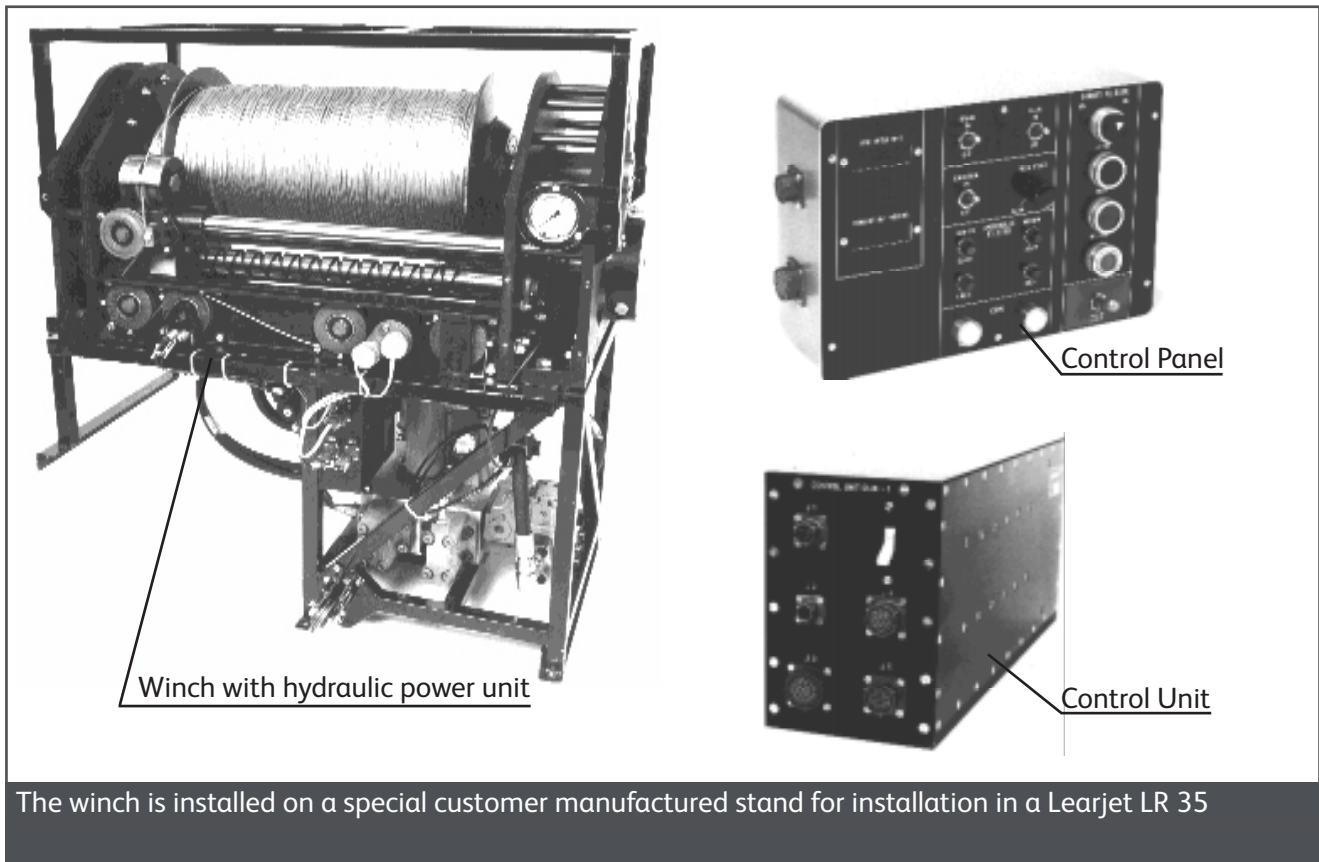


TARGET TOWING WINCH MBV 7S MK3



The MBV 7S Hydraulic operated winch is intended for heavy duty target towing operations with inboard installation in the towing aircraft.

The winch consists of an hydraulic unit which is powered by a pump from one of the engines. The pump is customer supply due to CAA regulations. Hydraulic pressure is supplied to the hydraulic unit which contains all the necessary control valves for control of the winch and the optional target launcher system.

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. High reel in and out speeds reduces target operation time and gives more time in the firing area. The safety system consists of a separately operated electric brake and a safety click. It also includes an emergency line cutter operated with explosive squibs.

The advanced control system allows one operator to operate the system with precision and control of the target.

The winch tow line is routed to a launcher arm installed under the aircraft from where the target is launched and retrieved. The tow line can also be routed through the wing of the aircraft and connect to the target in a launching/retrieving station at the wing hard point. Air Target can also supply the outboard launcher arm with hydraulic actuator.

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 installer.

The winch is presently used in the following aircrafts: LEARJET, MITSUBISHI MU-2, CESSNA CONQUEST, CESSNA CARAVAN II.

TECHNICAL DATA

CONTROL SYSTEM

Control method	Electro-hydraulic servo
Controls	Proportional

ELECTRICAL

Operating voltage	28 V DC
Current consumption	6 A

SAFETY DEVICE

Line cutter	Explosive squib
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REEL

Capacity	3500 m with 2.3 mm line
	5500 m with 1,8 mm line

BRAKE

Primary brake	By hydraulic system
Secondary brake	Electric disk brake
Reel lock	Click lock

HYDRAULIC PUMP REQUIREMENT

Max pressure	21MPa (3050 psi)
Max flow rate	30 l/min to 41 l/min Depending on towing requirement

HYDRAULICS

Max working pressure	20 MPa (2900 psi)
Safety valve setting	21 MPa (3050 psi)
Required flow rate	30 - 41 l/min
Hydraulic motor	10 -14 kW

HYDRAULIC UNIT HYW-3

Width	386 mm
Depth	379 mm
Height	240 mm
Weight	38 kg

CONTROL PANEL CPW-5

Width	300 mm
Depth	102 mm
Height	210 mm
Weight	3 kg

CONTROL UNIT CUW-3

Width	125 mm
Depth	420 mm
Height	190 mm
Weight	6 kg

DIMENSIONS (STAND NOT INCLUDED)

WINCH MBV-7S MK3	
Width	870 mm
Depth	510 mm
Height	405 mm
Weight	103 kg