

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 neccessary.

⚠ 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	1	DIN EN 100015-1

Specifications of encoder: Available PPR:
 1-16384

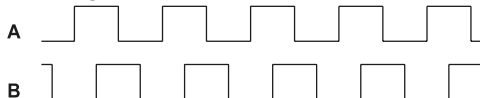
Mechanical Data

Housing	
- Screw flange:	Aluminium
- Cap:	stainless steel
Diameter:	36 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. 0.3 Ncm at ambient temperature
Bearings	
- Type:	2 precision ball bearings
Max. operating speed:	12000 rpm
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 °C up to +80 °C
Storage temperature:	-30 °C up to +80 °C

Machinery Directive: basic data safety integrity level

MTTF _d :	2200 a
Mission time (T _M):	25 a
Nominale service life (L _{10h}):	1,7 x 10 ¹⁰ revs. at 12000 rpm and 20 % rated shaft load
Diagnostic coverage (DC):	0 %

Puls diagram:



Customs tariff number: 90318020
Country of origin: Germany

2025-05-14 / Errors and modifications reserved.

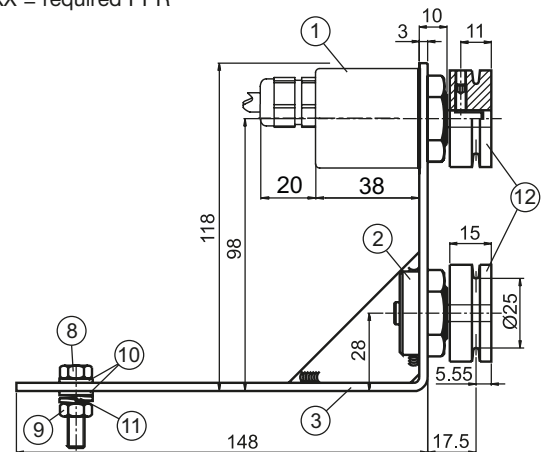
- Complete Measuring System for Length Measurement
- No slip when speed below 1 m/s
- Height typically 17 stops, approx. 53 m
- Resolution until 0.03 mm
- Quick assembly
- Applications: digital shaft copy for lifts, exact measurement of distance and speed

www.wachendorff-automation.com/wdgms

The guided cable shaft copying WDGMS comprises:

- | | |
|---|-------------------------------|
| 1 WDG 36S-XXXX-AB-H24-K2-030 (WDGI 36S according to data sheet) | |
| 2 Redirect pulley | 1x PULLEY-ZVK (incl. Nut) |
| 3 Mounting angle | 1x MKMWRT0001-ZVK |
| 4 Weight | 1x MKGERT0000-ZVK |
| 5 Spring | 1x FESFWDG001-ZVK |
| 6 Ring screw | 2x SC80RS50Z0-ZVK (not shown) |
| 7 Dowel I | 2x MKDBM8SKU0-ZVK (not shown) |
| 8 Screws M6 x 25 | 2x SC60HG25Z0-ZVK |
| 9 Nuts M6 | 2x MUM0M60000-ZVK |
| 10 Washers U6 | 4x US601612M0-ZVK |
| 11 Spring washers U6 | 2x US601612M1-ZVK |
| 12 Roll of wire | 2x MKRS635150-ZVK |

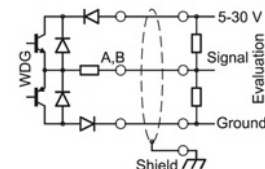
XXXXX = required PPR



Measurement drawing WDG-MS-36S-XXXXX, dimensions in mm

Electrical Data:

Power supply:	4.75 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 > UB - 10% UB L < 2,5 VDC
Pulse frequency:	600 kHz (HTL); 1 MHz (TTL)
Circuit protection:	inverse-polarity and short-circuit



Ordering information:

Description:	Order No.:
Measuring System XXXXX = Please specify required PPR (Roll of wire Ø 25 mm)	WDG-MS-36S-XXXXX
Accessories: Measuring wire xxx = length in meters Example: Measuring wire, 1 m length	WDGSNXXX WDGSN001