

Absolute positioning system

LIMAX SAFE - INTEGRATED SAFETY EN 81-20/50, EN 81-21

Limax is a shaft positioning system with an accuracy of 1mm for speed up to 10 m/s and shafts of 260m.

The principle of magnetic measurement ensures a high robustness of the system and makes it insensitive to smoke, heat, humidity and dust.

Furthermore, the robust magnetic band is very resistant to manual stress during assembly.

The integration with the Secur 3 through the car serial CAN-bus makes the installation and the use fast and easy. Individual floors can be set from the Secur 3 keypad from the landing or on top of the lift car.

To satisfy functional safety requirements, the LIMAX absolute car position measurement sensors - from the LIMAX33 RED series onwards - are fully redundant and thus can be used for safety-relevant applications up to SIL3.

Safety-relevant switching and control functions that depend on the position and the speed of the car can be implemented in the software:

- end terminal speed limiting
- door-overbridging and advanced door opening when entering the floor
- end limit and inspection end limit switch function
- protection against unintended car movement with open doors
- triggering of safety gear at overspeed

With LIMAX SAFE shaft information and safety systems, a considerable number of formerly mechanical components and subsystems in the shaft can thus be dispensed. Maintenance and troubleshooting are also simplified.

Its use is highly recommended for the followings applications:

- ⇒ Elevators for fireman or in demanding environments (smoke and humidity)
- ⇒ High Speed Elevators which require the maximum stopping accuracy
- ⇒ Any type of installation where you do not want to use floor or deceleration magnets
- ⇒ Immediate position recognition after power failure
- ⇒ Direct drive

