

Set - Circumferential belt measuring system **Silent Move light WDGMEUZ** For heights up to 54 metres



- Measuring set for easy installing the belt on existing brackets in the elevator shaft.
- 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 WDG58B
up to 0.08 mm/pulse at 5,000 pulses
 - Absolute encoder WDGA58B multiturn, with CANopen interface: 4,096 steps/turn and 262,144 (18 bit multiturn) turns or SSI interface: 4,096 (12 bit) steps/turn and 8,192 (13 bit multiturn) turns
- Quick and easy mounting with our complete belt fixing and tensioning set.

www.wachendorff-automation.com/silent-move

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
WDGA58B



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:
 $f_g \text{ (Hz)} = \frac{2500 \text{ PPR} \times 1.6 \text{ m/sec.}}{0.3564 \text{ m}} = 11223 \text{ Hz}$

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:
 $\text{Res. in pulses/mm} = \frac{2500 \text{ PPR}}{356.4 \text{ mm}} = 7.01 \text{ p/mm} \hat{=} 0.14256 \text{ mm}$

Ordering information - Circumferential belt measuring system WDGMEUZ:

Description:	Order No.:
<p>System (without encoder): 2 guide pulleys, encoder attachment, tensioning device and fixing for the belt. Please order the special belt separately. (see below: Silent Move special belt, calculation of length)</p>	WDGMEUZ
<p>Incremental variants System with incremental encoder WDG 58B600ABNG24SC8 and 15 m cable (KI 8-67-15S): For a accuracy of measurement of 0.594 mm or 1.684 pulses per mm with a limit frequency of 6,734 Hz and a cab speed of 4 m/s. Encoder type 58B600ABNH24SC8: pulse number: 600 PPR, channels AB and zero pulse, power supply 10 VDC up to 30 VDC, channels push-pull, sensor connector 8-pol. radial, 15 m cable (KI 8-67-15 S)</p>	WDGMEUZ58B600ABNH24SC8
<p>System with incremental encoder 58B1000ABNG24SC8 and 15 m cable (KI 8-67-15 S): For a accuracy of measurement of 0.3564 mm or 2.8 pulses per mm with a limit frequency of 11,223Hz and a cab speed of 4 m/s. Encoder type 58B1000ABNH24SC8: pulse number: 1,000 PPR, channels AB and zero pulse, power supply 10 VDC up to 30 VDC, channels push-pull, sensor connector 8-pol. radial, 15 m cable (KI 8-67-15 S)</p>	WDGMEUZ58B1000ABNH24SC8
<p>System with incremental encoder 58B2500ABNG24SC8 and 15 m cable (KI 8-67-15 S): For a accuracy of measurement of 0.14 mm or 7.01 pulses per mm with a limit frequency of 28,058 Hz and a cab speed of 4 m/s. Encoder type 58B2500ABNH24SC8: pulse number: 2,500 PPR channels AB and zero pulse, power supply 10 VDC up to 30 VDC, channels push-pull, sensor connector 8-pol. radial, 15 m cable (KI 8-67-15 S)</p>	WDGMEUZ58B2500ABNH24SC8
<p>Define your incrementalen 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>	WDGMEUN58BXXXXYYZZSC8
<p>Absolute variants WDGA58B CANopen or WDGA58B SSI System with absolute multiturn encoder with CANOpen CiA 406: For a accuracy of measurement of 0.087011718 mm or 11.49 Steps/mm. Binary code: 4,096 (12 Bit) Steps/revolution and max. 262,144 (18 Bit) revolutions. power supply 10 VDC up to 30 VDC, 5 pin. connector, 10 m bus line with connector and female connector.</p>	WDGMEUZ58B101218COAB00CB5
<p>System with absolute multiturn encoder with SSI interface*: For a accuracy of measurement of 0.087011718 mm or 11.49 Steps/mm. * Gray Code, alternatively Binary code: 4,096 (12 Bit) Steps/revolution and 4,096 (12 Bit) revolutions. power supply 10 VDC up to 30 VDC, 8 pin. connector, 10 m cable, axial</p>	WDGMEUZ58B101218SIAG01CB8
<p>Comprehensive technical information on WDGA CANopen / WDGA SSI www.wachendorff-automation.com/wdga58bcan / www.wachendorff-automation.com/wdga58bssi</p>	
<p>Silent Movelight special belt: Calculation of the length: Transport height x 2 + 10 m (extend accordingly for transition points) 20 m 35 m 50 m 60 m 80 m 360 m -drum Special belt (XXX = figures in metres)</p>	WDGZR020 WDGZR035 WDGZR050 WDGZR060 WDGZR080 WDGZR360 WDGZRXXX