

# Drive DR PSG 545-600

## New power in your elevator

According to EN 81 20

### Safer, more efficient performance

Give your existing elevator a power boost with a DR PSG drive. Compared to an old drive, it will reduce maintenance costs, improve energy efficiency. When combined with a new inverter, it

will not only reduce energy consumption but also improve comfort and safety for users.



1: Typical building application | 2: Machine room | 3: Inverter with energy recuperation

### Advanced technology

Same gearless and permanent magnet motor technology used in top-range elevators improves ride comfort and energy consumption. Whether in an office building, shopping mall, hotel or high-requirement residential buildings, the Schindler DR PSG drive is the ideal solution to meet the today's demands and work reliably far into the future.

### The power of flexibility

Packing plenty of power into compact dimensions, the DR PSG is designed to fit easily in any existing machine room. It can be rapidly installed with minimal adaptations to the building, thanks to the special frames and supports offering a variety of configurations, which make it simple to replace the existing machine.

### Key benefits



Excellent ride comfort



Flexible and quick installation



Complies with latest EU safety requirements



Energy saving, lower operating costs



Reliable and long operation life



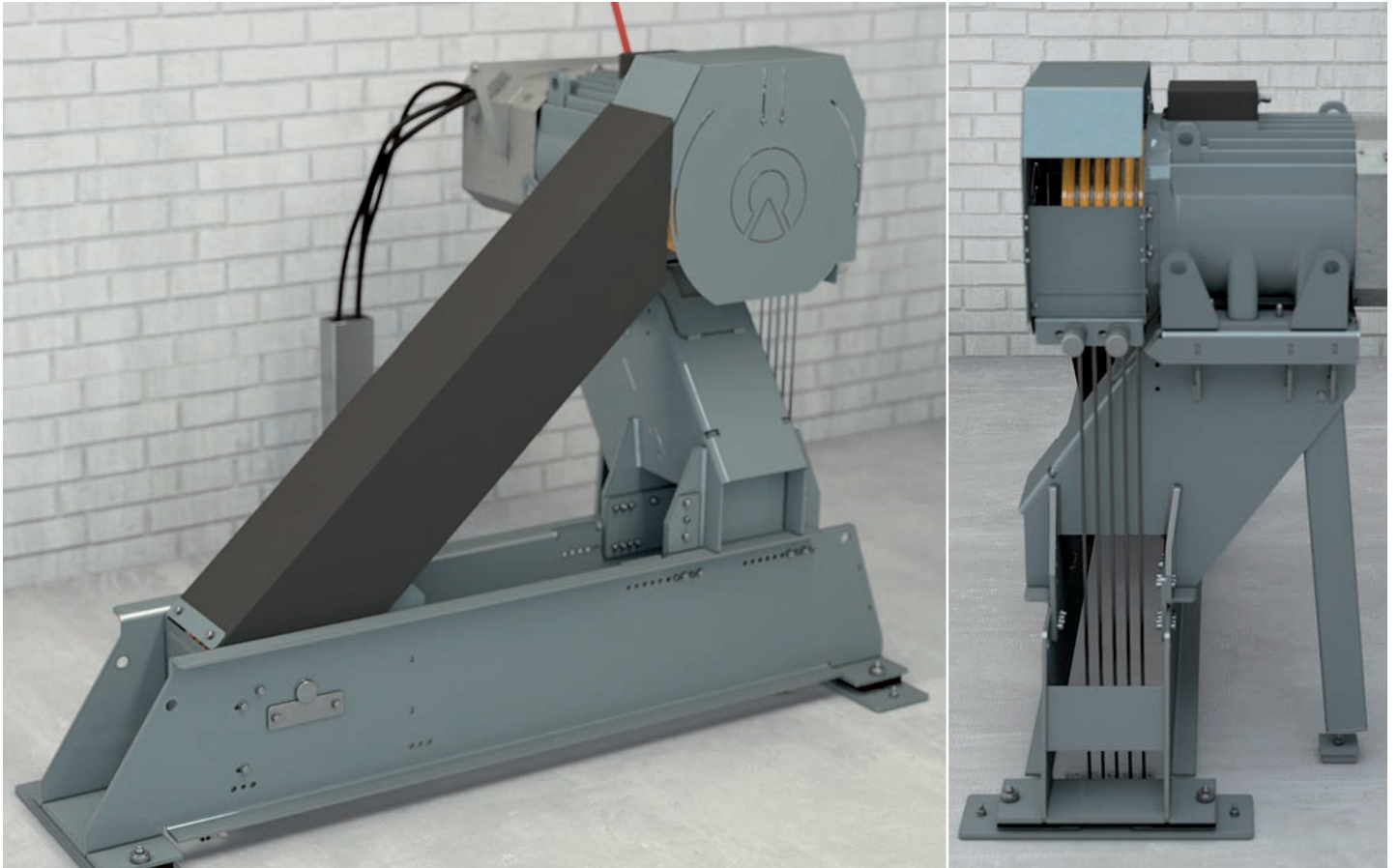
Design for high performance and traffic requirements



# Wide range of applications

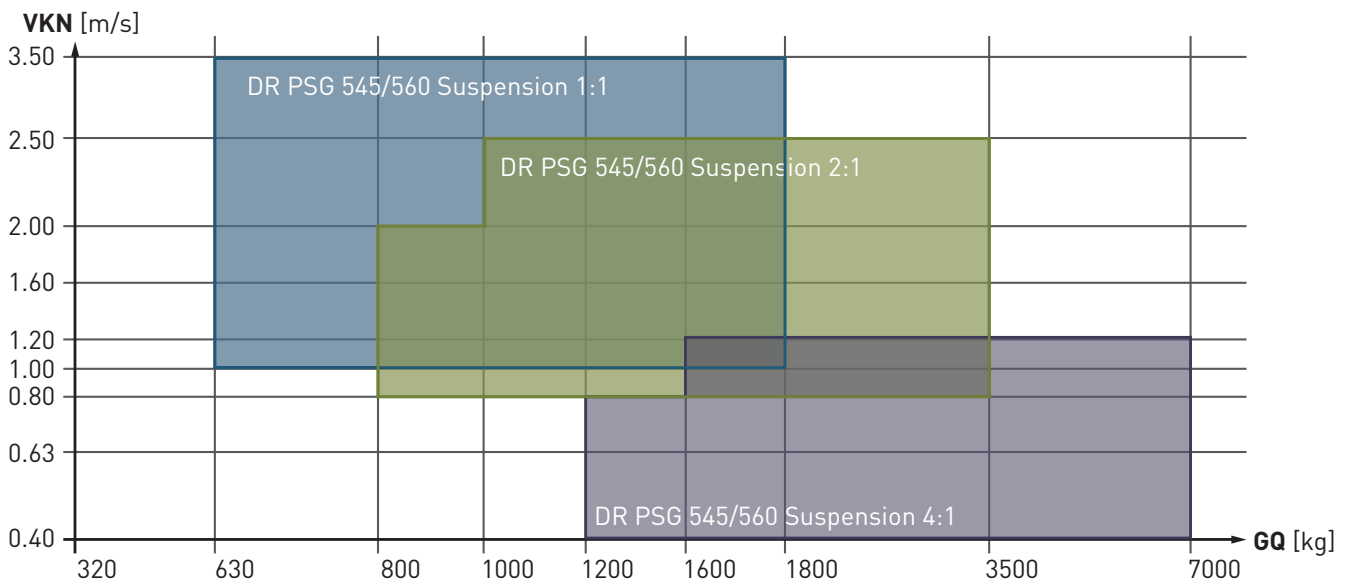
The new DR PSG drive is designed to satisfy the requirements of any top residential, public or commercial building of up to 125 metres in height. In combination with a multi-functional CO MX controller, it can be installed in a single elevator or in heavy traffic groups. Capable of carrying loads of up to 7000 kg and a speed of

up to 3.5 metres/second, it is equipped with extra reinforced brakes that eliminate noise and ensure compliance with the latest norms. What's more, it combines the comfort of a tried and tested Schindler drive with the robustness necessary to achieve up to 240 starts per hour.



Machine room

## Application range\*

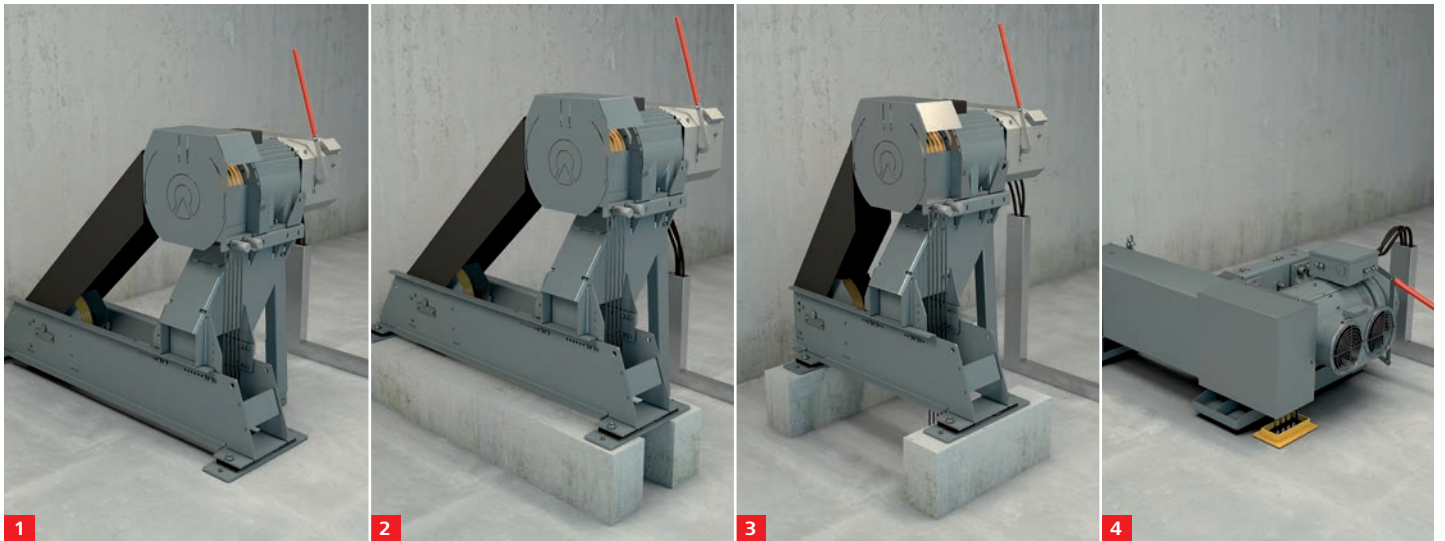


\*estimation: depend on specific machine calculation

# Adapts to your building

Concrete slabs and pillars can represent a challenging element when replacing an elevator drive. The flexible supports and frames of the DR PSG facilitate the substitution of the existing unit while

maintaining the original building structure, for fast, simple installation.

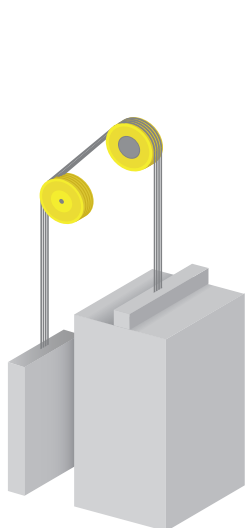
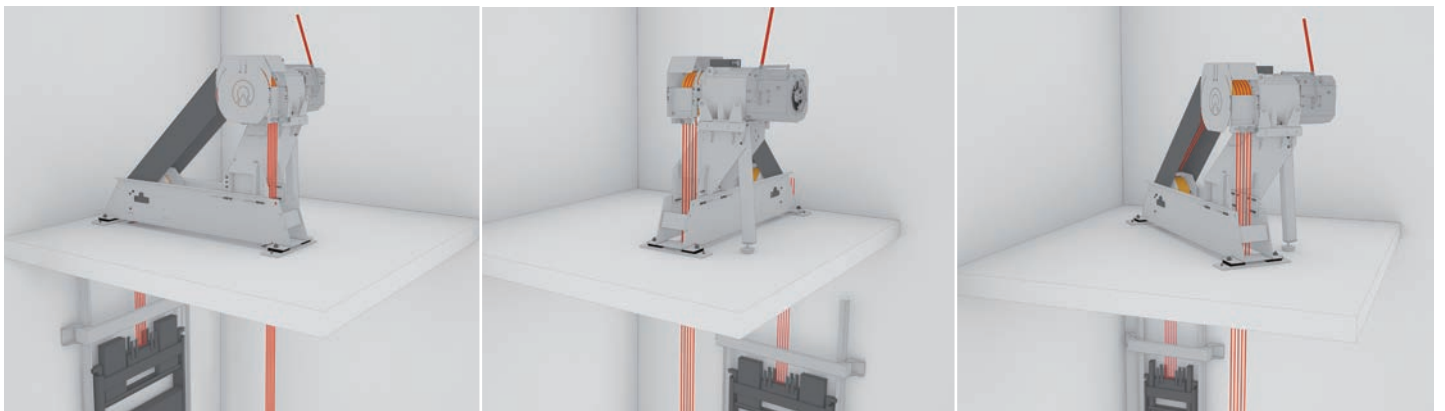


1. machine on floor | 2. machine on lateral pillars | 3. Pillars on extreme position | 4. Double wrap frame

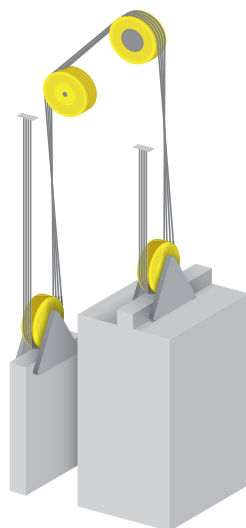
# Versatile installation

Made to fit in a large variety of machine room and elevator layouts, it can be installed in elevators with the counterweight in the rear,

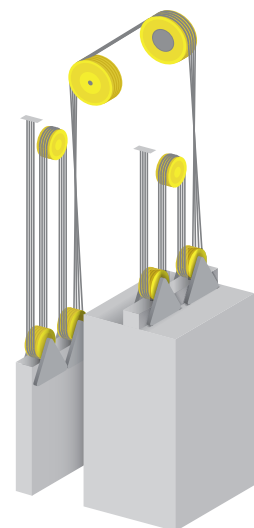
lateral, rear lateral, central or inclined positions. It's also ready for direct suspension (1:1) or with multiplication pulleys (2:1 - 4:1).



SUSPENSION 1:1



SUSPENSION 2:1



SUSPENSION 4:1

# DR PSG 545-600 Product details

## Encoder

- Optimum travel comfort
- Optimal positioning

## Terminal box (type dependent)

- Movable
- All sides motor connection
- Pre-assembled motor cable

## Magnets

- Nd-Fe-B with highest magnetic field intensity
- Assembling under clean room conditions
- Special high quality corrosion protection

## Bearing

- No re-lubrication needed
- Vibration smoothly
- Longevity

## Brake

- Type examined
- Quiet operation
- Longevity
- Available with optional hand-release system
- Certified against uncontrolled and unintended car movement
- With dust protection

## Housing

- Operation without forced cooling possible (high basic duty cycle)
- High-strength housing
- Smallest dimensions

## Winding

- Temperature protection either PTC or KTY sensors
- Insulation class F

## Shaft

- Type examined
- Conical
- Simple change of the traction sheave

## Traction sheave

- Groove geometry adapted to installation data
- Hardened groove up to 50HRC available
- Different diameters



**High energy efficiency**

## Energy efficiency

Without the need for mechanical gears or heavy moving parts, the optimized drive technology of the DR PSG can deliver energy savings of up to 30%. When combined with the Schindler high-end regenerative frequency converter, additional energy

savings of up to 50% can be achieved by feeding recovered braking energy back into the electricity grid for reuse by lighting, ventilation or other building systems.

## Safety first

There's no need for extra rope brakes or safety gear to satisfy the latest safety requirements. The DR PSG is designed to fully cover the demands of the new European norms EN 81 20/50 relating to uncontrolled movement. Its brakes act directly on the traction axle and its double acting disk brake ensures quiet and safe operation.

### Product characteristics

Nominal load	630kg to 7000kg
Nominal speed	1m/s up to 2.5m/s (3.5m/)
Travel height	up to 125m
Rope fall distance	960mm to 1800mm
Drive type	Gearless with steel ropes
Drive system	Synchronous motor, frequency regulation closed loop, optional with energy recuperation
Stopping accuracy	+/- 3mm
Brake system	double encapsulated disk brake
Start per hour	up to 240

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