Information Document

10 kN SWL HYDRAULIC MAN RIDING WINCH

Model 65-83-27-5210-12-MR

Torque Engineering Australia manufacture a hydraulically driven winch which is suitable for incorporation into a **Man Riding** winching system. The winch has been designed in accordance with the appropriate sections of the rules and recommendations detailed in the following documents.

- Lloyds Register Code for Lifting Appliances in a Marine
 Environment 2003
- ABS Underwater Vehicles, Systems and Hyperbaric Facilities 2002
- DNV Rules for certification of Lifting Appliances
- IMCA D023 Diver Launch & Recovery

MAIN FEATURES

- Parallel grooved drum
- Drum & frame hot dip galvanized
- 3 independent automatic fail safe braking systems
- Narrow drum to assist spooling & increase wire life
- Wedge socket wire rope termination inside drum
- Stainless steel hydraulic piping
- Large drum diameter to minimise rope layers
- Means of lowering load in total hydraulic power failure

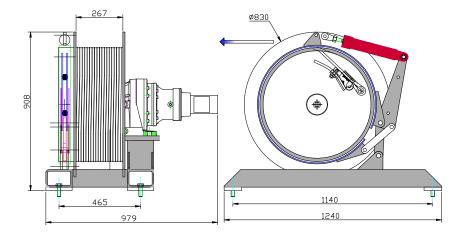
OPTIONAL FEATURES

- Over hoist automatic cut out limit switch
- Pneumatic drive with remote control
- Guards

HYDRAULIC INPUT

- 80 bar
- 60 liters / minute
- 11 kW HPU

DIMENSIONS



Mass with 200m of Ø13 mm wire rope = 700 kg













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PERFORMANCE DETAILS

DATA TABLE									
Safe Working Load (SWL)	1000	kg	Wire Rope FOS 6 x Design Load		esign Load				
MBL of Steel Wire Rope	120	kN	12 x SWL		WL				
Rope Ø	13	mm	Hydraulic Power	10.0	kW				
Hydraulic Pressure	80	Bar	Drum Torque	5.21	kNm				
Hydraulic Flow / Motor	60	l/min	Drum Speed	12	rpm				
Number of Drives	1		Rope Clearance	2.5	Diameters				
Drum Diameter	648	mm	Drum Width	267	mm				
Min distance to sheave	4	m for fleet angle <2 degrees							

WINCH PERFORMANCE									
Layer #	Pull Force (kN)	Speed (m/min)	Speed (m/sec)	Layer Length (m)	Cumulative Length (m)	Time to Heave (min)			
1	15.8	24.7	0.41	38.6	39	1.6			
2	15.2	25.5	0.42	39.8	78	3.1			
3	14.8	26.3	0.44	41.1	120	4.7			
4	14.3	27.1	0.45	42.4	162	6.3			
5	13.9	28	0.47	43.7	206	7.8			

APPLICATIONS

- Air Diver Launch & Recovery
- Hard Suit Operations
- FRB & Workboat LARS
- Suspended Work Platforms
- Drill rig maintenance & operations





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