MX Series Winches

The MX Winch is a logging hoist capable of positioning a geophysical probe or other tools in a borehole. The MX winch line is comprised of the 4MXA-1000, 4MXB-1000 and 4MXC-1000. The system is equipped with a slipring and connections through which surface instrumentation can communicate with the probe.

A precision measuring wheel and rotary encoder are also included to allow the amount of cable played out to be tracked. The cable is automatically wrapped on the drum in even layers through the level wind mechanism. The motor is controlled by an 110V (or 220V depending on the model) four-quadrant motor speed controller that allows the speed to remain constant with a varying loads and prevents overhauling with heavy loads.

The winch is designed to be used in conjunction with the MATRIX console and a portable PC to achieve a complete logging system.

NOTE: When using a DC inverter to power the winch, a true sine-wave inverter is required for smooth winch operation. Minimum power requirement for such an inverter is 600 watts, which should also allow operation of the logger.
GENERAL SPECIFICATIONS

Motor: 1/4 hp, SCR type
Controller: 4 quadrant, with current limit
Speed: 0 to 85 ft/min (26 m/min)
Load: 100 lbs (46 Kg)

Cable Capacity:
- 4MXA-1000: 1640 ft (500m) 1/8” (3.17mm) dia. cable
- 4MXB-1000: 1000 ft (305M) 3/16” (4.76mm) dia. cable (video)
- 4MXC-1000: 3281 ft (1000M) 1/8” (3.17mm) dia. cable

Shipping Weight:
- 4MXA w /500 m 1/8” (3.17mm) dia. cable = 132 lbs (60 Kg)
- 4MXB w /305 m 3/16” (4.76mm) dia. cable = 179 lbs (82 Kg)
- 4MXC w /1000 m 1/8” (3.17mm) dia. cable = 195 lbs (89 Kg)

Winch Size:
- 4MXA-1000: 16” x 20.5” x 12” (40.6 x 52 x 30.5 cm)
- 4MXB,C-1000: 16” x 22” x 14.5” (40.6 x 55.9 x 38.8 cm)

Case Size: 26” x 26” x 24” (66 x 66 x 61 cm)

Cable off-axis tolerance: 10° left, 10° right, 12° down, 45° up

Depth Encoder: BEI Model H20 (200 pulses/turn) standard, others available.