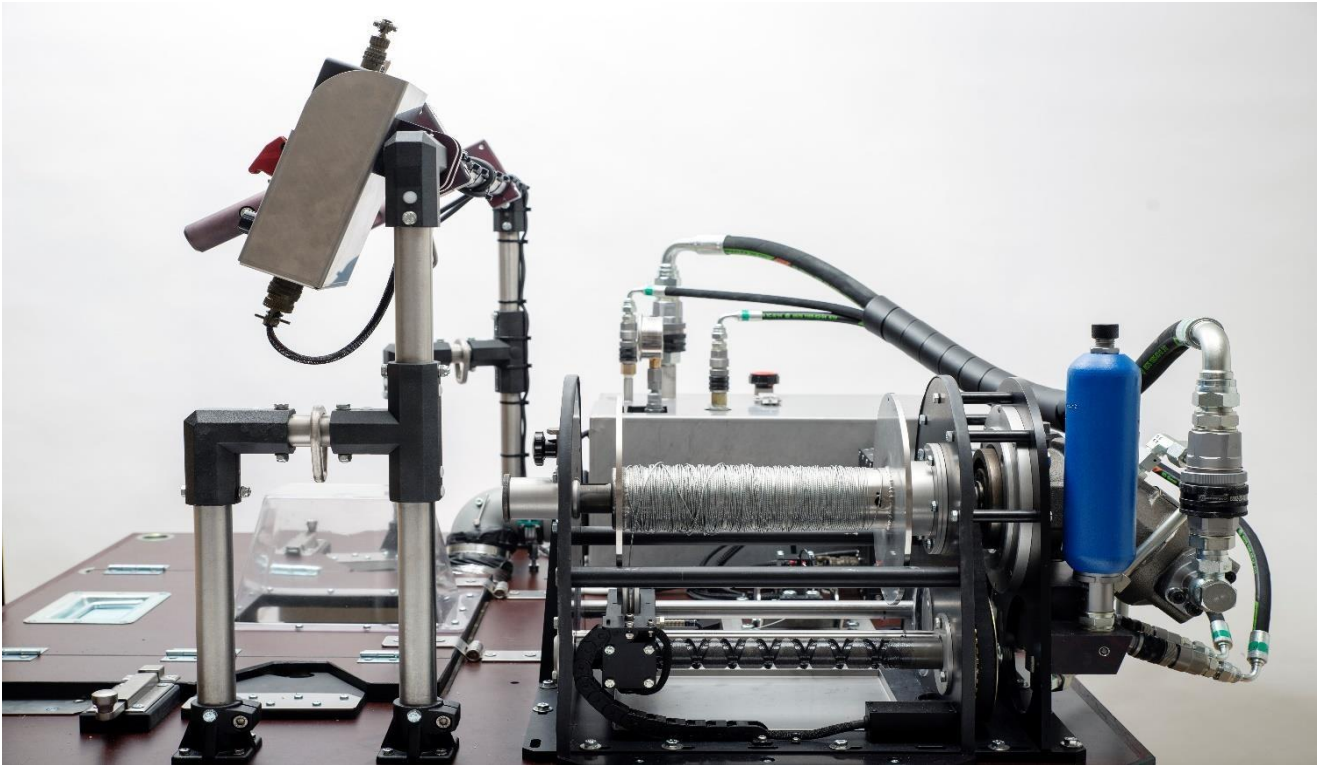


TARGET TOWING WINCH MBV-45



The MBV-45 electro/hydraulic operated winch is intended for medium duty target towing operations with inboard installation in the towing aircraft.

The winch consists of a hydraulic unit which is powered by a hydraulic pump. The pump is driven from an electric motor. The electrical motor can either be driven directly from existing electric power from the aircraft or a separate battery pack.

The hydraulic unit contains all the necessary control valved for full control of the complete winch.

Winch operation is controlled from the control panel which sends commands via the control unit to the hydraulic valves. Reel in or out, reel speed and tow line length are displayed on the control panel.

The safety system consists of a safety latch and an emergency line cutter operated with an explosive squib.

The advanced control system allows one operator to operate the system with precision and control of the target. The winch tow line should be routed to a launcher arm installed on the aircraft from where the target is launched and retrieved. Launcher arm may be supplied by Air Target.

The advantageous weight/power ratio of this winch makes installation in a variety of small aircrafts possible.

Certification of winch and launcher installation is the responsibility of the customer or integrator.

The winch has been used in several air-crafts such as: CESSNA 172, BEECH BARON, PIP-ER SENECA, NORMAN ISLANDER and PILATUS PC-6.

TECHNICAL DATA

HYDRAULICS

Max working pressure	14 MPa (2000 psi)
Safety valve setting	15 MPa (2175 psi)
Required flow rate	9 l/min

ELECTRICAL

Operating voltage	24/28 V DC
Current consumption	60 -140 A (depending on load)

CONTROL SYSTEM

Control method	Electro-hydraulic servo
Controls	Proportional

REEL

Capacity	2200 m with 1.25 mm line
Max reeling in speed	5 m/s

BRAKE

Primary brake	By hydraulic system
Reel lock	Latch lock

SAFETY DEVICE

Line cutter	Explosive squib
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DIMENSIONS

Width	630 mm
Depth	370 mm
Height	400 mm
Weight	30 kg
Weight of electric motor and hydraulic unit	36 kg
Weight of batteries for battery operation (optional)	49 kg
Weight of 2200 m 1.25 mm tow line	24.5 kg

INSTALLATION

The winch, hydraulics, control unit, and optional batteries and electric motor are normally installed on a custom designed mounting platform in order to facilitate easy installation and removal from the aircraft. The installation of the

launcher may be integrated with the winch or separate, depending on the aircraft used. Installation may in some cases be subject to CAA approval, which is the responsibility of the user or the installer.