Tiger ROV Chain Block – RCB



Home of the Tiger hoisting and winching range

Main Features:

- 3.0t, 10.0t, 15.0t and 20.0t capacity units available
- Fully corrosion protected
- Several choices of interface:
 - Hydraulic Hot Stab connection dual port type A and
 B
 - o Rotary Torque Receptacle Classes 1, 2 & 3
 - Manual D Handle, T-bar or Fishtail Direct Drive manual connection
 - QD Direct Drive Couplings
- Compliant with BS ISO 13628-8:2002 & BS ISO 13628-1:2005
- Stainless steel 316 framework and handle
- Proven Subsea brake design
- Patented Quad Can pawl system
- One-piece brake chamber cover
- Heavy duty flexible chain bag c/w stainless steel mounting frame available as an option
- 4 Point manipulator connection points
- · Compact and light weight
- Balanced design for easy handling and installation
- Marine specific friction discs
- New hand wheel feature for on-deck height of lift adjustments
- Bespoke chain lengths to meet exact customer requirements
- Full individual spares back up
- Each unit is fully tested and certified before delivery







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Tiger ROV Chain Block

The Tiger ROV compatible chain block is available in various different interface options all in accordance with BS ISO 13628-8:2002 ROV Interfaces on Subsea production systems. Tested and finished in accordance with Annexes B & K of BS ISO 13628-1:2005:

- 1) Hydraulic Hot Stab connection dual port type A and B
- 2) Rotary Torque Receptacle Classes 1,2 & 3
- 3) D Handle, T-bar or Fishtail Direct Drive manual connection
- 4) QD Direct Drive Couplings

Available as a 3.0 tonne (single fall of load chain), 10 tonne (3 falls), 15 tonne (5 falls) and 20 tonne single head (6 falls) capacity chain blocks, chained up to project specific heights of lift (H.O.L.) that can be pre-set to meet the exact starting point required within the rigging drawings.



QD Direct Drive Couplings



Manual D Handle Interface



One of our Torque Receptacle Options

Protection and Finish:

Critical internal components as are protected by our OCP (Organic Compound Protection) finish giving unprecedented long-term reliability. Stainless steel fittings are used throughout the hoist. These ensure the initial capital outlay of purchasing the hoist is protected by allowing the statutory inspections and recertifications to be easier and also help with the overall aesthetics of the hoist being maintained in an "as new" condition. The integrated SS12 chain block is finished in our high quality white Akzo Nobel powder coat paint offering excellent additional corrosion protection and a high degree of impact protection. Chain with extra corrosion protection is also available.

Hydraulic Hot Stab:

Working in partnership with Forum Energy Technologies (formerly Perry Slingsby Systems Ltd) we have designed and built an ISO 13628-8 fig 20 Type A & B Dual Port Hub Stab Female receptacle that is protected by our full 316 Stainless Steel frame handle that has 4 built in connection points for the work class manipulators to hold and operate. This exclusively designed system makes for a well-balanced unit that sits perfectly when installing the unit within the project rigging. We use high quality dual direction check valves that prevents loss of the hydraulic fluid within the system when the hot stab is removed. These valves have a dual purpose as they ensure the minimal level of contamination to the system form sea water. We incorporate laser cut text for identification of hydraulic adjustments.



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Stainless Steel Laser Cut Mounting Frame



High Performance Marine Spec Hydraulic System

Rotary Torque Tool:

The interface has been designed to meet the exact requirements of BS ISO 13628-8:2002. These units can be supplied in Classes 1+2 or class 3 giving maximum tooling flexibility whilst only requiring an operations torque of 5-Nm to lift 20 tonnes.

D Handle, T-Bar or Fishtail Manual Direct Drive:

Using the same guard frame as the torque tool interface built from 316L Stainless Steel giving maximum protection, this option gives a very flexible operator-friendly interface by incorporating a high strength but flexible compliance joint making for a very positive and reliable direct drive mechanism.

Stainless Steel Frame Handle:

All interface options come mounted in our purpose built high strength frames that ae constructed using 316L Stainless Steel bar and tubing, ensuring full compliance with BS ISO 13628-8:2002 (E) which gives the manipulators four T-bar connection positions to hold onto and these tie in with T slots found in parallel jaw manipulators. All welds are continuous and al edges sealed to prevent corrosion. Frames have laser cut text for identification of hydraulic adjustments. Frames are painted RAL 20002 orange as per ISO 13628-1 to signify ROV grab point.

Subsea Brake:

Developed and designed for Subsea use creating a highly efficient, reliable braking surface for use in the most extreme conditions.

Optional Chain Bags:

Designed to carry and hold the exact length of load chain required for the operation. Incorporating a stainless steel frame work and heavy duty PVC flexible bag reinforced by webbing with eyelet drain holes for an easy transfer through the splash zone. These chain bags prevent loose chain from getting snagged during lifting or lowering operations and protect any loose chain during transit to and from the operational site.



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Chain Guides:

Specifically designed to guide the load chain safely onto or off the load sheave without snagging or jamming, the fluted chain stripper ensures unrestricted entry and exit of the calibrated load chain.

Hooks:

Our hooks incorporate out latest Patent Pending "EZ Check" feature which allows operators and inspection engineers to easily check to see if the hoist has been previously overloaded or shock loaded by simply measuring between the triangle of pop marks.

Our drop forged and heat treated alloy hooks are furnished with heavy duty spring latch kits that fully engage into the recessed nose of the hook safeguarding the load when side loading of the latch occurs and offering maximum load security. The swivel hooks are attached to the yoke using high grade nuts and bolts allowing for complete inspection during any statutory inspection or written scheme maintenance. The entire hook fitting has been protected using OCP or stainless steel fixtures and fittings.

Available with hooks that swivel under the full working load limit, to meet relevant standards ie. AS 1418.2. Also available with spark resistant hooks.

High Performance Premium Grease:

Load carrying ability, mechanical stability, corrosion protection, water resistance and increased operating temperature ranges are all improved by the using only the very best lubricant.



Hand Wheel:

Recent innovation to meet client requirements saw the optional addition of a hand wheel on out ROV operated chain blocks to allow for on-deck height of lift adjustments.



Quality Machining:

Our strong impact resistant gearbox housing is complete with close tolerance fit phosphor bronze bushing that full supports the pinion shaft and gears to maintain smooth revolutions whilst under load.

The Subsea suitable bearings for top and bottom hook load sheaves are enclosed in drop forged housings assembled with stainless steel fittings.



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User Manual/Certification:

There is an accompanying user manual which includes a test certificate or an EC Declaration of Conformity stating compliance with the essential health and safety requirements of the Machinery Directive 2006/42/EC. This document clearly states the proof test for the unit at 1.5 times the rated capacity on the 3.0t, 10.0t and 15.0t models and 1.25 times (25.0t) for the 20.0t model and the light load test of 2% of the rated capacity across the full range, which exceeds the requirements of the current applicable standard. Chain certification is included as part of this documentation.

Hydraulic Specification:

Hydraulic Interface: ISO 13628-8 Fig 20 Type A & B Dual Port Hot Stab Female.

Recommended Hydraulic Fluid: Hydraulic Mineral oil AWS 22 or 23 or similar.

Hydraulic Supply: 210bar Maximum (Via ROV or Deck Powerpack) Guide flow rate 4 to 8 litres per minute.

Danfoss 80cc hydraulic motor. Painted Stainless Steel mount frame. Manufacturer Coated Steel motor. Stainless Steel Hydraulics and fastenings.

Available with Adaptor Components:

Drop forged adaptor maintaining maximum strength. 360° Rotation and 180° Pivot for Maximum Flexibility. Tested and certified to 4:1 factor of safety.



Tiger clevis shackle or reevable egg (master) link available for units up to 10t capacity or alternatively the hoist can be customised for alternative fittings for all capacities.

Technical Data:

Product Code	Capacity	Max	Revs per 300mm	Mass out of Water (Kg) (Includes chain block @ std HOL)						
	(tonne)	Torque (Nm)	travel (max 125 RPM)	Hot Stab	QD Drive	Torque Tool	Fishtail/D- handle			
RCB-0300	3.0	45	55	60.5	54.5	57.5	53.5			
RCB-1000	10.0	50	165	90.5	84.5	87.5	83.5			
RCB-1500	15.0	52	275	160.5	154.5	157.5	153.5			
RCB-2000	20.0	55	340	208.0	202.0	205.0	201.0			



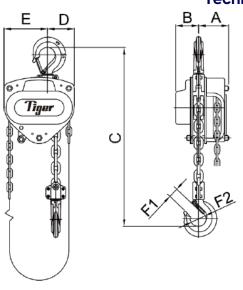


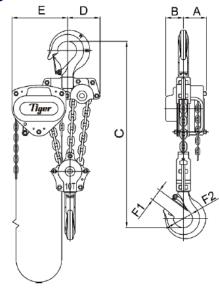


Chain Block Data:

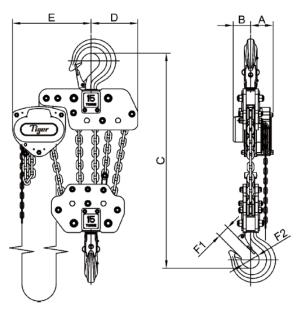
Product	Capacity	Effort			Dime	ensions (r	nm)		Load Chain Sta		Standard	Mass	Mass for	
Code	(tonne)	(kg)	Α	В	С	D	E	F1	F2	Diameter	No. of	HOL (m)	@ std HOL	extra metre
										(mm)	falls		(kg)	HOL (kg)
SCB-0300	3.0	38	109	84	550	98	157	36	56	ø10.0	1	3	30.5	3.2
SCB-1000	10.0	40	109	84	660	153	263	54	87	ø10.0	3	3	64.0	7.5
SCB-1500	15.0	41	109	84	840	225	378	59	81	Ø10.0	5	3	128.5	11.8
SCB-2000	20.0	43	161	90	1050	148	360	81	110	Ø10.0	6	3	178.5	14.2

Technical Drawings:

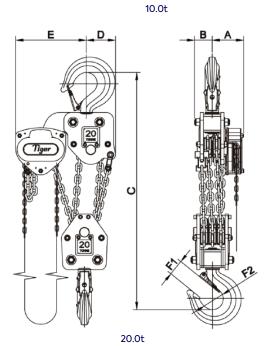




3.0t single fall



15.0t



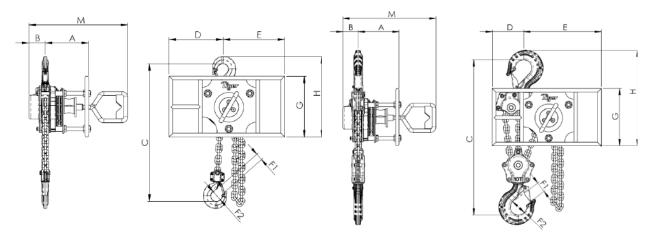


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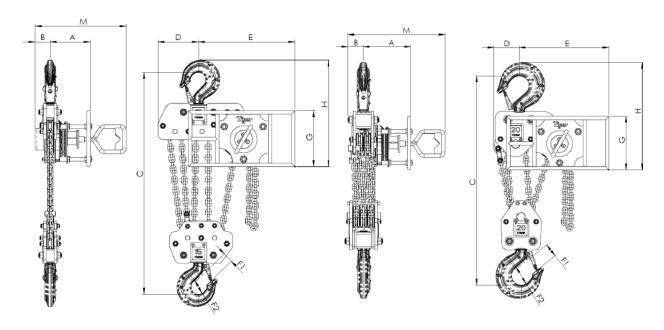
ROV Chain Block with D Handle Data:

Product code	Dimensions (mm)											
	Α	В	C	D	E	F1	F2	G	Н	M		
RCB-030D	221	84	550	280	310	36	56	309	405	504		
RCB-100D	221	84	660	185	405	54	87	309	515	504		
RCB-150D	221	84	840	225	520	59	81	309	570	504		
RCB-200D	221	90	1050	148	515	81	110	309	650	510		



RCB 3.0t D-Handle

RCB 10.0t D-Handle



RCB 15.0t D-Handle

RDB 20.0t D-Handle

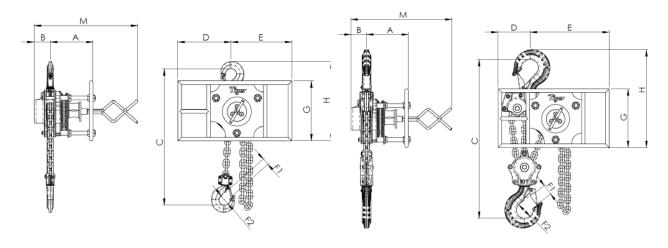


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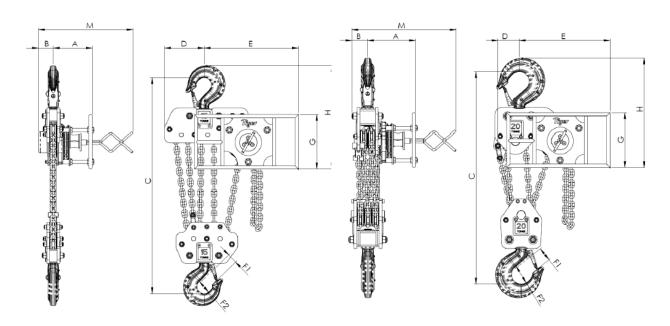
ROV Chain Block with Fishtail Data:

Product code	Dimensions (mm)											
	Α	В	С	D	E	F1	F2	G	Н	M		
RCB-030F	221	84	550	280	310	36	56	309	405	536		
RCB-100F	221	84	660	185	405	54	87	309	515	536		
RCB-150F	221	84	840	225	520	59	81	309	570	536		
RCB-200F	221	90	1050	148	515	81	110	309	650	542		



RCB 3.0t Fishtail

RCB 10.0t Fishtail



RCB 15.0t Fishtail

RCB 20.0t Fishtail

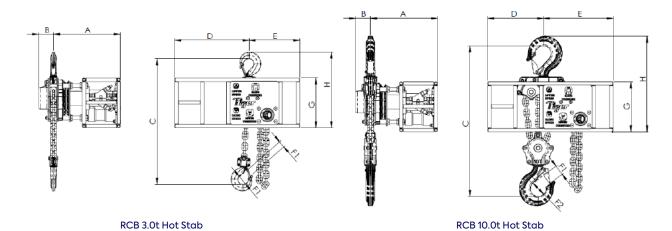


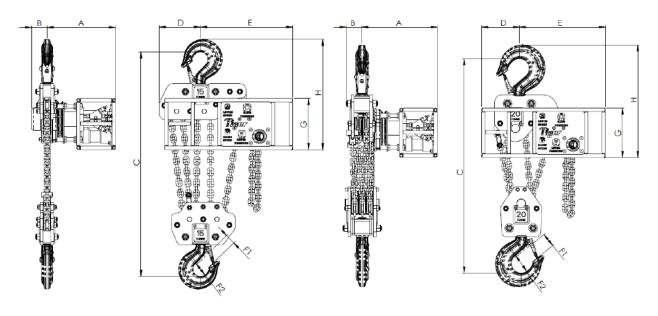




ROV Chain Block with Hot Slab Data:

Product code	Dimensions (mm)											
Product code	Α	В	С	D	E	F1	F2	G	Н	М		
RCB-030H	374	84	550	420	280	36	56	273	420	458		
RCB-100H	374	84	660	300	400	54	87	273	530	458		
RCB-150H	374	84	840	225	510	59	81	273	570	458		
RCB-200H	374	90	1050	200	500	81	110	273	700	464		





RCB 15.0t Hot Stab RCB 20.0t Hot Stab

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ROV Chain Block with QD Drive Data:

Dradust sada	Dimensions (mm)											
Product code	Α	В	С	D	E	F1	F2	G	Н	M		
RCB-030H-QD	374	84	550	228	280	36	56	273	420	458		
RCB-100H-QD	374	84	660	153	400	54	87	273	530	458		
RCB-150H-QD	374	84	840	225	510	59	81	273	570	458		
RCB-200H-QD	374	90	1050	148	500	81	110	273	700	464		

