




Winch  
Model 32.300 - Special

# Manual


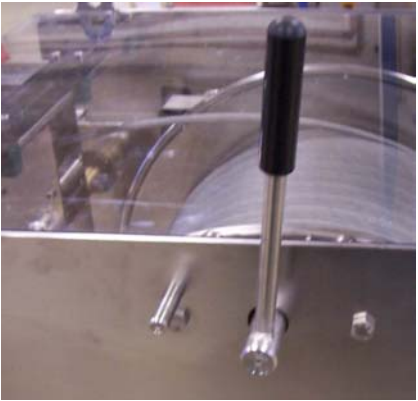
**KC** Denmark

Research Equipment  
Limnology • Oceanography • Hydrobiology



	<p align="center"><b>Manual for winch</b></p>	<p align="center"><b>Model no. 32.300</b></p>
	<p> <b>Caution</b></p> <p>This winch is very dangerous in unskilled hands and serious precautions must be taken to avoid accidents.</p> <p>The safety cover must always be in the secured position to avoid any contact with the drum and the wire during operation.</p> <p>KC-Denmark is not, and cannot be held, responsible for any damage(s) made to equipment or injury to operators who ignore safety precautions or because of misuse or wrong operation.</p>	
	<p><b>Preparation</b></p>	
<p align="center">1</p>	<p>The winch must be secured on a plain and stable surface before use. Fasten with 4 bolts, minimum M14 or M16. To avoid any damage or injury, you must ensure free space for the wire in all position.</p>	
	<p><b>Power</b></p>	
<p align="center">2</p>	<p>An authorized technician must perform all power installation.</p> <p>Supply 1 x 230 Volt AC + earth. Cable: 3 x 1,5 mm<sup>2</sup>, type HO7</p>	


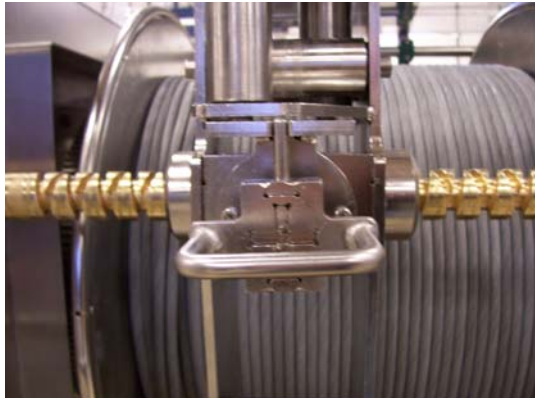

3	<p>A 10 watts heat element has been mounted inside the electrical manoeuvre box to prevent condensate water. The heat element should <u>always be on.</u></p>	
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<h2>Operation</h2>		
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4	<p>  <b>Caution</b>  <b>Always remember</b> to loose the break before use. Otherwise you might cause serious damage to the winch.</p> <p>The brake is for emergency only use or to secure a heavy load (the gear is <b>NOT</b> self locking).</p>	
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5	<p>Make sure the joystick is in neutral position. Turn on the red main switch.</p> <p>Push the start button.</p> <p>The joystick controls the wire direction and the speed of the winch. The more you press the higher speed.</p> <p>  <b>Caution</b>  When changing direction of the wire, return the joystick to neutral position. Be sure the drum has stopped, before you activate the joystick in the opposite direction.</p> <p>By emergency or in need of a fast stop press SAFETY SWITCH and the winch will stop immediately.</p>	
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	<p><b>Greasing</b></p>	
	<p>The winch has three vertical ball bearings, (one behind the slip-ring device and two for the wire guiding system), make sure its being greased every 6 months, with regular ball bearing grease.</p> <p>The spindle of the wire guide has to be greased before use of the winch.</p>	
	<p><b>Adjusting the cable laying</b></p>	
	<p>Ensure the winch has been stopped and the joystick is positioned in neutral position.</p> <p>Pull out the handle and turn it to left of right, according to the direction you want the cable laying to proceed.</p> <p> <b>Caution</b> Check out the pawl is positioned correctly on the spindle. An incorrect setting might damage the wire guide system.</p>	
	<p><b>Meter counter</b></p>	
	<p>Power supply: The counter needs an external power supply of 10 – 24 Volt AC or DC. Power consumption: Max. 200 mA. A 3-conductor cable, length 5 m, is for the power supply.</p> <p>Connection: Brown and blue wire: 10 – 24 Volt AC or DC. No need for polarity. Yellow/green wire: Earth. No needs for connecting to ground.</p> <p>Before inserting the cable on the meter wheel check out the counting direction</p>	

	<p>of the wheel by manually turning of wheel.</p> <p>Operation: Push the green bottom to start the counter and the night visibility.</p> <p>When you lower the equipment and it hits the sea level, you can reset the counter to zero by pushing the red bottom.</p> <p>The counter has an internal heating element to prevent condensate water. (Always connected, regardless of the green bottoms position).</p>	

<b>Description:</b>	<b>Ordering no.</b>
CTD winch with adjustable speed. 230 Volt AC - 2,2 Kwatt = 3 HP	32.300 Special
<b>Electrical:</b>	
Supply	1 x 230 Volt AC
Power	Rev. 2800/min - 2,2 Kwatt = 3 HP
Speed	Regulated by a frequency converter, ABB, 2,2 Kwatt. Density of manoeuvre box: IP 65
<b>Mechanical:</b>	
Material	AISI 316 Stainless steel Site plates: 6 mm Drum and disc brake: 6 mm
Drum	O.D./I.D. 700/436 mm
Drum rev.	0 - 50 rev./min. Adjustable
Drum capacity	500 m ø11,5 mm conductor cable or other types.
Wire speed	Approx. max. 0,5 m/sec.
Angle-gearbox	Bonfiglioli, type A 202, Ratio 5,4:1, torque of 240 Nm, Tractive force 125 kg.
Brake system	Disc brake made of 6 mm AISI 316 stainless steel.
Ball bearings	AISI 304 stainless steel flange ball bearings, 3 pcs ø30 mm.

<b>Dimensions:</b>	
Height:	Exclusive manoeuvre box and motor: 840 mm Inclusive manoeuvre box and motor: 1200 mm
Length:	1000 mm
Width:	Exclusive motor and slip-ring: 850 mm Inclusive motor and slip-ring: 1250 mm
Weight:	App. 330 kg inclusive cable

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