

## Guided cable shaft copying WDGMS



### Read these instructions before shortening the measuring cord:

#### Instructions:

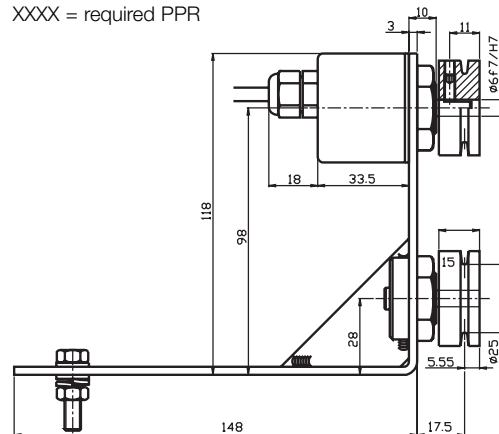
1. Fit the measuring cord parallel to the section travelled by the lift car.
2. First, fasten the measuring cord in the head of the shaft using one of the supplied eyebolts including plug.
3. Fasten the weight to the lower end of the measuring cord, and fasten the spring under the weight. Now hang the spring with a pretension of 5-10 cm in the lower eyebolt incl. plug in the shaft pit.
4. Mount the measuring system to the lift car in such a way that the two rope pulleys can be inserted in parallel without any offset.
5. Place the rope in the measuring system as shown. This pretension via the pulleys combined with the pretension from the weight fixed over the springs guarantees reliable use. The spring also prevents any twisting.

- Complete Measuring System for Length Measurement
  - No slip when speed below 1 m/s
  - Height typically 17 stops, approx. 53 m
  - Resolution until 0,02 mm
  - Quick assembly
  - Applications: digital shaft copy for lifts, exact measurement of distance and speed
- [www.wachendorff.de/wdgms-engl](http://www.wachendorff.de/wdgms-engl)

### The guided cable shaft copying WDGMS comprises:

WDG 40S-XXXX-AB-H24-K2-030	1x
Redirect pulley	1x
Mounting angle	1x
Weight	1x
Spring	1x
Ring screw	2x
Dowel	2x
Screws M6 x 25	2x
Nuts M6	2x
Washers U6	4x
Spring washers U6	2x
Roll of wire	2x

XXXX = required PPR



Measurement drawing WDG-MS-40S-XXXX, dimensions in mm

### Specifications of encoder:

#### Available PPR

9, 10, 15, 20, 25, 28, 30, 40, 50, 60, 90, 100, 120, 125, 128, 150, 160, 180, 200, 235, 250, 300, 314, 318, 360, 400, 500, 600, 625, 635, 720, 900, 1000, 1024, 1080, 1200, 1250, 1500

(Other PPR's on request)

#### Mechanical Data

##### Housing

- Screw flange: Aluminium
- Housing: Aluminium, powder coated
- Diameter: 40 mm

##### Shaft

- Material: stainless steel
- Diameter: 6 mm with flat
- Length: 13 mm
- Load on shaft end: max. 80 N radial, max. 40 N axial
- Starting torque: approx. 0,2 Ncm at ambient temperature

##### Bearings

- Type: 2 precision ball bearings
- Service life:  $2 \times 10^8$  revs. at 100% of full rated shaft load,  $2 \times 10^9$  revs. at 40%,  $10^{10}$  revs. at 20%

##### Operating speed:

12.000 rpm

##### Weight:

approx. 300 g with cable

##### Connections:

K2-030: cable axial with 3 m cable

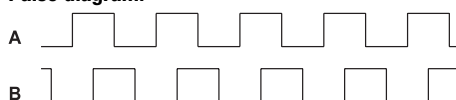
##### Operating temperature:

-20... +80°C

##### Storage temperature:

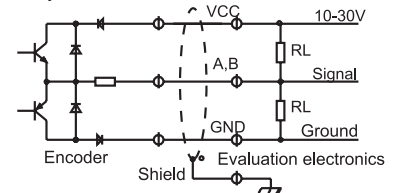
-30... +80°C

#### Pulse diagram:



#### Electrical Data:

- Power supply: 10 - 30 VDC
- Current consumption: max. 70 mA
- Channels: A, B
- Output: push-pull
- Load: max. 40 mA
- Signal level: to 20 mA,  $H > U - 2,5$  VDC,  $L < 2,5$  VDC
- Pulse frequency: 200 kHz
- Circuit protection: yes



#### Ordering information:

Description:	Order No.:
Measuring System XXXX = Please specify required PPR (Roll of wire $\varnothing$ 25 mm)	WDG-MS-40S-XXXX
Accessories: Measuring wire xxx = length in meters Example: Measuring wire, 1 m length	WDGSNXXX WDGSN001