RBFLT800 RC Electro

MGTOW 50,000 kg / 110,000 lbs

TECHNICAL DATA

ENGINE / DRIVE SYSTEM

- Electric engine 2 x AC 48V 8.5 kW direct drive
- The tug can be set with up to 70 different settings, setting speed, brakes and much more

STEERING

- Remote control
- 2 Finger joystick (Forward and back / left and right)

FRAME

- For aircraft up to approx. 80,000 kg / 175,000 lbs
- Loading Weight: 8000 kg
- Empty weight: 3350 kg
- Dimensions: LxWxH 3.35 x 2.59 x 0.63 m
- Ground clearance 136mm

SPEED

- Step 1: approx. 0 – 3 km/h
- Step 2: approx. 0 – 12 km/h
- Joystick controlled speed control, and step control by switch

BATTERIES

Lead acid batteries in a steel safety coated case, 48 V 480 Ah

BATTERY CHARGER

HF charger 48V 50A with charge level indicator incl. charging cable, charging time 8 hours

BRAKE

Hydraulic oil-multi-disc brake

RANGE

Approximately 20 km

GROUND CONDITIONS

Concrete, Asphalt

AXLE

- Front axle: pendulum axle with electric steering
- Drive axle: single drive, with multi-disc brake

TYRES

- 2 wheel drive wheels, solid rubber, heavy duty.
- 225-75R10 2 steering wheels, heavy duty, 400 x 4

LANDING GEAR BRACKET

Electric hydraulic landing gear bracket:

- Complete electrically guided, hydraulic lifting and holding
- Hydraulic door opening and closing system
- Hydraulic ramp for different wheel diameter
- Rollers
- Wheel lockdown for single and double landing gear wheels
- Maximum landing gear width 570mm
- Lifting height 140mm

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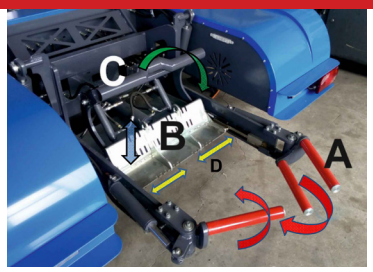
LIGHTS / SAFETY EQUIPMENT

- 2 emergency switch, 1 on the vehicle and 1 on the remote control
- Light on the landing gear bracket
- 4 LED driving lights
- LED flashing yellow light rear and front
- Warning signal during driving
- Control boxes
- Indicator lights forward and backward / left - right
- Key switch
- Battery capacity indicator
- Operating hours counter

OPTIONAL EXTRAS

- Colour
- Gel batteries
- Toolbox with cover

LANDING GEAR BRACKET



A hydraulic doors with rotatable draw roll
B Ramp
C Wheel hold system
D Side wheel holder

ADDITIONAL TECHNICAL SPECIFICATION

The FT tugs are built with safety and ease of response at the forefront of our technology.

EMDSL (ELECTRONIC MECHANIC DOOR SAVE LOOK) STANDARD

The EMDSL protects the nose wheel against accidental opening of the nose landing gear hold bars. Two independently working security systems stop the hold bars from opening. The mechanical system blocks the opening process with heavy wedges which automatically free themselves when setting down the nose landing gear again.
The electronic system recognises the raised landing gear status and interrupts the other control system for opening the bars.

HDCS (HYDRAULIC DOOR CLOSING SYSTEM) OPTIONAL

All HDCS adapters on the FT C-series are equipped with an EDMSL. The current status is indicated on the OMS (When fitted).
Indicating the following

- Doors open and closed
- Wheel holder open-close and pressure gauge in bar to the nose wheel
- Lifting position HDCS down, up, ground contact

PENDULUM AXLE STANDARD

The FLT 800 RC has a uniquely developed pendulum axis with a fitted electric steering motor to achieve optimum traction. Thus, uneven surfaces are perfectly balanced and the drive wheels always have a uniform contact pressure.
The FLT 800 RC has a unique steering control system. Two independently controlled, each with external processors steering systems monitor each other. On the one hand, the remote control is given the direction to the FLT 500 RC via a speed difference. On the other hand, the second independent steering system is conventionally set by means of an electric motor for steering the steering axle. This allows for precise directional stability but also ensures the greatest possible safety. If a system issues a steering error, the reference is checked for consistency with the second steering unit. If a deviation occurs, the vehicle switches off.
So our system offers

- Double steering angle testing
- Pendulum axle for even and maximum traction
- Exact manoeuvring and steering, as well as locked forward drive
- Balance of uneven surfaces through pendulum axle
- Positively controlled electric steering with steering angle sensor prevents an uncontrolled cornering during engine and steering failure

OSC (OVER STEERING CONTROL) OPTIONAL

When you are towing an aircraft, it is important observe the steering angle of the nose landing gear (max. tow limit). Our OSC system enables you to preprogram a wide range of aircraft types.
With nose wheel dimentions programed, the 3 attached lasers then detect the dimensions and distances during the towing operation. If a distance becomes critical, the operator is informed.
The system takes a photo of the nose wheel before and after towing.

LANDING GEAR BRACKET

It is designed with full aircraft and operator safety in mind. If the aircraft is not positioned correctly the tug will not allow the landing gear to be picked up.

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STEERING ANGLE CONTROL DURING DRIVE

There is a maximum movement between Tug and aircraft of 60 degrees either way (this can be configured to customer requirement). If oversteering occurs then an alarm will sound, and it will be displayed on the OMS (if one is fitted). If the operator continues to oversteer then the Tug will come to a top. Counter steering will allow you to continue to move the aircraft.

OMS (OPERATION MONITORING SYSTEM) OPTIONAL

The OMS is the main-communication terminal for all operational settings in the vehicle. An electronic computer-controlled monitoring system determines the current situation of all vital equipment. Data is indicated on a Dashboard for the driver. If the equipment starts operating outside of its paramotors this is indicated with red flashing warning light and alarm signal.

DISPLAY FOR OSC AND OMS

OWC (OVERWEIGHT CONTROL) OPTIONAL

The OWC is a landing gear weighing system. While raising the landing gear the actual landing gear weight is determined. The weighing result is indicated the driver on the OMS (if fitted). If the allowed landing gear weight is crossed, the weighing result flashes in the Dashboard with the note “OVERLOADED”. The Tug will automatically shut down the ability to move forward and backwards.

WDC (WING DISTANCE CONTROL) OPTIONAL

Towing maneuvers in a cramped hangar always come with a risk. The “Wing Distance Control” is a step in safe maneuvering in narrow areas and by an early warning system the user is made aware of impending obstacles. Both acoustic signals and a visual display on a display give the driver information on the current distance. When the lateral wing distance is less than 1.5 m to a fixed or movable obstacle, the system is activated.

Technical description

General: 4 ultrasonic devices in a plastic alominium casing with suction pads are positioned on the aircraft wings, nose and tail.
Technical Details: Power: 12 V / DC
Transmission: Radio remote transmission
Radio transmission: Hz. 875
Optical display: Display on the contorler

THE LANDING GEAR BRACKET

- Electro-hydraulic and universal for single and double nose wheels
- Two-part wheel bars for an even pressure distribution on the tyres with single and double nose wheels
- The hydraulic wheel holder prevents uncontrolled movement of the nose wheel
- Double protection of wheel bars, electronic and manual locking
- Power failure backup system
- Fully electrical system to elevate the nose wheel
- One button aircraft release

SURGE CONTROL / BATTERIES

- The surge control ensures a steady stream of power to the engine, and protects the batteries.
- The unit is fitted as standard with lead acid batteries. You can change as an option for lead gel batteries or Lithium bateries.
- There is surge control throughout the tug to protect all components. The batteries are protected against deep discharge.

CHARGER

Intelligent charger for optimum batterie charging. Offering standby/float when the batteries are fully charged. The charger can be left plugged in at all times.

DRIVING COMFORT AND SPEED

- Automotive E-control unit, which enables stepless driving from a slow starting speed up to a maximum driving speed of 12 km/h. Speed control by pedal.
- There are two speed levels one limits the speed to a maximum of 3 km/h in order to safely manoeuvre difficult areas.

REMOTE CONTROL

- 2-joystick remote control with all indicators for operation and steering
- Ergonomic finger switches or buttons for all operating elements hydraulically and electrically.
- Wide shoulder strap for comfortable and safe handling of remote control.
- Safety buttons and control display in the remote control.

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