Information Document

10 kN SWL PNEUMATIC MAN RIDING WINCH

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

Torque Engineering Australia manufactures a pneumatically 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 hot dip galvanised
- 2 independent oil submersed automatic fail safe braking systems
- Narrow drum to assist spooling & increase wire life
- Crosby wedge socket wire rope termination inside drum
- Stainless steel hydraulic & pneumatic piping
- Large drum diameter to minimise rope layers
- Means of lowering load in total hydraulic power failure
- Secondary air supply connection
- Filter & Lubricator incorporated in to the winch
- Emergency stop on the winch
- Interlock on guards

OPTIONAL FEATURES

- Over hoist cut out limit switch
- Remote pendant control
- Frame hot dip galvanized

PNEUMATIC INPUT

- 6 bar (90 psi) minimum
- 150 liters / second (320 cfm) free air

APPLICATIONS

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

DIMENSIONS

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

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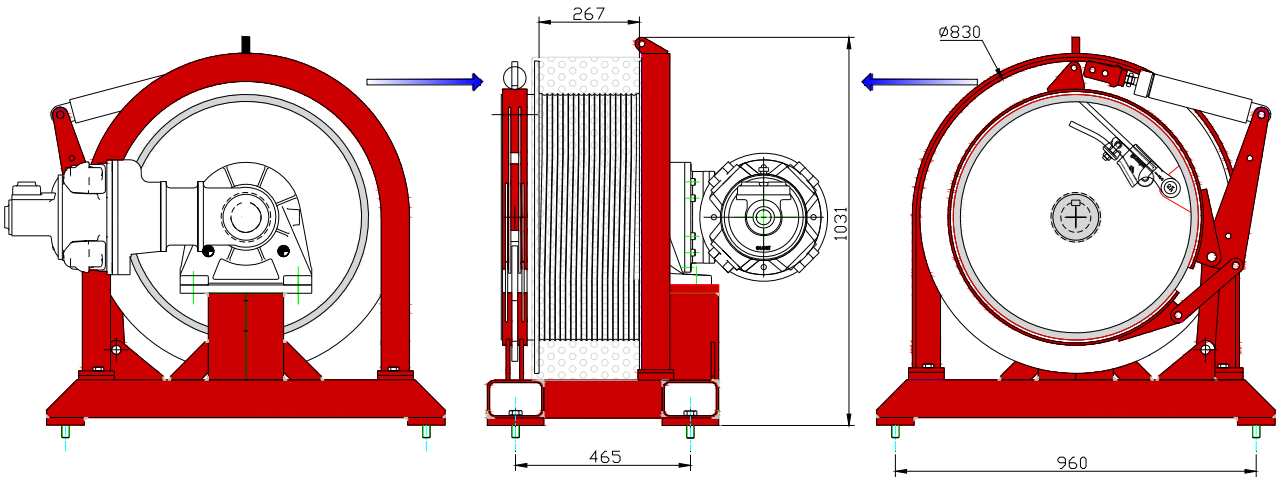
PERFORMANCE DETAILS

DATA					
Mass to be lifted	**1,000**	kg	Wire Rope FOS	**6 x**	Design Load
MBL of SWR	**120**	kN		**12 x**	SWL
Rope Ø	**13**	mm			
Min Air Press.	**6.1**	Bar	Drum Torque	**5.2**	kNm
Air Consumption (max)	**150**	l/sec	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	15.3	25.5	0.43	39.8	78	3.1
3	14.8	26.4	0.44	41.1	120	4.7
4	14.3	27.2	0.45	42.4	162	6.2
5	13.9	28	0.47	43.7	206	7.8



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