

- ASK 18 - Flight Manual

For the following empty weights the following center of gravity positions are approved:

Empty weight kp	200	210	220	230	240	
Minimum pay-load = 60 kp	638	626	615	604	595	max. mm forward
	577	559	543	528	514	max. mm rearward

Emptyweight kp	200	210	220	230	240	
Minimum pay-load = 65 kp	660	646	634	623	613	max. mm forward
	577	559	543	528	514	max. mm rearward

Position of glider : Tangente on rib 3 horizontal
 Ref. point (BP) : Wing leading edge rib 3

If the empty weight center of gravity is within the given limits it is certain to have the center of gravity (in-flight center of gravity) within the approved limits provided that the payload is within the approved limits.

The center of gravity position has a considerable influence to the handling characteristics. Therefore, care for that is most important.

Most dangerous can be to have the C. of G. too far behind because the stalling and especially the spinning characteristics (flat spin) will deteriorate. The sensitivity of the elevator is increasing.

The C. of G. too far forward has an adverse effect to the flight performance and may not allow to fly with max. lift (pull up during touch down).

The following limits of the in-flight center of gravity are tested :

- a) max. forward 200 mm behind ref. point
- b) max. rearward 379 mm behind ref. point

7. Trim plan

Pay-load max. 110 kp incl. parachute

min. 60 kp incl. parachute *)

or 65 kp incl. parachute *)

*) depends on empty weight center of gravity

With less pay-load some ballast will be necessary.

The 7.7 kp standard ballast weight on the floor board compensates for 12 kp on the seat.

Note :

If no parachute is carried, a back cushion of 10 cm thickness compressed has to be used.

Load in the luggage compartment : max. 5 kp.