



Hauling rope: Ø 13 mm galvanised
 Minimum breaking force 165 KN
 Tension force Max 36 KN
 Rope sag min 26.5 meters

Glider data:
 Passengers weight max 4 x 80 kg
 Minimum age 10 years
 Minimum body size 130 cm
 Capacity 60 people/hour

Carrying rope: Ø 28 mm full-locked
 Minimum breaking force 875 KN
 Tension force max 234 KN
 Rope sag min 25.8 meters

SG_01 Top-station:
 The top-station needs no energy and no connection line to the drive station. The galvanized round tube support with suspension rope, hanging point and two pulleys for the hauling rope redirection, is guided on the mountain side with two tension rods. A ladder and several service platforms ensure accessibility for service. The top station is unattended during operation and secured against access by unauthorized persons.

SG_02 Drive-station:
 The hydraulic carrying rope and hauling-rope tensioning device with the associated monitoring system is located in the drive system. The rotating hauling-rope is moved via drive wheel by means of electric drive. Two independent mechanical emergency brake systems ensure maximum safety in the event of a fault. The drive-wheel moves the glider uphill and downhill and holds it exactly above the loading platform while passengers are getting in and out. The position and speed check during the flight is done by 4 independent shaft encoders. The entire Fail Safe control and electrical engineering is located in the drive-station and is locked in operation.

SG_03 Glider:
 The Glider consists of a steel frame and 4 rubberized rollers and 2 pieces of preloaded counter-rollers enclose the carrying rope. At the Glider, the 4 passengers are securely locked in the specially developed harness. In the event of a cable break, an integrated carrying-rope brake provides additional safety.

SG_04 Entrance-station:
 Access is via centrally divided staircase. The passenger receives the suitable harness in the also divided dressing-area (4 different harness sizes available). In the dressing-area is also the control panel for the operator. The passenger enters the loading platform via a security door and is locked on a hook in the glider by the operator. The flight starts uphill towards the mountain. After the downhill flight towards the valley, the passenger leaves the landing platform through the dressing-area. The harness is left there and the passenger leaves the building via the staircase.

General description:

The SkyGlider is an amusement ride that simulates a kite flight on a rope for the visitor. The glider (vehicle) hangs on a carrying rope and is accelerated over a circulating hauling rope by an electric drive with 70 km/h uphill and after a short mountain break with up to 83 km/h downhill and again slowed down. The procedure is carried out automatically for the 4 passengers in the Glider. The SkyGlider can be operated in summer up to +40° C and in winter up to -15° C. Even rain and snow do not disturb the operation. One operator is sufficient for the safe operation of the system. For the rescue of the passengers in case of failure, a second trained person is needed. In order to achieve the maximum capacity of equipment, we recommend two operators.

The SkyGlider consists of 4 main components: **01-02-03-04**

Environmental conditions for operation:
 Temperature range: - 15 to + 40 ° C
 Wind speed: max. 15 m/s
 Operation in the summer and in the winter rain and snow possible

System data:
 Carrying rope length 878 meters
 Flight length 860 meters
 Top-station height 10.0 meters
 Entrance-station height 11.5 meters
 Total Height difference 120 meters

Uphill speed max 13.9 m/s²
 Downhill speed max 23 m/s²
 Average cycle time 5-6 min
 Acceleration glider via drive 2.5 m/s²
 Braking by drive 2.6 m/s²
 Braking by emergency brake 5 m/s²
 Braking by Glider carrying rope-brake 8 m/s²

Electrical data:
 Drive Power 160 KW
 E-Control technology Fail safe plc / Pilz PSS 4000
 Network requirements PE
 Operating voltage 3 x 400V/50 Hz
 Pre-Fuse protection 400 amps