

CALCULATION OF LOADING CONDITION	DA 42 (Example)		Your DA 42	
	Mass	Moment	Mass	Moment
	[kg] [lb]	[kgm] [in.lb]	[kg] [lb]	[kgm] [in.lb]
1. Empty mass (from Mass and Balance Report)	1250 2756	2937.5 254,965		
2. Front seats Lever arm: 2.30 m (90.6 in)	160 353	368.0 31,982		
3. Rear seats Lever arm: 3.25 m (128.0 in)	70 154	227.5 19,712		
4. Nose baggage compt. Lever arm: 0.60 m (23.6 in)	5 11	3.0 260		
5. Cabin baggage compt. Lever arm: 3.89 m (153.1 in)	10 22	38.9 3,368		
6. Baggage extension Lever arm: 4.54 m (178.7 in)	5 11	22.7 1,966		
7. De-icing fluid (if installed; see NOTE on previous page) (1.1 kg/liter) (9.2 lb/US gal) Lever arm: 1.00 m (39.4 in)	27.5 61	27.5 2,403		
8. Total mass & total moment with empty fuel tanks (Total of 1. through 7.)	1527.5 3368	3625.1 314,656		
9. Usable fuel, main tanks (0.84 kg/liter) (7.01 lb/US gal) Lever arm: 2.63 m (103.5 in)	159 351	418.2 36,329		
10. Usable fuel, auxiliary tanks (if installed; OÄM 42-056) (0.84 kg/liter) (7.01 lb/US gal) Lever arm: 3.20 m (126.0 in)	84 185	268.8 23,310		
11. Total mass & total moment with fuel & de-icing fluid (Total of 8. through 10.)	1770.5 3904	4312.1 374,295		

The CG's shown in the following diagrams are those from the example in Section 6.4.3 'CALCULATION OF LOADING CONDITION', rows 8 and 11.

6.4.4 PERMISSIBLE CENTER OF GRAVITY RANGE

