

Linear Measuring Technology

Elevator measuring system for shaft-copying

Encoder mounting fixture, guided-belt, LM3

max. height 53 m



System for shaft-copying, with complete mechanical kit in proven toothed belt technology.

A smooth-running toothed belt and a vibration-resistant encoder mounting fixture ensure quiet operation. The belt pulley benefits from separate bearing supports in the mounting fixture, so protecting the installed encoder from mechanical overloading. With the guided-belt system, the encoder mounting fixture and the measuring wheels are located on the elevator car.



Ideal for use in passenger elevators, freight elevators, automatic storage systems.

Complete system

- · Rugged construction
- Reduced load on encoder bearings due to separate belt pulley-bearings
- Non-slip
- · Tensioning rollers with belt guide

Minimal noise generation

- Smooth-running toothed-belt ensures extremely quiet operation
- · Vibration-free operation

Order code

8.LM3.01

Encoder mounting fixture with measuring wheels for fixing on the elevator car

consists of:

- Encoder mounting fixture
- · Mounted measuring wheel
- · Belt guide
- · Belt fixing and tensioning set
- Screws and other small components

suitable encoders:

• Incremental encoder: 8.5000.83XX.XXXX

Calculation of pulse rate PPR =

 $\frac{300 \text{ mm}}{\text{Resolution, e.g. 0.5 mm}} = 60$

Absolute encoders:

SSI: 8.5863.12XX.XXXX CANopen / CANopenLift: 8.5868.12XX.XXXX





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Fixing kit Fixing at the top Fixing at the bottom

Complete kit consists of:

- C-rails, 700 mm
- Bracket
- Screws
- Other small components

8.BLM2.01





- Width 10 mm
- Polyurethane, with single parallel steel cords.
- Low belt-stretch
- High resistance to abrasive wear
- Resistant to the effects of UV radiation
- Maintenance-free
- Resistant to ageing
- Temperature range -10°C...+80°C [+14°F ... +176°F]

Calculation of the required length of toothed belt = Elevator height + approx. 5 m (depending on the distance between top and bottom fixing) 05.ZAR1.XXX

 $XXX = Length in metres \\ Standard delivery lengths: \\ 20 m, 25 m, 30 m, 35 m, 40 m, \\ 45 m, 50 m, 55 m, 60 m, 70 m, \\ 80 m, 90 m, 100 m, 120 m, \\ 250 m, 300 m \\ \\ Other lengths on request$

Technical data	
Resolution in the shaft	depends on the resolution of the encoder (e.g. incremental encoder with 3000 PPR = 0.1 mm ; absolute encoder $12 \times 12 \text{ bit} < 0.1 \text{ mm}$)
Elevator car speed	max. 1.6 m/s
Max. height of elevator	53 m
Effective circumference of belt pulley	300 mm

Dimensions

Dimensions in mm [inch]



