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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.

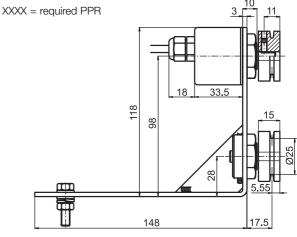
Complete Measuring System for Length Measurement

- No slip when speed below 1 m/s
- Height typically 17 stops, approx. 53 m
- Resolution until 0.03 mm
- · Quick assembly
- Applications: digital shaft copy for lifts, exact measurement of distance and speed

www.wachendorff-automation.com/wdgms

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



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

Specifications of encoder: Available PPR:

4, 9, 10, 15, 20, 25, 28, 30, 36, 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, 1800, 2000, 2048, 2500. (Other PPRs on request)

Mechanical Data

Housing

- Screw flange: Aluminium

- Cap: Aluminium, powder coated

Diameter: 40 mm

Shaft

Material: stainless steel
Diameter: 6 mm with flat
Length: 13 mm
Permitted load max. 80 N radial on shaft end: max. 50 N axial

- Starting torque: approx. 0.2 Ncm at ambient temperature

Bearings

- Type: 2 precision ball bearings

- Service life: 1x 10⁸ revs. at 100 % shaft load 2x 10⁹ revs. at 40 % shaft load

 $2x 10^9$ revs. at 40 % shaft load $1x 10^{10}$ revs. at 20 % shaft load

Max. operating speed: 12000 min⁻¹

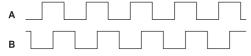
Weight: approx. 300 g with cable Connections: K2-030: cable axial with 3 m cable

Protection rating: IP67, shaft sealed to IP65

(EN 60529)

Operating temperature: $-20~^{\circ}\text{C}$ up to +80 $^{\circ}\text{C}$ Storage temperature: $-30~^{\circ}\text{C}$ up to +80 $^{\circ}\text{C}$

Puls diagram:



Electrical Data:

Power supply: 10 VDC up to 30 VDC Current consumption: max. 70 mA

 Channels:
 A, B

 Output:
 push-pull

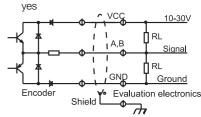
 Load:
 max. 40 mA

 Signal level:
 to 20 mA

 H > U - 2.5 VDC

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 Ø 25 mm)	WDG-MS-40S-XXXX
Accessories: Measuring wire xxx = length in meters	WDGSNXXX
Example: Measuring wire, 1 m length	WDGSN001