

Set - Circumferential belt measuring set **Silent Move WDGMEUN** For heights up to 70 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/sec.
- 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 5000 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

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
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:
 $f_g \text{ (Hz)} = \frac{2,500 \text{ PPR} \times 1.6 \text{ m/sec.}}{0.395 \text{ m}} = 11,223 \text{ Hz}$

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:
 $\text{Res. in pulses/mm} = \frac{2,500 \text{ PPR}}{395 \text{ mm}} = 6.33 \text{ p/mm} \hat{=} 0.158 \text{ mm}$

Ordering information - Circumferential belt measuring system WDGMEUN:

Description:	Order No.:
<p>Incremental variants 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>	WDGMEUN
<p>System with incremental encoder WDG 58B600ABNH24SC8 and 15 m cable (KI 8-67-15S): For a accuracy of measurement of 0.658 mm or 1.5 pulses per mm with a limit frequency of 6,076 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>	WDGMEUN58B600ABNH24SC8
<p>System with incremental encoder 58B1000ABNH24SC8 and 15 m cable (KI 8-67-15 S): For a accuracy of measurement of 0.395 mm or 2.5 pulses per mm with a limit frequency of 10,126 Hz 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>	WDGMEUN58B1000ABNH24SC8
<p>System with incremental encoder 58B2500ABNH24SC8 and 15 m cable (KI 8-67-15 S): For a accuracy of measurement of 0.158 mm or 6.33 pulses per mm with a limit frequency of 25,316 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>	WDGMEUN58B2500ABNH24SC8
<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 DS 406 interface: For a accuracy of measurement of 0.096435546 mm or 10.37 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, radial, 10 m bus line connector and female connector, T-junction, termination resistor</p>	WDGMEUN58B101218COAB00CC5
<p>System with absolute multiturn encoder with synchronous serial interface SSI*: For a accuracy of measurement of 0.048217773 mm or 20.74 steps/mm. * Gray Code (G)/Binary Code (B): 4,096 (12 bit) steps/revolution and 8,192 (13 bit) revolutions. Power supply 10 VDC up to 30 VDC, 8 pin connector, radial, 10 m cable</p>	WDGMEUN58B101218SIAX01CC8 X = G or B
<p>Comprehensive technical information on WDGA CANopen / WDGA SSI www.wachendorff-automation.com/wdga58bcan / www.wachendorff-automation.com/wdga58bssi</p>	
<p>Silent Move special belt: Calculation of the length: Transport height x 2 + 10 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) 	<ul style="list-style-type: none"> WDGNR020 WDGNR035 WDGNR050 WDGNR060 WDGNR080 WDGNR200 WDGNR500 WDGNRXXX