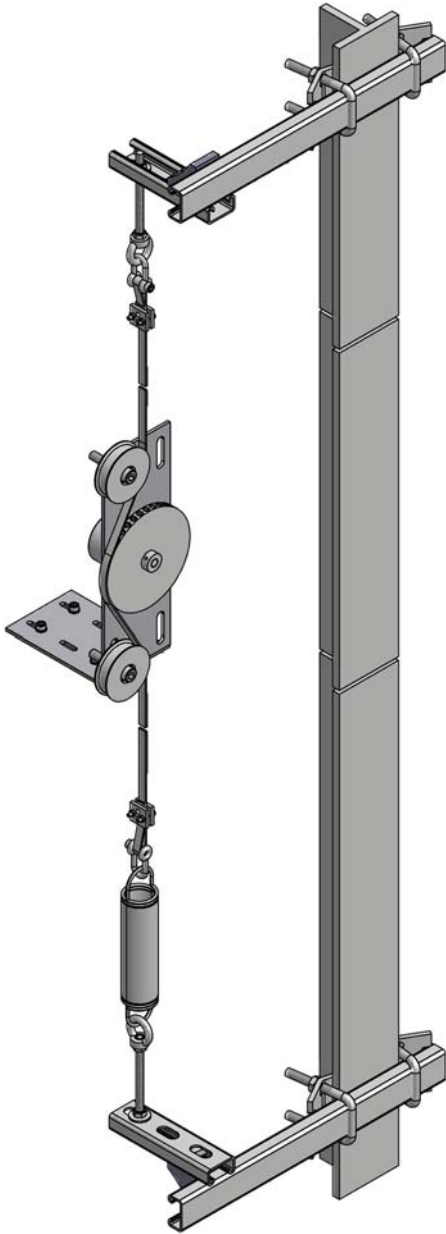


Guided belt measuring system Silent Move

For heights up to 120 metres



- Quiet and non-slip digital shaft copying for universal mounting on a lift cabin
- Use up to speeds of 4 m/s
- Particularly quiet and smooth-running, thanks to special belts and low-noise suspension.
- User-friendly, reliable alternative to switches and sensors.
- Accuracy in the shaft:
 - Incremental encoder WDG up to 0.08 mm/pulse. at 5000 pulses
 - Absolute encoder WDG multiturn, with 8192 steps/turn 13 Bit (24 Bit Multiturn) and 4096 turns 12 Bit, with CANopen or SSI interface.
- Fast and flexible installation with complete set of mechanical parts.

www.wachendorff-automation.com/silent-move

Noticeably quieter in a noise comparison*:

Conventional System: 92 db

Silent Move: 68 db

*measured directly at the idler pulley at 4 m/sec.

The quiet **Silent Move** belt shaft copying devices are systems which are installed quickly and easily in the shaft.

All installation components required for standard installation to the lift cab rail or on the wall are supplied.



Put together your own system for shaft copying, by selecting an encoder and specifying the length of the special belt.



Incremental encoder
WDG58B



Absolute encoder
WDGSL00G



Self-guiding special belt for exceptionally quiet, non-slip measuring with noise-reducing wheel.

Calculation of the limit frequency:

$$f_g \text{ (Hz)} = \frac{\text{Pulse number of encoder (PPR)} \times \text{max. speed (m/sec)}}{\text{Circumference of pulley (m)}}$$

Example:
 $f_g \text{ (Hz)} = \frac{2500 \text{ PPR} \times 4 \text{ m/sec.}}{0.4 \text{ m}} = 25000 \text{ Hz}$

Calculation of resolution in the lifting hole:

$$\text{Res. in pulses/mm} = \frac{\text{Pulse number of encoder (PPR)}}{\text{Circumference of pulley (mm)}}$$

Example:
 $\text{Res. in pulses/mm} = \frac{2500 \text{ PPR}}{400 \text{ mm}} = 6.25 \text{ p/mm} \hat{=} 0.16 \text{ mm}$

Ordering information - Guided belt measuring system WDGMSMN:

Discription:	Order No.:
<p>Incremental variants</p> <p>System (without encoder): Belt pulley, 2 tensioning rollers, encoder attachment, attachment of the belt in the shaft, tensioning device for the belt and corresponding assembly components. Please order the special belt separately. (see below: Silent Move special belt, calculation of length)</p>	WDGMSMN
<p>System with incremental encoder 58B600ABNG24K3: For a accuracy of measurement of 0.6 mm or 1.5 pulses per mm with a limit frequency of 6000 Hz and a cab speed of 4 m/s. Encoder type 58B58B600ABNG24K3: Pulse number: 600 PPR, channels AB and zero pulse, G24: 10 up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial</p>	WDGMSMN58B600ABNG24K3
<p>System with incremental encoder 58B1000ABNG24K3: For a accuracy of measurement of 0.4 mm or 2.5 pulses per mm with a limit frequency of 10.000 Hz and a cab speed of 4 m/s. Encoder type 58B1000ABNG24K3: Pulse number: 1000 PPR, channels AB and zero pulse, G24: 10 VDC up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial</p>	WDGMSMN58B1000ABNG24K3
<p>System with incremental encoder 58B2500ABNG24K3: For a accuracy of measurement of 0.16 mm or 6.25 pulses per mm with a limit frequency of 25.000 Hz and a cab speed of 4 m/s. Encoder type 58B1000ABNG24K3: Pulse number: 2500 PPR, channels AB and zero pulse, G24: 10 VDC up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial</p>	WDGMSMN58B2500ABNG24K3
<p>Define your incremental encoder: With the aid of the calculation forms for limit frequency and resolution in the shaft and the data sheet WDG58B. All variants defined except optional shaft sealed to IP67.</p>	WDGMSMN58BXXXXYYZZK3
<p>Absolute variants</p> <p>System with absolute multiturn encoder with synchronous serial interface SSI*: For a accuracy of measurement of 0.048828125 mm or 20.48 Steps/mm. * Gray Code: 8192 (13 Bit) Steps/revolution and 4096 (12 Bit) revolutions. 10 VDC up to 30 VDC, clamb flansh, cable 2 m, radial</p>	WDGMSMNSL00G1213C100CRW
<p>System with absolute encoder Multiturn with CANOpen DS 406 + DSP 417** (Lift) interface: For a accuracy of measurement of 0.048828125 mm or 20.48 Steps/mm. Binary Code: 8192 (13 Bit) Steps/revolution and max. 4096 (12 Bit) revolutions. 10 VDC up to 30 VDC, clamb flansh, cable 2 m, radial</p>	WDGMSMNCAB1B1213C100CRW
<p>Comprehensive technical information on absolute encoder types is given in the data sheets on the encoder WDG absolute at our homepage www.wachendorff-automation.com/optical</p>	
<p>Silent Move special belt: Calculation of the length: Transport height + 5 m (extend accordingly for transition points)</p> <ul style="list-style-type: none"> 20 m 35 m 50 m 60 m 80 m 200 m-drum 500 m-drum Special belt (XXX = figures in metres) 	WDGNR020 WDGNR035 WDGNR050 WDGNR060 WDGNR080 WDGNR200 WDGNR500 WDGNRXXX