

Schunk Smart Fast Charging – “Inverted System”

The inverted System for smart charging is designed as a single arm or half-scissors pantograph with an insulated *4-pole* contact head.

The flexible contact head mounted on a linear bearing allows compensation of the positions and angles of the bus as well as Kneeling in resting position.

The contacts (Positive, Negative, PE, Control Pilot) are insulated from one another and set up the contact to the charging station. This allows the current transmission from charging station to energy storage on the bus in seconds. The Control Pilot guarantees a permanent safe current transmission during the whole charging process.

This design allows an extreme compact and light-weight arrangement of the complete charging system with very short charging cycles.

Standard Features

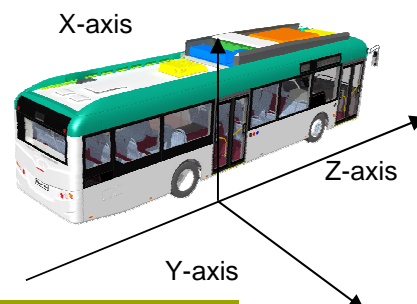
- Multi-pole design (Positive, Negative, PE und Control Pilot)
- Safety function with control pilot (TÜV-certified)
- Zero-potential frame parts
- Compensation of kneeling during charging process possible
- In the structure integrated raising/lowering actuation
- Raising of pantograph in different positions possible
- Power transmission in seconds at various bus stops and long-time charging at depots possible
- Simple maintenance, no special tools necessary
- Lock down latch
- Extreme durable and reliable design due to high experience and knowledge

Technical Data

- Maximum rated voltage 750 V DC
- Charging current 500A – continuous current
- 1,000A – max. 30sec
- Supply voltage of electric lowering unit 24V DC $\pm 30\%$
- Contact force (adjustable) overall 250N
- Raising time ca. 3sec.
- Lowering time ca. 4,5sec.
- Weight ~ 85kg
- Operating temperature -30°C to $+65^{\circ}\text{C}$
- Working range ca. 1,800 mm

Compensation of the positions and angles of the bus in resting position:

- X-axis: 1,060mm → vertical axis
- Y-axis: 750mm → transversal axis
- Z-axis: 1,000mm → longitudinal axis
- Kneeling (Lateral lowering of 4°)



Dimensions Panto

- Total length: ca. 2,000mm
- Total width: 1,000mm
- Mounting dimension longitudinal: 600±1mm
- Mounting dimension transversal: 630±1mm
- Length of linear bearing: 1,000mm
- Extension: ca. 1,800mm

Dimensions collector

- Total length (adjustable): 1,300mm
- Total width (adjustable) 770mm
- Height 325mm
- Weight ca. 45kg

