



# Tiger Lifting



[www.tigerlifting.com](http://www.tigerlifting.com)

**Tiger**

Home of the Tiger hoisting range & Tiger subsea lifting products

## Tiger ROV Chain Block Model No RCB



### Main Features

- Available in 3.0t, 10.0t, 15.0t and 20.0t capacity
- Fully corrosion protected
- Several choices of interface:
  - Hydraulic Hot Stab connection type A dual port
  - Rotary Torque Receptacle Classes 1,2 & 3
  - Manual D Handle, T-bar or Fishtail Direct Drive
  - 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
- \*NEW\* Patented Twin Cam shaped pawl design
- One-piece brake chamber cover
- Heavy duty flexible chain bag c/w stainless steel mounting frame
- 4 Point manipulator connection points
- Compact and light weight
- Balanced design for easy handling and installation
- Subsea suitable bearings for top and bottom hook load sheaves
- Marine specific friction discs
- Bespoke chain lengths to meet exact customer requirements
- Full individual spares back up
- Each unit is fully tested and certified before delivery





## 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 type A dual port
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, 10 tonne, our new 15 tonne 5 fall and our new 20 tonne single head six fall capacity chain block, 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.

### Corrosion Protection:

Exclusively working with NiTEC (UK) Ltd using their proven SEATEC 100 and ENP processes ensures the Tiger has unprecedented protection whilst operating subsea. Every single component within the Tiger ROV chain block has been protected against corrosion by working in partnership with NiTEC (UK) Ltd and combining various methods of protection using their expertise in subsea protection systems.



### 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 Dual Port Hot 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. Using only Forum supplied high quality dual direction check valves that prevent 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 from sea water. The units come supplied with a dummy female stab that ensures debris does not collect in the receptacle during transportation or when the connection is not being used. We incorporate laser cut text for identification of hydraulic adjustments.





### Rotary Torque Tool:

This 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 operational torque of 50Nm to lift 10 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 our interface options come mounted in our purpose built high strength frames that are 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 (see below) and these tie in with T slots found in parallel jaw manipulators. Frames are painted 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.

### 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.

### 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:

Drop forged and heat treated alloy hooks are furnished with heavy duty latch kits that fully engage into the nose of the hook offering maximum load security. The swivel hooks are attached to the yoke using high grade nuts & bolts allowing for complete inspection during any statutory inspection or written scheme maintenance procedure. Recessed forgings offer full protection to the load chain anchor bolts on all our bottom 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.





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## Quality Machining:

Our strong impact resistant gearbox housing is complete with close tolerance fit bearings that fully support the pinion shaft and planet 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.

## 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 and the light load test of 2% of the rated capacity, 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 Dual Port Hot Stab Female.

Recommended Hydraulic Fluid: Hydraulic Mineral oil AWS 22 or 32 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. Stainless Steel fastenings. Weight in air without chain block: 32 kg air

## Data Tables

### Chain Block Data

Product Code	Capacity (tonne)	Effort (kg)	Dimensions (mm)								Load Chain		Standard HOL (m)	Mass @ std HOL (kg)	Mass for extra metre HOL (kg)
			A	B	D	E	F	F1	F2	G	Diameter (mm)	No. of falls			
SCB-0300	3.0	38	109	84	98	157	40	35	54	550	∅10.0	1	3	30.8	3.17
SCB-1000	10.0	40	109	84	153	263	60	54	90	660	∅10.0	3	3	65.0	7.54
SCB-1500	15.0	41	110	84	225	374	64	57	81	840	∅10.0	5	3	132.0	11.85
SCB-2000	20.0	43	160	90	140	347	90	70	105	1050	∅10.0	6	3	201.0	14.20

### ROV Block Data

Product Code	Capacity (tonne)	Max Torque (Nm)	Revs per 300mm travel (max 125 RPM)	Mass out of Water (Kg) (Includes chain block @ std HOL)		
				Hot Stab	Torque Tool	Fishtail
RCB-0300	3.0	45	55	60.5	57.5	53.5
RCB-1000	10.0	50	165	90.3	87.3	83.3
RCB-1500	15.0	52	275	160.3	157.3	153.3
RCB-2000	20.0	55	340	208.0	205.0	201.0



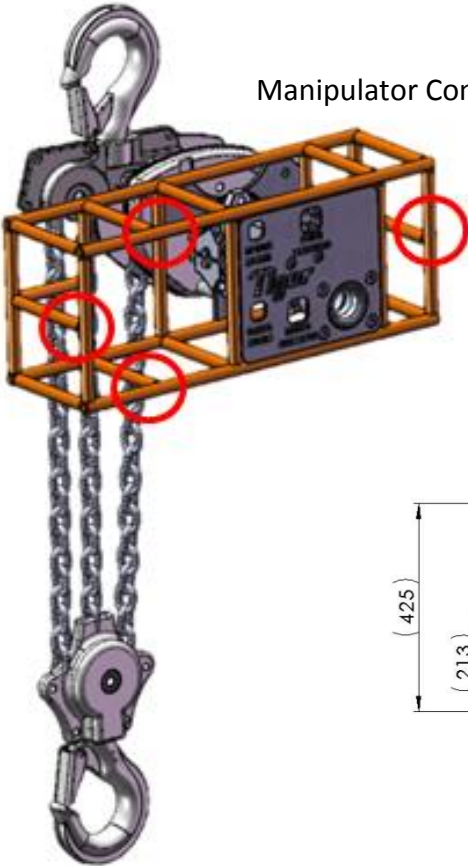




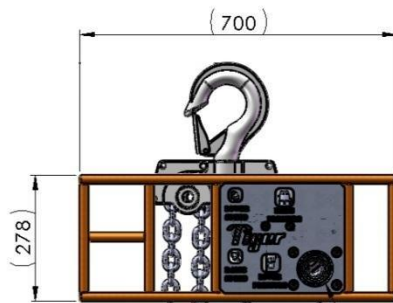
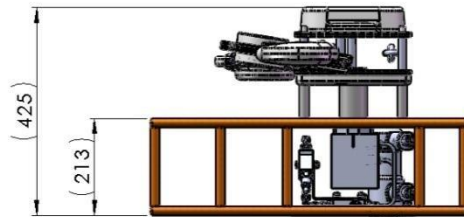
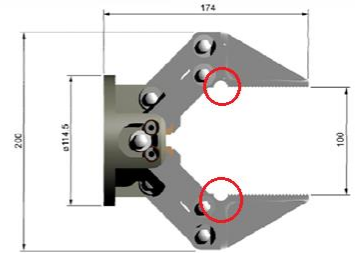
## Technical Drawings

### Hydraulic Hot Stab ROV Chain Block:

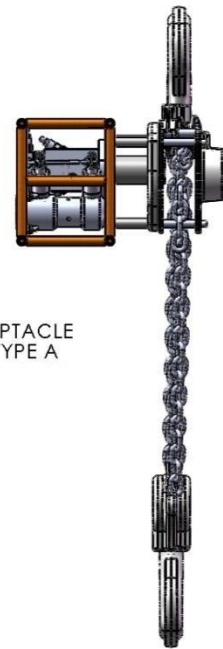
Manipulator Connection Points



100mm (4") Parallel Jaw

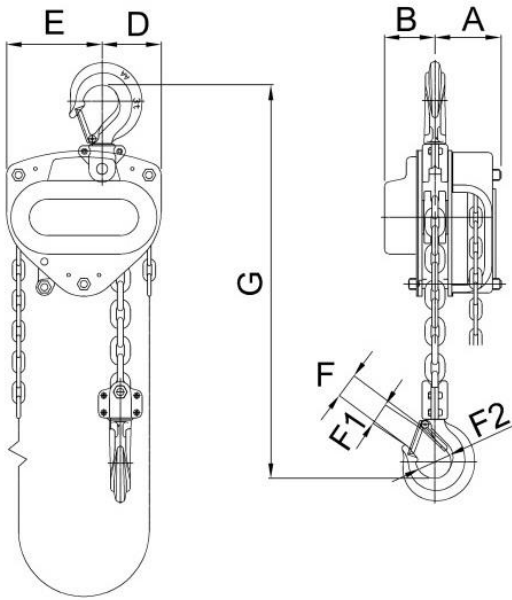


HOT STAB RECEPTACLE  
ISO 13628-8 TYPE A

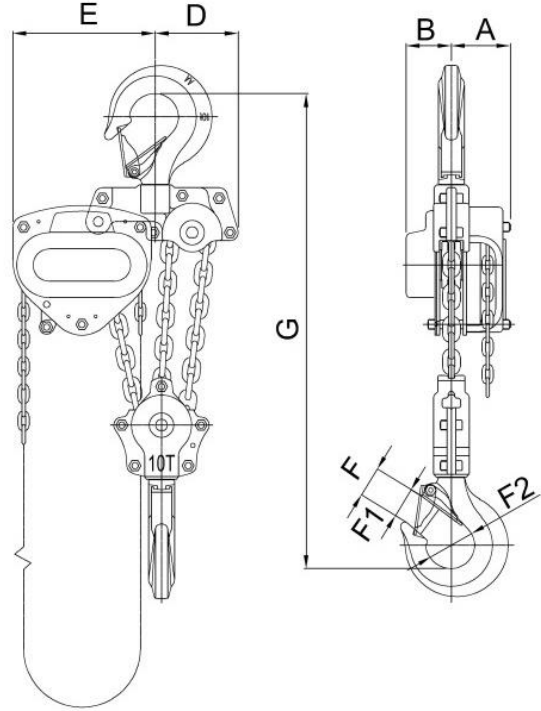




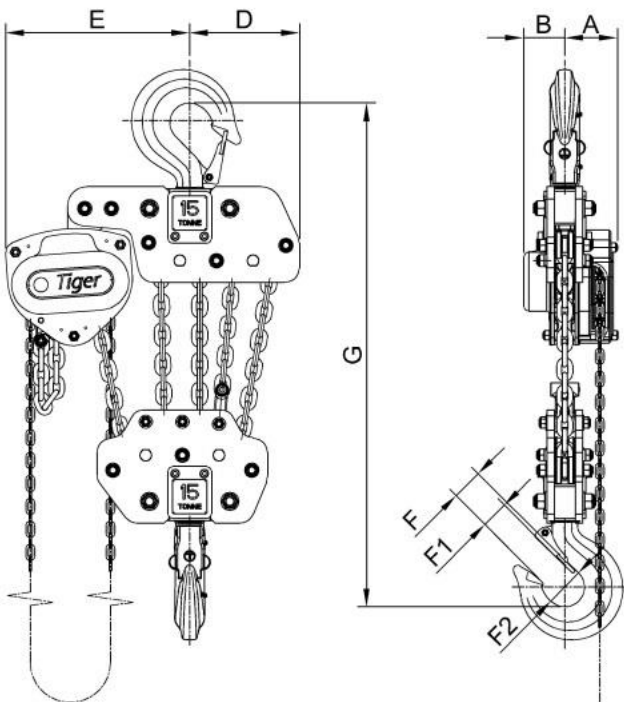
## Chain Block Technical Drawings



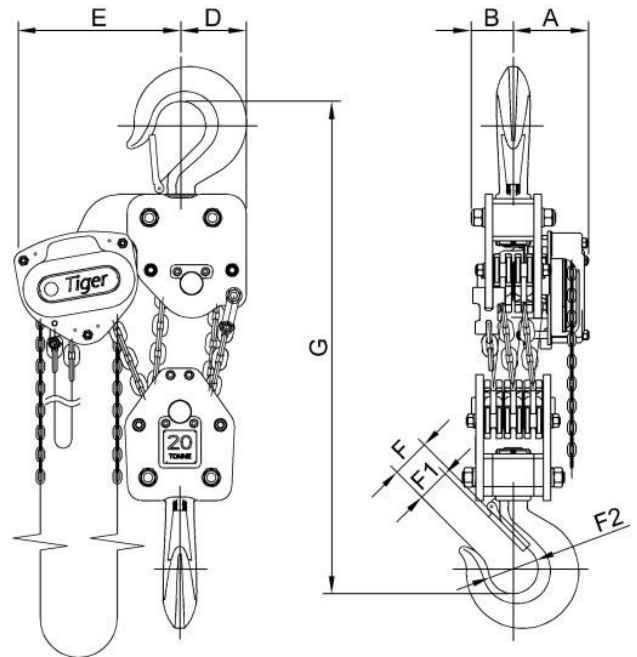
3.0t single fall



10.0t



15.0t



20.0t

## Photo Gallery





# Tiger Lifting



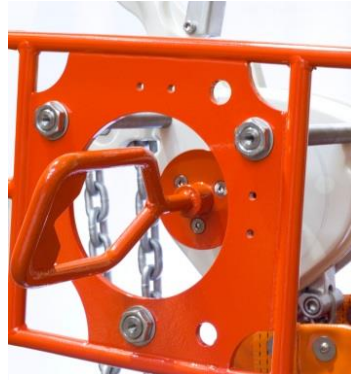
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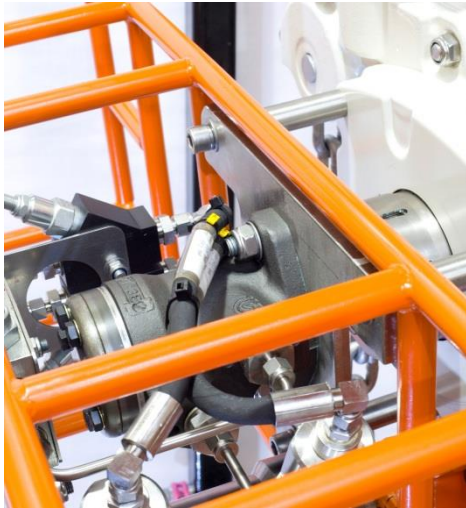
Manual Fishtail Direct Drive



Manual D Handle



Manual T Bar



Hot stab hydraulic system



Available with QD direct drive couplings



Hot Stab Drive Cage



New Rotary Torque

Due to our policy of continual product development, dimensions, weights and specifications may change without prior notice. Please check with your Tiger sales team when ordering.





# Forum & Tiger ROV Chain Block Features

## 1. Hot Stab Interface

- ISO 13628-8 Fig 20 Type A Dual Port Hot Stab Female
- Supplied with dummy female to prevent debris ingress
- Dual Direction Check Valves Prevent seawater ingress



## 3. Frame

- Stainless Steel 316
- High strength
- Durable
- Corrosion Resistant
- All welds continuous and all edges sealed to prevent corrosion
- Painted orange as per ISO 13628-1 to signify ROV grab point
- All Frame welds to BS 1011 parts 1 and 3.
- Welder Qualified to BS EN 287-1 or equivalent
- Laser cut text for identification of hydraulic adjustments

## 2. Hydraulics

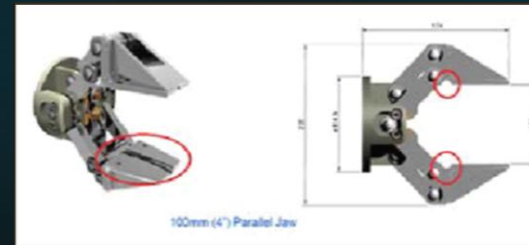
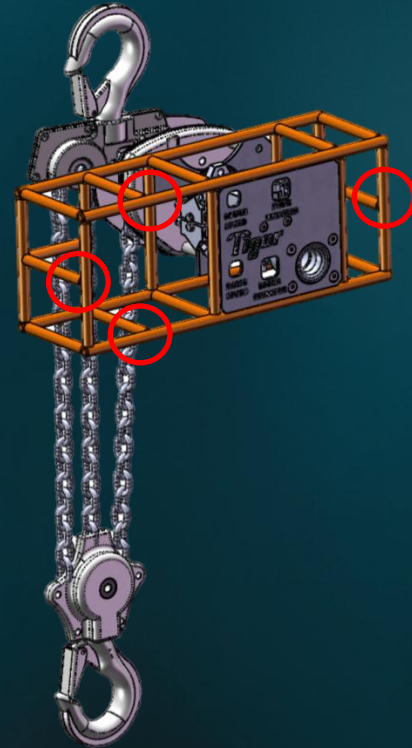
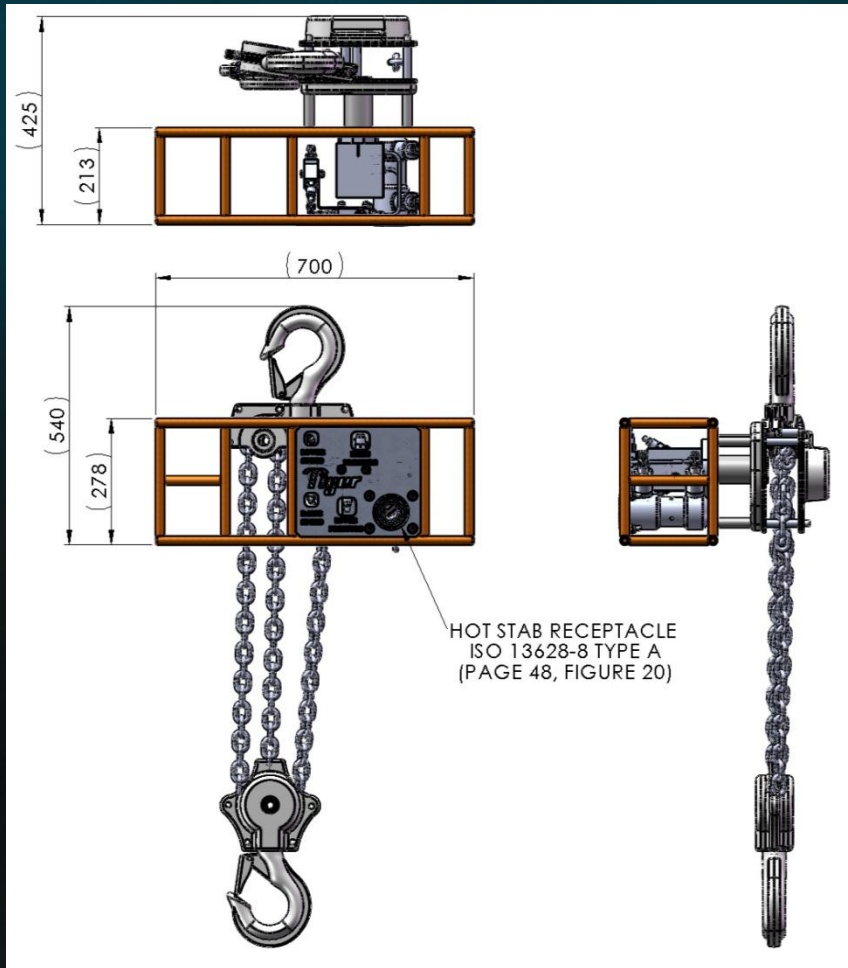
- High quality St St Swagelok fittings
- Speed Control
- Pressure Control
- Hoses individually pressure tested and labelled

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everything remotely possible<sup>®</sup>



# Tiger Forum ROV Chain Block Manipulator Interface



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