

Guided cable shaft copying WDGMS



Read these instructions before shortening the measuring cord:

Instructions:

1. Mount measurement cable parallel to the trajectory of the cabin.
2. Fix measurement cable at the shaft top first by using the provided ring bolt and screw anchor.
3. Fix the weight at the lower end of the measurement cable and attach the spring at the bottom side of the weight. Use the other ring bolt and screw anchor to fix the other end of the spring to the shaft bottom.
4. Mount the measuring system to the cabin. Mind that the measuring cable should be placed into the pulleys parallelly and without displacement. (the accurateness correspondes directly with a low maintenance)
5. Insert measuring cable according to drawing. Mind that the spring serves as a twist prevention.
6. The measuring cord might stretch during long-term operation, so the length must be checked at regular maintenance intervals. Correct the cable length when necessary.

- 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

XXXX = required PPR

⚠ Assembly only qualified personnel, Montage par qualifié personnel, Montaggio solo personale qualificato, Montaje solamente personal cualificado
Safety instructions: Only for use in industrial environments and NOT for safety-relevant areas. Utilisation uniquement dans un environnement industriel et PAS dans un domaine lié à la sécurité. Utilicelo sólo en entornos industriales y NO en áreas relevantes para la seguridad. Utilizzare solo in ambienti industriali e NON in aree riguardanti la sicurezza.

Power supply: Class 2 only

DIN EN 100015-1

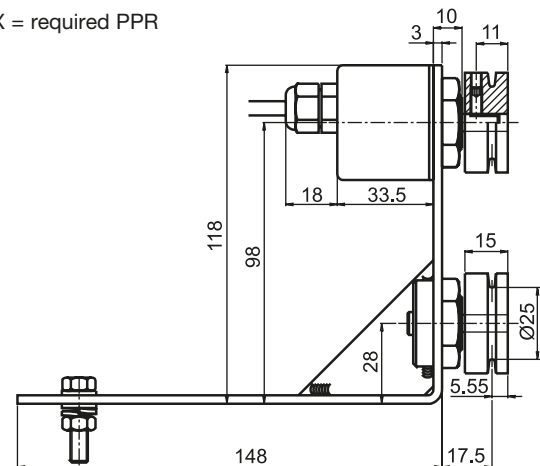
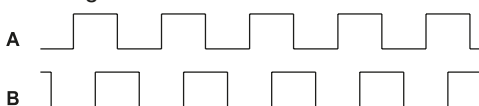
Specifications of encoder: Available PPR:

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, 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 on shaft end:	max. 80 N radial max. 50 N axial
- Starting torque:	approx. 0.2 Ncm at ambient temperature
Bearings	
- Type:	2 precision ball bearings
- Service life:	1x 10 ⁸ revs. at 100 % shaft load 2x 10 ⁹ revs. at 40 % shaft load 1x 10 ¹⁰ revs. at 20 % shaft load
Max. operating speed:	12000 rpm
Weight:	approx. 300 g with cable
Connections:	K2-030: cable axial with 3 m cable
Protection rating : (EN 60529)	IP67, shaft sealed to IP65
Operating temperature:	-20 °C up to +85 °C
Storage temperature:	-30 °C up to +85 °C
Machinery Directive: basic data safety integrity level	
MTTF _d :	200 a
Mission time (T _M):	25 a
Nominal service life (L _{10h}):	1x 10 ¹⁰ revs. at 12000 rpm and 20 % rated shaft load
Diagnostic coverage (DC):	0 %

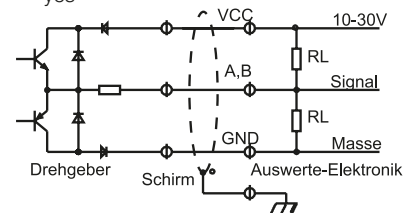
Puls diagram:



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

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 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 Example: Measuring wire, 1 m length	WDGMSXXXX WDGMS001