

## Winches and cables on OFEG ships – March 2016

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## NERC UK

### RRS Discovery winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	Traction winch - 2 drums and wires	8,000m steel armoured electro-mechanical	Rochester 11.4mm steel EM cable	Mechanical 'eye' and clamp termination.
<b>CTD (Metal free))</b>	Direct pull – portable winch - metal free spec - sheaves non-metal coatings	8,000m synthetic rope electro-mechanical	Cortland 15.25mm Vectran EM rope; 1320kg SWL; 9990kg MBL;	Titanium resin potted termination.
<b>Deep Tow</b>	Traction winch – ship fitted	10,000m steel electro-optical cable	Rochester 17.3mm steel OEM cable.	EVERGRIP termination
<b>Steel core (GP)</b>	Traction winch - ship fitted	7,000m steel wire	Certex (UK); 16.5mm 3x25 steel wire;	Swaged/crimped hard eye termination.
<b>Coring winch</b>	Traction winch – ship fitted	8,000m synthetic rope (PLASMA)	Cortland PLASME Dyneema 66.5Te rope	Spliced rope with hard eye termination
<b>Trawl</b>	Traction winch – ship fitted	15,000m tapered steel wire	Certex (UK); tapered 15000m steel wire;	Swaged/crimped eye termination.

### RRS James Cook winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	Traction winch - 2 drums and wires – ship fitted	8,000m steel armoured electro-mechanical	Rochester 11. mm steel EM cable	Mechanical 'eye' and clamp termination.
<b>CTD (Metal free))</b>	Direct pull – portable winch - metal free spec - sheaves non-metal coatings	8,000m synthetic rope electro-mechanical	Cortland 15.25mm Vectran EM rope; 1320kg SWL; 9990kg MBL;	Titanium resin potted termination.
<b>Deep Tow</b>	Traction winch – ship fitted	10,000m steel electro-optical cable	Rochester 17.3mm steel OEM cable.	EVERGRIP termination
<b>Steel core (GP)</b>	Traction winch - ship fitted	7,000m steel wire	Certex (UK); 16.5mm 3x25 steel wire;	Swaged/crimped hard eye termination.
<b>Coring winch</b>	Traction winch – ship fitted	8,000m synthetic rope (PLASMA)	Cortland PLASME Dyneema 66.5Te rope	Spliced rope with hard eye termination
<b>Trawl</b>	Traction winch – ship fitted	15,000m tapered steel wire	Certex (UK); tapered 15000m steel	Crimped eye termination

### CSIC-UTM Spain

#### BIO Hesperides winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Core	Hydraulic Direct pull	8000m steel deep-sea wire; 16mm	Notor HP Galfan	stainless terminal closure cone
Deep tow	Hydraulic Direct pull	6,000m steel armoured electro-mechanical	Rochester 14.1mm steel EM cable	
CTD	Hydraulic Direct pull	8,000m steel armoured electro-mechanical	Rochester 8.18mm steel EM cable	

#### B/O Sarmiento de Gamboa winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Core	Electrical Direct Pull	8000m steel deep-sea wire; 16mm	Notor HP Galfan	stainless terminal closure cone
Deep tow	Electrical Direct Pull	6,000m steel armoured electro-mechanical	Rochester 14.1mm steel EM cable	
CTD	Electrical Direct Pull	8,000m steel armoured electro-mechanical	Rochester 11mm steel EM cable	

### NIOZ Nederland's

#### RV Pelagia winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
CTD	Direct pull - ship fitted	8,500m steel armoured electro-mechanical	Rochester 8.03mm steel EM cable	Mechanical 'eye' and Nicopress termination
Coring winch	Direct pull – ship fitted	4,000m steel wire	14 mm 3x36 steel wire	Mechanical 'eye' and Nicopress termination
Deep Sea/ metal free multi purpose	Traction winch – portable winch - metal free spec - sheaves non-metal	9,200m synthetic rope opto-electro-mechanical cable (ARAMID)	Cousin Trestec 20.0 mm super aramid OEM cable.	Titanium bollard or Nicopress termination
Trawl	Direct pull - ship fitted	4,000m steel wire	14 mm 3x36 steel wire	Mechanical 'eye' and Nicopress termination.
Trawl Electrical	Direct pull – ship fitted	3,000m steel armoured EM cable	Rochester 8.03mm EM cable	Mechanical 'eye' and Nicopress termination

## IFREMER France

### L'Atalante winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Hydrology	Direct pull - Hydraulic	8000m steel wire	10,8mm, BL 8,2t,	Eye termination
CTD	Direct pull - Hydraulic	8050 m electro-mechanical wire	10,8mm, BL 8,2t, SCHLUMBERGER	Eye termination
PENFELD	1 traction winch for 2 drums - Hydraulic	7700m steel wire	19,5mm, BL 34t, TREFILEUROPE	Eye termination
Dredging/Coring		8000m steel wire	19,5mm, BL 23t	Eye termination

### Thalassa winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Hydrology	Direct pull - Hydraulic	8000m steel wire	10,8mm, BL 6,9t	Eye termination
CTD	Direct pull - Hydraulic	8080 m electro-mechanical wire	10,8mm, BL 8,2t, SCHLUMBERGER	Eye termination
Dredging	Direct pull - Hydraulic	700m steel wire	12mm, BL 34t	Eye termination
Trawling	Direct pull - Hydraulic	4500m steel wire	26mm, BL 39,6t	Eye termination

### Pourquoi pas? Winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Hydrology	Direct pull - Hydraulic	8100m steel wire	10,8mm, BL 6,9t	Eye termination
CTD	Direct pull - Hydraulic	8100 m electro-mechanical wire	10,8mm, BL 8,2t, SCHLUMBERGER	Eye termination
Coring	2 traction winches for 4 drums - Electric	8000m synthetic Dyneema rope	29mm, BL 44T	Spliced rope with hard eye termination
ROV Victor 6000		8000m electro-opto-mechanical cable	20,6mm, BL 24t, ROCHESTER	Specific titanium termination
Dredging/steel core		9000m steel wire	21mm, BL 40t	Eye termination

### L'Europe winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Hydrology	Direct pull - Hydraulic	3200m steel wire	6,5mm, BL 2,4t	Eye termination

## BMBF Germany

### Maria S Merian winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>Core</b>	Traction winch	7000m steel deep-sea wire; 18mm	Drakoflex 18mm, Tow Cable, NSW(Norddeutsche Seekabelwerke)	Mechanical 'eye' and clamp termination.
<b>Deep tow</b>	Traction winch	7000 m fibre-optic wire, Steel armoured; 18,2mm	Rochester fibre-optic wire ; 18,2mm	EVERGRIP termination?
<b>CTD</b>	Direct pull	6000m single- conductor coaxial wire; 11mm	1mm Coax Cable, NSW (Norddeutsche Seekabelwerke)	Stainless hoisting socket termination
<b>CTD</b>	Direct pull	6000m single- conductor coaxial wire; 11mm	11mm, NSW(Norddeutsche Seekabelwerke)	Stainless hoisting socket termination
<b>GP</b>	Direct pull	3000m Dyneema Cable; 8mm, or serial wire; 6mm	Dyneema Cable, GeoSpezial Technora; 8mm	Mechanical 'eye' and clamp termination.
<b>Portable GP</b>	Direct pull	6000m single- conductor coaxial wire; 11mm	11mm, NSW(Norddeutsche Seekabelwerke)	Stainless hoisting socket termination

### RV Meteor winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	Hydraulic direct pull / two drums / two wires	6000m steel armoured coaxial cable	11mm, NSW(Norddeutsche Seekabelwerke)	Stainless hoisting socket termination
<b>Single Niskin bottles (Metal free)</b>	Hydraulic direct pull	6000m aramid rope	8,0mm COSA aramid-rope with nylon intermediate compacting braid and outer jacket of polyester elastomer	Rope spliced thimble termination
<b>Deep Tow</b>	One traction winch (hydraulic) for both storage winches/wires	8000m steel armoured coaxial-cable, 18,2mm	Coax Tow Cable RR 18,2mm, NSW(Norddeutsche Seekabelwerke)	EVERGRIP Termination
<b>Coring winch</b>		11000m steel deep-sea wire	Steel wire PFEIFFER DRAKO-FLEX 1770 A zZ 18,0mm	Wedge socket termination
<b>GP</b>	Hydraulic direct pull	600m or 2000m of 6mm stainless steel alternating 900m rope	-CERTEX Stainless steel wire, 6mm - SELDIS synthetic rope with PA core & PP jacket, 14mm	Aluminium swaged thimble termination
Portable subsea seabed drill	20ft-winch container; 20ft-traction-container	Steel armoured fibre-optic cable;	JDR CABLE SYSTEMS subsea seabed drill cable, possible: 18, 2mm → 7600m or 25mm → 3800m	JDR Subsea seabed drill cable termination

### RV SONNE winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Core	electrically / traction winch	12000m steel deep-sea wire; 18,0mm	Pfeiffer Drakoflex / steel wire	Evergrip termination
Deep tow	electrically / traction winch	12000 m fibre-optic wire; 18,2mm	Rochester LWL / steel cable OEM	Crosby wedge socket (type S-412WT)
CTD	electrically / direct pull / two drums / two wires	each 8000m single- conductor coaxial wire; 11mm	Rochester Coaxial / steel cable EM	Evergrip termination
GP	electrically / direct pull	6200m of 8mm wire, or 4000m of 8mm aramid wire	Pfeiffer Drakoflex / steel wire, or GeoSpecial Technora / wire	

### FS Alkor winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
Core	Hydraulic direct pull / three drums /three wires	900m Coax-11mm, 800m 16mm-steel-wire, , 800m Coax-8mm Steel armoured coaxial	8 mm and 11 mm Coax Norddeutsche Seekabelwerke	Mechanical eye clamp termination
Deep tow	Hydraulic direct / one drum	1800 m steel (niro)	6 mm steel wire	Wire spliced, wedge socket termination
CTD	Hydraulic direct pull / two drums Ship fitted	1200 m steel wire	20 mm, 6*19s + fe	Spliced rope with hard eye termination

### Rv “Elisabeth Mann Borgese” winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
CTD	Traction winch, electrical with	800m steel armoured electro-mechanical	3 wired core	Mechanical clamp termination
Crane winch	Traction winch, hydraulic	900m steel wire	Steel wire 13 mm	Mechanical clamp termination
Crane winch	Traction winch, hydraulic	900m steel wire	Steel wire 13 mm	Mechanical clamp termination
Stern anchor winch	Traction winch, hydraulic	300m steel wire	Steel wire 22 mm	Mechanical clamp termination

### FS Heincke winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	Hydraulic direct pull / three drums /three wires	3000 m, 2400m, 900m Steel armoured coaxial	8 mm, 11 mm, 11 mm Norddeutsche Seekabelwerke	Mechanical eye clamp termination
<b>Single Niskin bottles</b>	Hydraulic direct / one drum	2800 m steel (niro )	6 mm steel wire	Wire spliced, wedge socket termination
<b>Trawl</b>	Hydraulic direct pull / two drums Ship fitted	2400 m steel wire	18 mm, 6*19s + fe	Spliced rope with hard eye termination

### FS Poseidon winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>Towing winch (W6)</b>	direct pull (low pressure), hydraulic	2500m single conductor coaxial, steel deep-sea wire	TYCO / Rochester Electronics , 11mm	Swaged/crimped hard eye termination.
<b>Deep tow /high Tension (W3)</b>	direct pull (low pressure), hydraulic	4200m heavy tension wire	DRACO « 175LC » Type IWRC 1960BzZ, 13mm 22X7KIWRC 1960BzZ, min Breaking load 146,4kN	Swaged/crimped hard eye termination.
<b>CTD Winch (W2)</b>	direct pull (low pressure), hydraulic	6000m single- conductor coaxial wire	NSW (SWL 16kN) min. breaking strain 65kN, 10mm	Mechanical 'eye' and clamp termination.
<b>fishing winch (W7)</b>	direct pull (low pressure), hydraulic, two drums stbd. side / port side	1600m heavy tension wire	ENGEL-NETZE 16 mm, 1x cross stroke left, 1x cross stroke right 6x07fc, SWL 138,20kN	Swaged/crimped hard eye termination.

## IMR Norway

### R/V G.O. Sars winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	electrically / traction winch	4200m Stainless Steel 8,18 mm	2-32 P2 Coax	
<b>CTD (Metal free)</b>	electrically / traction winch	3740 m Kevlar (Aramid Armoured umbilical) 18.5 mm	GS(4) + 2x1mm <sup>2</sup> FMAM 2 x e11 x FO	GISMA Connector
<b>Steel core (GP)</b>	electrically / traction winch	6500 m steel wire 16 mm		

### R/V Johan Hjort winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	Hydraulic Direct pull	4700m steel armoured coaxial cable.	Rochester 8.18mm Stainless steel.	Mechanical eye clamp termination
<b>Towing winch</b>	Hydraulic Direct pull	3000m steel armoured coaxial cable.	Rochester 11.43mm.	Mechanical eye clamp termination
<b>Trawl</b>	Hydraulic Direct pull	2500m steel wire	26 mm.	Spliced rope with hard eye termination

### R/V Håkon Mosby winches, cables, wires and ropes:

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>CTD</b>	Hydraulic Direct pull	3,500m armoured electro-mechanical	8mm, stainless steel	
<b>Coring winch</b>	Hydraulic Direct pull	4,300m steel wire	16mm, steel wire	
<b>Trawl</b>	Hydraulic Direct pull	1,500m steel wire	24mm, steel wire	



**R/V Hans Brattstrøm winches, cables, wires and ropes:**

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
CTD	Direct pull, hydraulic	1600m stainless, electro / mechanical coax.	6.8 mm diam.	

**R/V G.M. Dannevig winches, cables, wires and ropes:**

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
CTD	Direct pull, hydraulic.	750 m electromechanical coax.	6,3 mm diam.	

**IFREMER mobile winches, cables and ropes:**

Activity	Winch type	Wire length/type	Cable /Wire/Rope	Termination type
<b>Ariane (Hybrid)</b>	Direct pull – Electric – KLEY FRANCE	3000m, opto-mechanical cable	15mm, BL 15,6t, ROCHESTER, all ships	Specific termination
<b>Victor 6000</b>	Direct pull - Hydraulic	8000m electro-opto-mechanical cable	20,6mm, BL 24t, SCHLUMBERGER, Thalassa, L'Atalante, Pourquoi pas?	Specific titanium termination