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Set - Guided belt measuring system Silent Move Compact WDGMSMZK

For heights up to 120 metres (393.70 ft)

- Quiet and non-slip digital shaft copying for universal mounting on a lift cabin
- Use up to speeds of 4 m/s (800 ft/min).
- 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 WDGI58B
    < 0.03 mm/pulse (0.00133 inch/pulse) 5,000 pulses
  - Absolute encoder WDGA58B multiturn, with
    CANopen interface:4,096 steps/turn
    and 262,144 (18 bit multiturn) turns,
    CANopen LIFT 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
  - 16 Bit < 0.003 mm (0.000102 inch)
    13 Bit < 0.02 mm (0.000813 inch)
    12 Bit < 0.04 mm (0.001627 inch)
- Fast and flexible installation with complete set of mechanical parts.

www.wachendorff-automation.com/smcompact

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

Incremental encoder
WDGI58B

Absolute encoder
WDGA58B

Incremental encoders WDGI:

Calculation of resolution in the shaft:
Effective circumfrerence of pulley: 169.24 mm (6.6629 inch)

$$\text{Res. in mm (inch)} = \frac{\text{169.24 mm (6.6629 inch)}}{\text{Pulse number of encoder (PPR)}}$$

$$\text{Res. in pulses/mm (inch)} = \frac{\text{Pulse number of encoder (PPR)}}{\text{169.24 mm (6.6629 inch)}}$$

Calculation of the limit frequency:

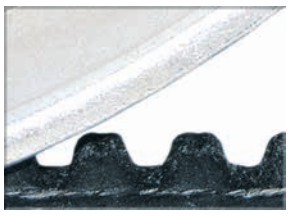
$$\text{fg (Hz)} = \frac{\text{Pulse number of encoder (PPR) x max. speed (m/sec) (ft/sec)}}{\text{0.16924 m (0.5552493 ft)}}$$

Calculation of the traverse path:

$$\text{s (m) (ft)} = \frac{\text{Pulses (I)}}{\text{Pulse number of encoder (PPR)}} \text{ x 0.16924 m (0.5552493 ft)}$$

Absolute encoders WDGA:

Repeat precision with WDGA: +/- 0.2 mm (0.007874 inch)



Special belt for exceptionally quiet, non-slip measuring.

Ordering information - Guided belt landing system WDGMSMZK:

Description:	Order No.:
System (without encoder): Silent Move Compact, fastening of the belt in the shaft, tensioning device and attachment for the belt. Please order the special belt separately. (see below: Silent Move special belt, calculation of length)	WDGMSMZK
Incremental variants	
System with incremental encoder 58B10600ABNH24K3: For an accuracy of measurement of 0.28 mm (0.011105 inch) or 3.5 pulses/mm (90.1 pulses/inch) with a limit frequency of 14.1 kHz and a cab speed of 4 m/s (787.4 ft/min). Encoder type 58B10600ABNG24K3: Shaft: Ø 10 mm, 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	WDGMSMZK600ABNH24K3
System with incremental encoder 58B101000ABNH24K3: For an accuracy of measurement of 0.17 mm (0.006663 inch) or 5.8 pulses per mm (150.1 pulses per inch) with a limit frequency of 23.5 kHz and a cab speed of 4 m/s (787.4 ft/min). Encoder type 58B101000ABNG24K3: Shaft: Ø 10 mm, pulse number: 1,000 PPR, channels: AB and zero pulse, G24: 10 VDC up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial	WDGMSMZK1000ABNH24K3
System with inkremental encoder 58B102500ABNH24K3: For an accuracy of measurement of 0.07 mm (0.002665 inch) or 4.7 pulses per mm (375.2 pulses/inch) with a limit frequency of 58.8 kHz and a cab speed of 4 m/s (787.4 ft/min). Encoder type 58B102500ABNH24K3: Shaft: Ø 10 mm, pulse number: 2,500 PPR, channels: AB and zero pulse, H24: 10 VDC up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial	WDGMSMZK2500ABNH24K3
Find your incremental encoder: With the aid of the calculation forms for limit frequency and resolution in the shaft and the data sheet WDGI58B. All variants defined except optional shaft sealed to IP67.	WDGMSMZKXXXXYYYZZZSC8
Absolute variants WDGA58B CANopen. CANopen LIFT or WDGA58B SSI	
System with absolute multiturn encoder with CANopen CiA 406 interface: For an accuracy of measurement of 0.042 mm (0.001627 inch) or 24.1 steps/mm (614.7 steps/inch). Binary code: 4,096 (12 bit) steps/revolution and max. 262,144 (18 bit) revolutions. 10 VDC up to 30 VDC, clamping flange, 5 pin. connector, radial.	WDGMSMZK1218COAB00CC5
System with absolute multiturn encoder with CANopen LIFT CiA 417 interface: For an accuracy of measurement of 00.042 mm (0.001627 inch) or 24.1 steps/mm (614.7 steps/inch) configurable. Binary Code: 4,096 (12 bit) steps/revolution and max. 262,144 (18 bit) revolutions configurable. Power supply 10 VDC up to 30 VDC, 5 pin. connector, radial.	WDGMSMZK1218CLAB00CC5
System with absolute multiturn encoder with SSI interface*: For an accuracy of measurement of 0.042 mm (0.001627 inch) or 24.1 steps/mm (614.7 steps/inch). * Gray Code (G)/Binary Code (B): 4,096 (12 bit) steps/revolution and 8,192 (13 bit) revolutions. 10 VDC up to 30 VDC, clamping flange, lead outlet 2 m cable, radial. Comprehensive technical information on WDGA 58B CANopen / WDGA 58B CANopen LIFT / WDGA 58B SSI - www.wachendorff-automation.com/wdga58bcan /wdga58bcanlift /wdga58bssi	WDGMSMZK1218SIAX01L3 X = G or B
Silent Move Compact special tooth belt:	
Calculation of the length: Transport height + 5 m (extend accordingly for transition points)	
20 m	WDGZR020
35 m	WDGZR035
50 m	WDGZR050
60 m	WDGZR060
80 m	WDGZR080
430 m-drum	WDGZR430
Special tooth belt (XXX = figures in metres)	WDGZRXXX

Customs tariff number: 90318020
Country of origin: Germany