of installation mean high flexibility. It can be used even where space is tight, thanks to its compact dimensions. The SZG65 WDGA SSI can be mounted quickly and with its highly precise mechanics provides reliable accurate length measurement, with all advantages, which result from an absolute length measurement. e. g. The position-value is saved, if supply breaks down and is available immediately if supply gets recovered. Doing a reference run isn't necessary. The intelligent spring-suspension and the nylon-coated stainless-steel wire cable guarantee long-service life, even in difficult operating conditions. The encoder is already installed.

### Multipath transmission





All details in mm and dependent on the encoder configuration.



## Connection configuration for encoder WDGA SSI:

	2 1 8 7 3 4 5	
Connection / cable	M12 x1	cable outlet
Description	CB8 axial, 8-pin	L2, axial
GND	1	wh
Plus U+	2	bn
SSI CLK+	3	gn
SSI CLK-	4	ye
SSI DATA+	5	gy
SSI DATA-	6	pk
PRESET	7	bu
DIR	8	rd
Shield	housing	housing K1 n. c.

