

BELLANCA DECATHLON 8KCAB Model Guide

The BELLANCA DECATHLON 8KCAB is a single-engine piston, fabric-covered, tailwheel aerobatic aircraft. The registry lists the 8KCAB family as a two-seater from Champion. The only document is an operator's quick reference handbook (QRH). It gives a maximum takeoff weight of 1800 lbs, 40 US gallons of usable fuel and a fixed undercarriage.

KEY TAKEAWAYS

- Maximum takeoff and landing weight are both 1800 lbs (818 kg). Baggage is limited to 100 lbs.
- Load limits are +5G/-3G in the Normal category and +6G/-5G in the Aerobatic category.
- Fuel is 40 US gallons usable. The QRH lists burn at 32 L/hr normal and 45 L/hr aerobatic at full rich.
- The QRH is not the approved flight manual. It does not take precedence over the CASA approved Aircraft Flight Manual.

WEIGHTS, FUEL AND LIMITS

The QRH gives MTOW and MLW as 818 kg (1800 lbs) and maximum baggage as 45 kg (100 lbs). Usable fuel is 40 USG. Oil is 6 quarts minimum and 8 quarts maximum. The crosswind limit is 17. Fuel burn is 32 L/hr normal, 45 L/hr aerobatic (full rich) and 40 L/hr for a lesson with 30 minutes of aerobatics.

WHAT TO INSPECT

The QRH preflight covers the fabric on both fuselage sides, the greenhouse roof, wing root fairings, and front and rear struts. It also covers the horizontal stabilizer brace wires, tailwheel condition and inflation, wheel fairings, brakes, tires and air filter. Check the fuel drains at both wings, the nose and the belly. Check that the pitot tube, fuel vent and static ports are clear.

HANDLING NOTES FROM THE CHECKLIST

The undercarriage is fixed and flaps are marked N/A. Climb power after takeoff is 2500 RPM at 25 inches. The precautionary landing approach is flown at 75 IAS. The emergency landing speed is 65 and the engine air restart speed is 80. The magneto check at 2000 RPM allows a maximum drop of 175 RPM each, with a 50 RPM difference.

PERFORMANCE

Max Crosswind Kts	17
Vr Rotate Kts	55
Vbase Kts	75
Vfinal Kts	70
Family Max Cruise Speed Kts	150
Family Max Range Nm	380
Family Max Service Ceiling Ft	16000

V-SPEEDS

Vne Kts	174
Vno Kts	139
Va Normal Kts	93
Va Aerobatic Kts	115
Vx Kts	50
Vy Kts	71
Vglide Kts	65
Vs1 Kts	47

WEIGHT & BALANCE

Max Takeoff Weight Lbs	1800
Max Landing Weight Lbs	1800
Max Baggage Weight Lbs	100
Usable Fuel Gal	40

SAFETY NOTES

- Oil pressure must be in the green within 30 s of start. With little or no oil pressure, land as soon as possible.
- Engine fire in flight: mixture ICO, fuel shut-off valve OFF, all switches OFF, cabin heat OFF, extinguish the fire and land ASAP.
- Static system failure: the QRH calls for breaking the glass on the pressure instruments. Confirm the procedure against the approved flight manual.