

## Tiger ROV Chain Block

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### Main Features

- 3.0t, 6.0t, 8.0t, 10.0t, 15.0t, 20.0t and 30.0t capacity units available
- Fully corrosion protected
- Several choices of interface:
  - Hydraulic Hot Stab connection dual port type A and B
  - 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 Cam pawl system – proven reliability
- 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



### User Manual/Certification:

Tiger chain blocks are sent out with a 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 15t models and 1.25 times for the 20.0t and 30.0t models 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.

The Tiger ROV compatible chain block is available in various 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

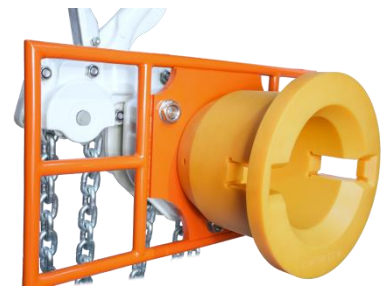
Available as 3 tonne (single fall of load chain), 6 tonne (2 falls), 8 tonne (3 falls), 10 tonne (3 falls), 15 tonne (5 falls), 20 tonne single head (6 falls) and 30t twin head (10 falls) capacity chain blocks, chained up to project specific heights of lift (HOL) that can be pre-set to meet the exact 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 unique corrosion protection 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 re-certifications to be easier and also help with the overall aesthetics of the hoist being maintained in an “as new” condition. The integrated SS20 chain block is completed with a two-stage finish combining electroplating as a base layer and then finished with a very hard-wearing sand texture powder coating paint which offers excellent corrosion protection and high impact protection ideally suited for multi-immersion applications. Paint finish in accordance with ISO12944 C5M. 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 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. We use 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. We incorporate laser cut text for identification of hydraulic adjustments.



Stainless steel laser cut mounting frame



High performance marine spec hydraulic system

### QD Direct Drive Couplings:

The QD interface is supplied with a female and male  $\frac{3}{4}$  NPT wing series coupler set that provides fast and efficient hydraulic connection, allowing the hoist to be controlled from the deck HPU. The QD interface is complete with the same equipment as the hot stab interface but is far more compact in design for areas with reduced access. The interface 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.

### 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 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 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. All welds are continuous and all edges sealed to prevent corrosion. Frames have laser cut text for identification of hydraulic adjustments. Frames are painted RAL 2002 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.

**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 our patented “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 & 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 i.e. AS 1418.2. Also available with spark resistant hooks.

**High Performance Premium Grease:**

We use new technology, wide temperature range, high performance premium grease. It contains no heavy metals or other harmful additives making it more environmentally friendly. This selection achieves the correct viscosity to prevent the grease migrating from the area of application. Even when mixed with 50% high water absorption it has excellent adhesion and no sign of breakdown after 100,000 strokes and remains unchanged with no slump or breakdown unlike other “premium” greases. 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.

**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 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.

**Hand Wheel:**

Recent innovation to meet client requirements saw the optional addition of a hand wheel on our 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 fully supports the pinion shaft and gears to maintain smooth revolutions whilst under load. Ideally suited for offshore and marine environments.

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



### One Piece Construction Pinion Gears:

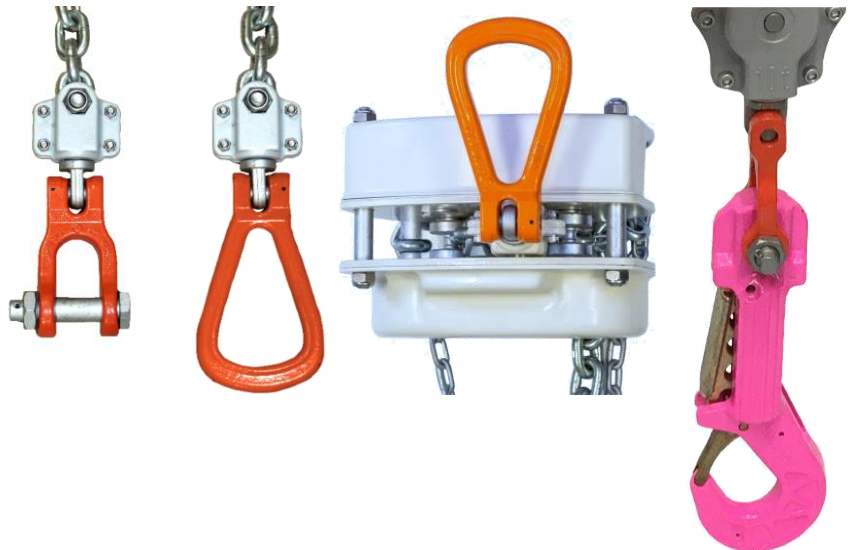
SS20 gearboxes for Tiger ROV chain blocks contain one-piece pinion gears. This revolutionary process in gear manufacturing uses drop-forged raw material, precision machined and heat treated with precise ratios between teeth and body.

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

Also available with RUD ROV hooks



Please see our Tiger Corrosion Resistant Chain Block SS20 technical sheet for more information about the chain block.



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.

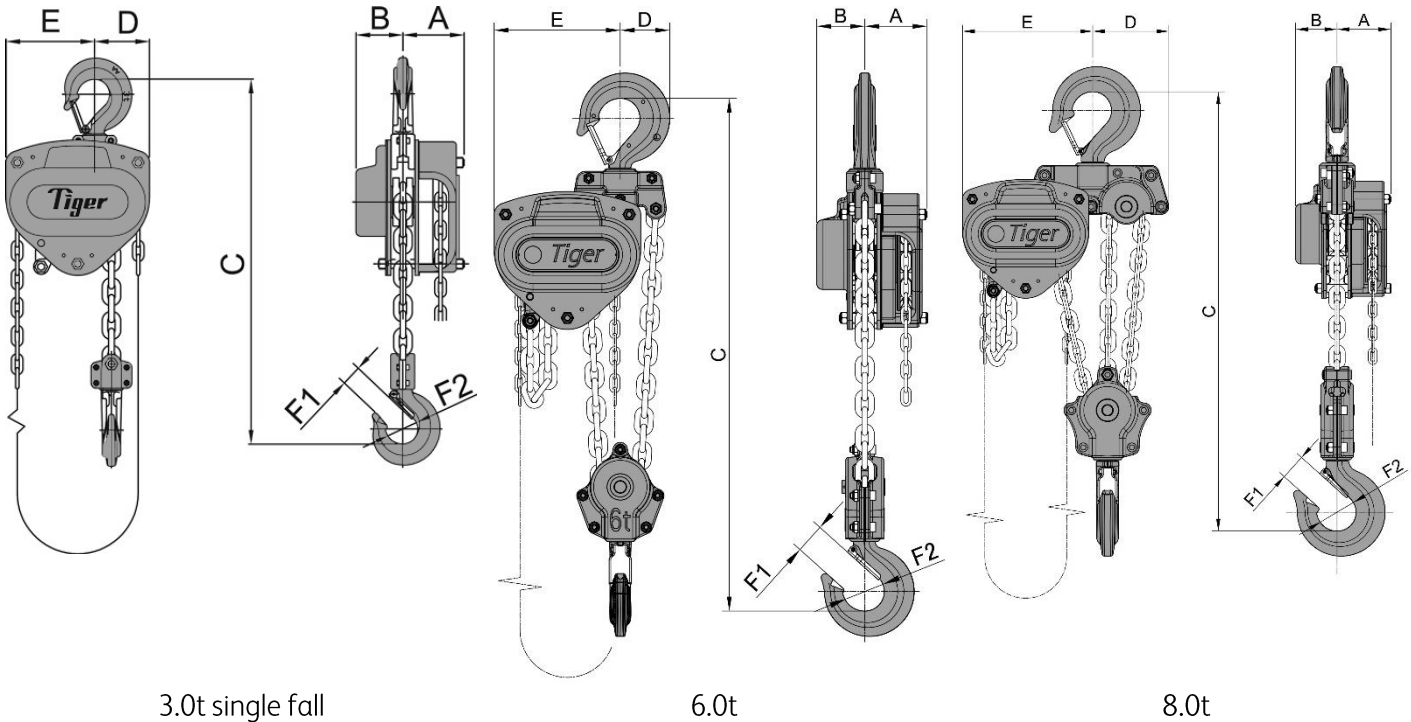
Bespoke designs available on request – contact [info@tigerlifting.com](mailto:info@tigerlifting.com) for more information.

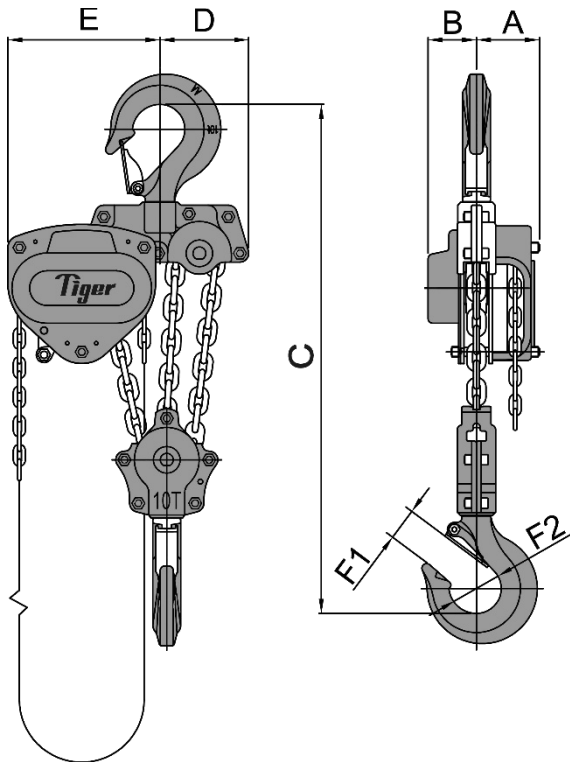
### Technical Information

Product Code	Capacity (tonne)	Max Torque (Nm)	Revs per 300mm travel (max 125 RPM)	Time to raise 300mm at max RPM (Min:Sec)	Mass out of Water (Kg) (Includes chain block @ std HOL)			
					Hot Stab	QD Drive	Torque Viper	Fishtail/ D-handle
RCB-0300	3.0	45	55	0:26	72.5	54.5	57.5	43.0
RCB-0600	6.0	TBA	110	0:59	87.5	TBA	TBA	TBA
RCB-0800	8.0	TBA	165	1:19	103.0	TBA	TBA	TBA
RCB-1000	10.0	50	165	1:19	106.0	84.5	87.5	76.0
RCB-1500	15.0	52	275	2:12	170.5	154.5	157.5	141.0
RCB-2000	20.0	55	340	2:43	220.5	202.0	205.0	190.5
RCB-3000	30.0	TBA	570	4:34	TBA	TBA	TBA	TBA

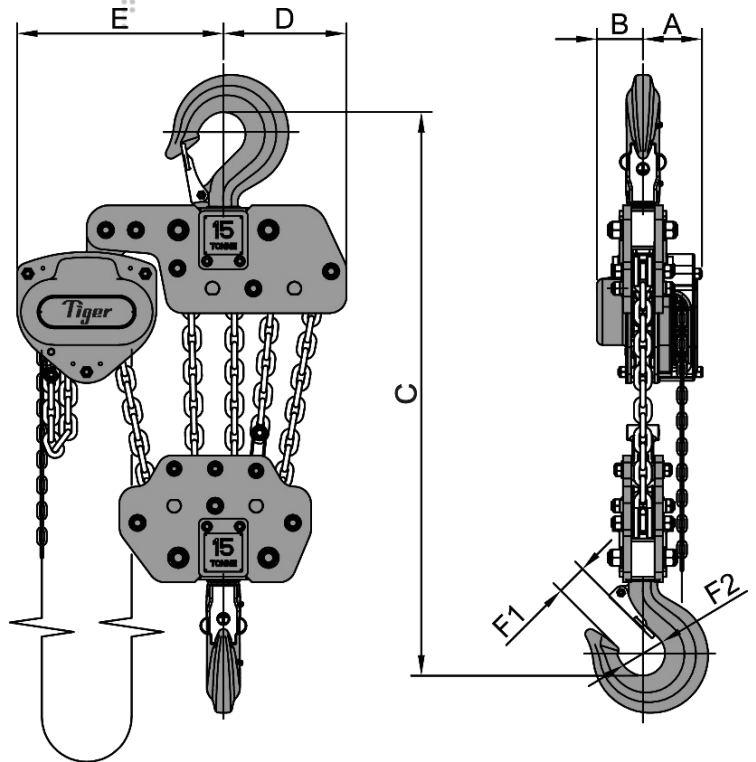
### Chain Block Data

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	C	D	E	F1	F2	Diameter (mm)	No. of falls			
SCB-0300	3.0	38	109	84	550	98	157	36	56	∅10.0	1	3	30.5	3.2
SCB-0600	6.0	38	109	84	635	86	220	49	70	∅10.0	2	3	45.5	5.3
SCB-0800	8.0	34	109	84	610	153	263	51	78	∅10.0	3	3	61.0	7.5
SCB-1000	10.0	40	109	84	660	153	263	54	87	∅10.0	3	3	64.0	7.5
SCB-1500	15.0	41	109	84	840	225	378	59	81	∅10.0	5	3	128.5	11.8
SCB-2000	20.0	43	161	90	1050	148	360	81	110	∅10.0	6	3	178.5	14.2
SCB-3000	30.0	42	220	220	1200	388	388	91	135	∅10.0	10	3	307.0	23.8

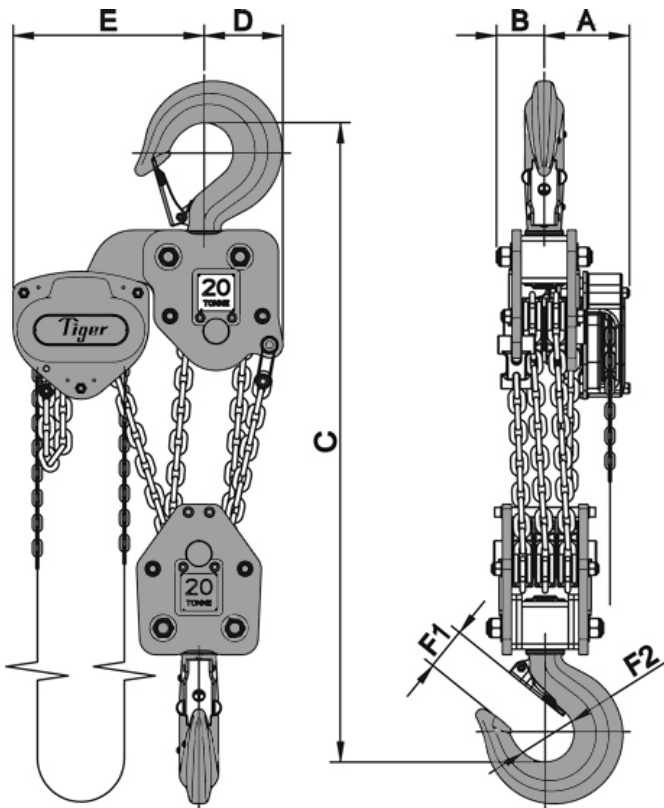




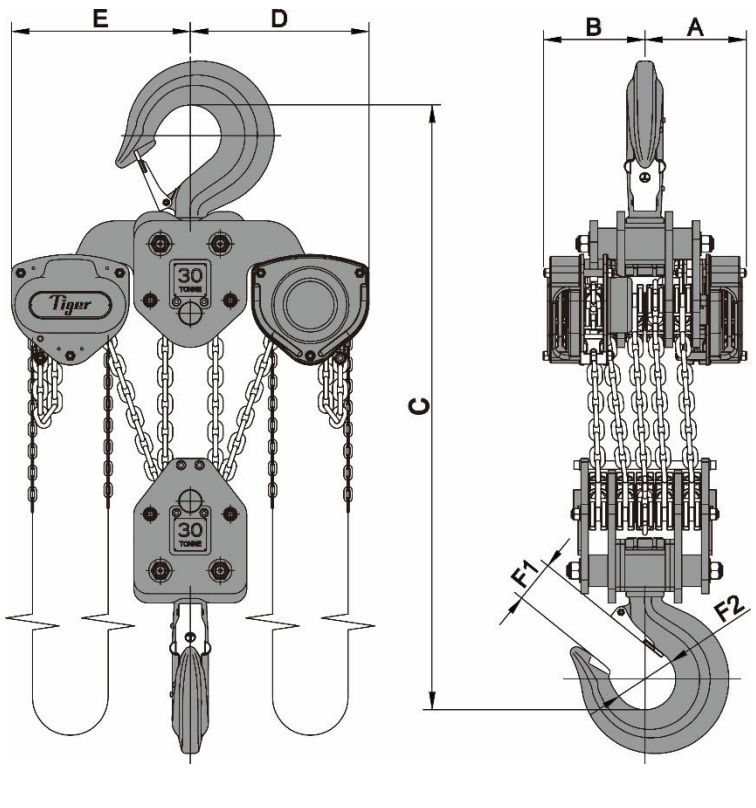
10.0t



15.0t



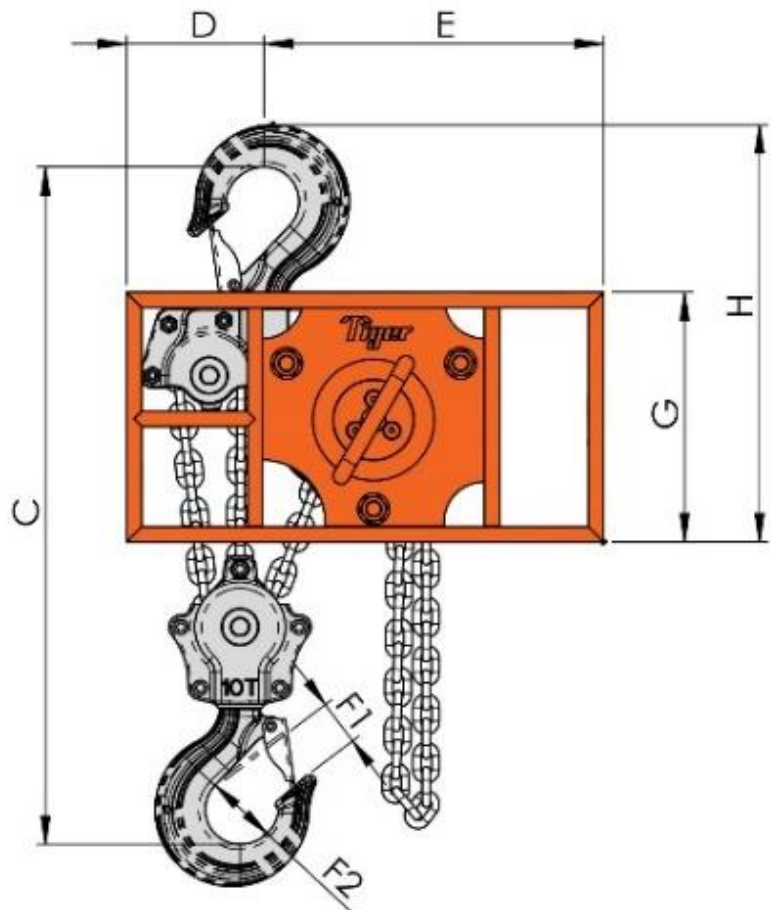
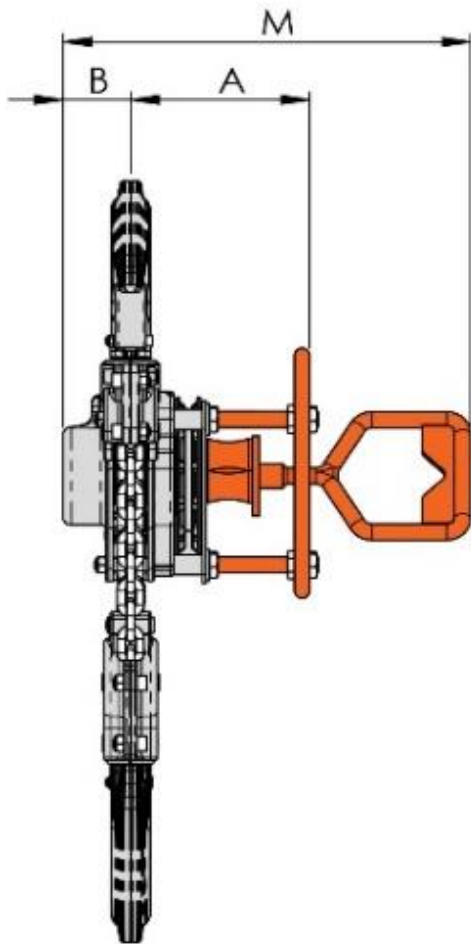
20.0t



30.0t

**ROV Chain Block with D Handle**

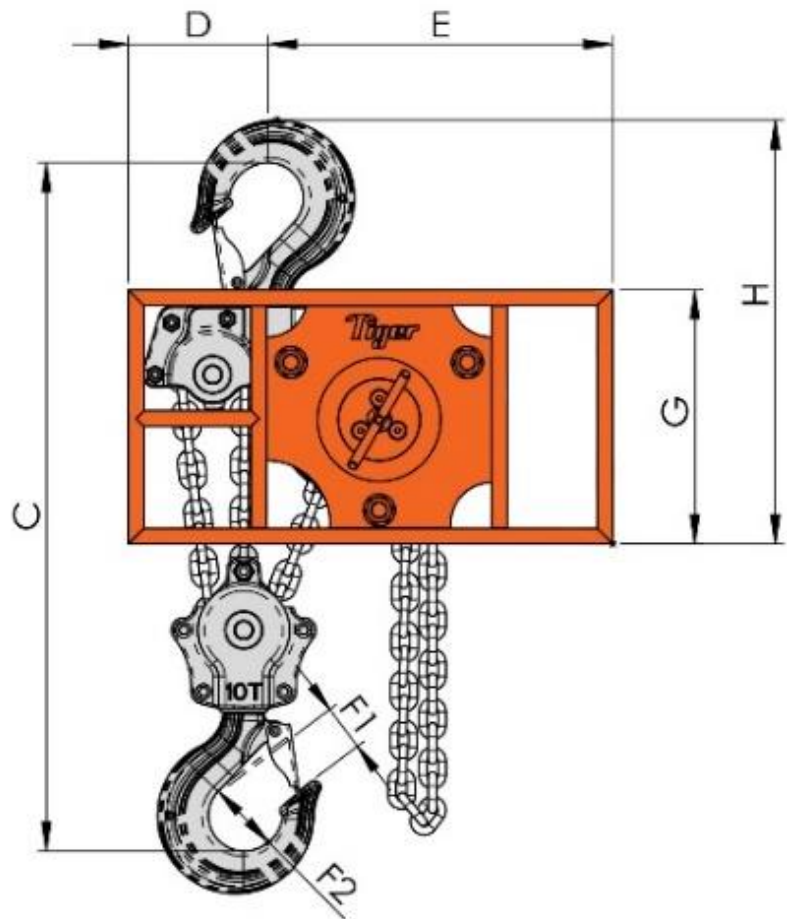
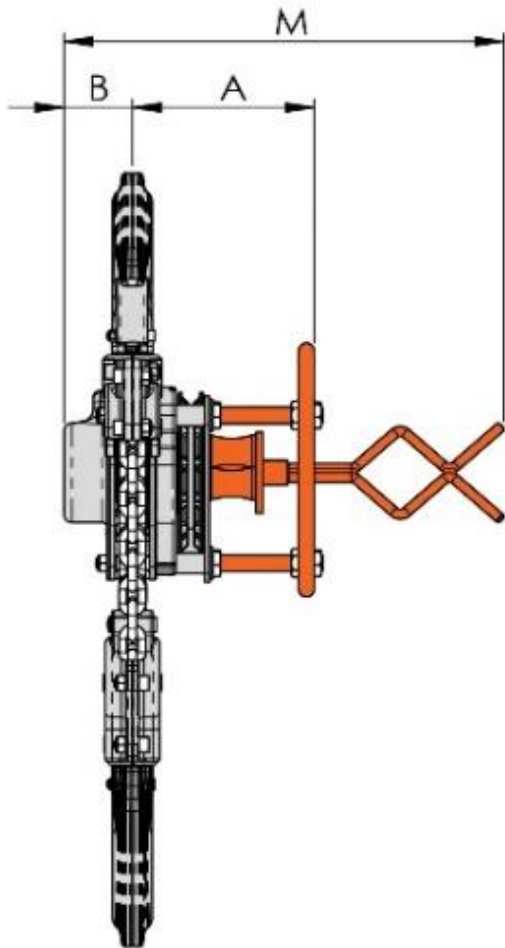
Product code	Dimensions (mm)									
	A	B	C	D	E	F1	F2	G	H	M
RCB-030D	221	84	550	280	310	36	56	309	405	504
RCB-060D	221	84	703	221	369	49	70	309	467	504
RCB-080D	221	84	749	179	411	51	78	309	489	504
RCB-100D	221	84	660	185	405	54	87	309	515	504
RCB-150D	221	84	840	225	520	59	81	309	570	504
RCB-200D	221	90	1050	148	515	81	110	309	650	510
RCB-300D	332	220	1200	388	545	91	135	309	680	750





**ROV Chain Block with Fishtail**

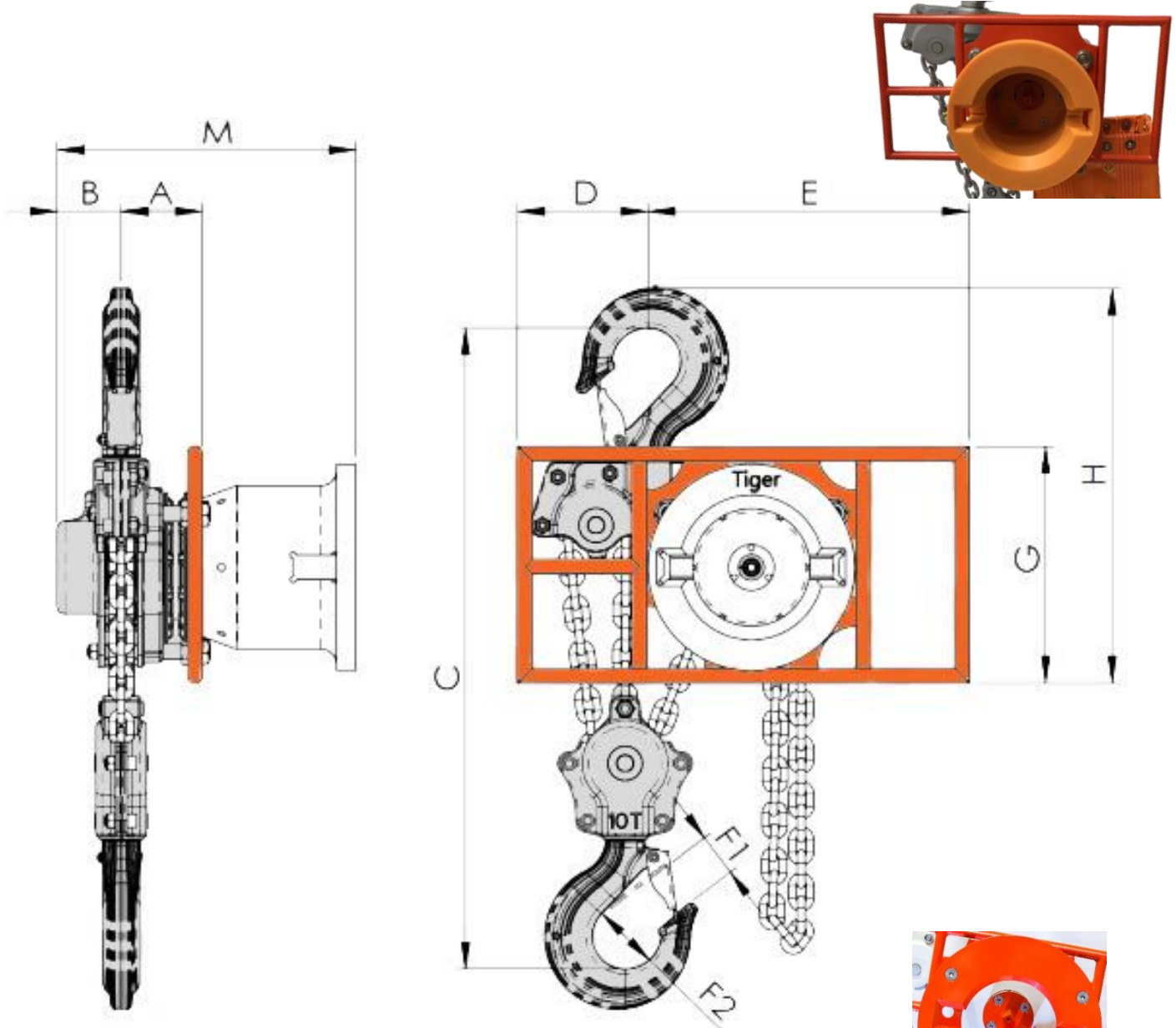
Product code	Dimensions (mm)									
	A	B	C	D	E	F1	F2	G	H	M
RCB-030F	221	84	550	280	310	36	56	309	405	536
RCB-060F	221	84	703	214	376	49	70	309	467	536
RCB-080F	221	84	749	179	411	51	78	309	189	536
RCB-100F	221	84	660	185	405	54	87	309	515	536
RCB-150F	221	84	840	225	520	59	81	309	570	536
RCB-200F	221	90	1050	148	515	81	110	309	650	542
RCB-300F	332	220	1200	388	545	91	135	309	680	780



ROV Chain Block with Rotary Torque

Product code	Dimensions (mm)									
	A	B	C	D	E	F1	F2	G	H	M
RCB-030T	106	84	550	280	310	36	56	309	405	390
RCB-060T	106	84	703	214	376	49	70	309	467	390
RCB-080T	106	84	749	179	411	51	78	309	489	390
RCB-100T	106	84	660	185	405	54	87	309	515	390
RCB-150T	106	84	840	225	520	59	81	309	570	390
RCB-200T	158	90	1050	148	515	81	110	309	650	448
RCB-300T	216	220	1200	388	545	91	135	309	680	636

A/M measurements are for our Viper Rotary Torque option (as shown in diagram below and this image)

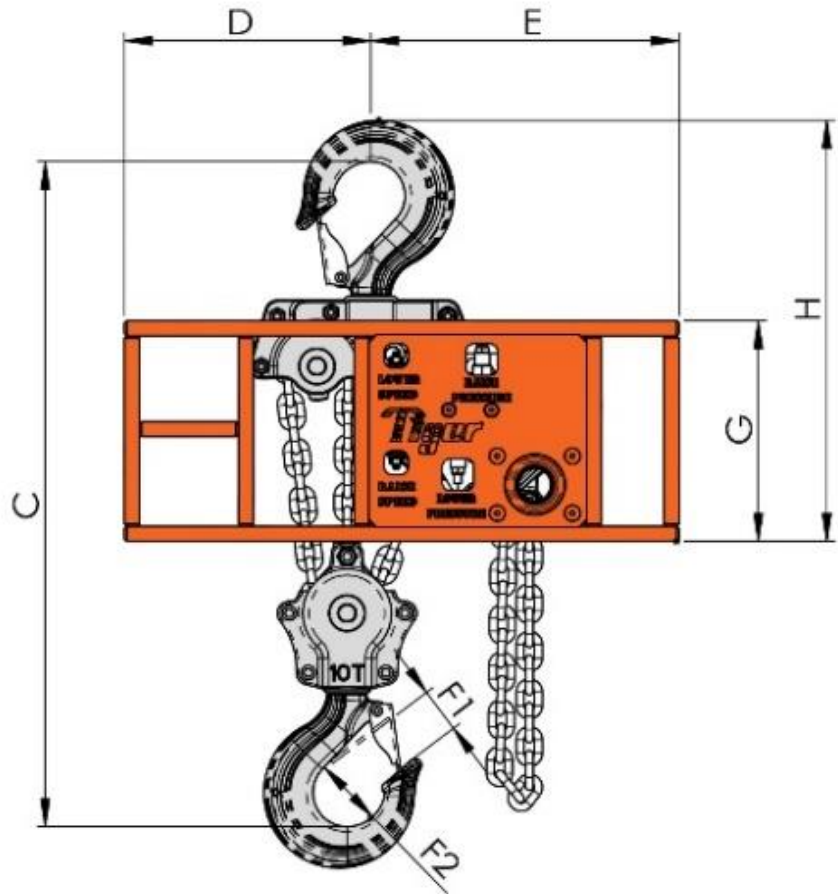
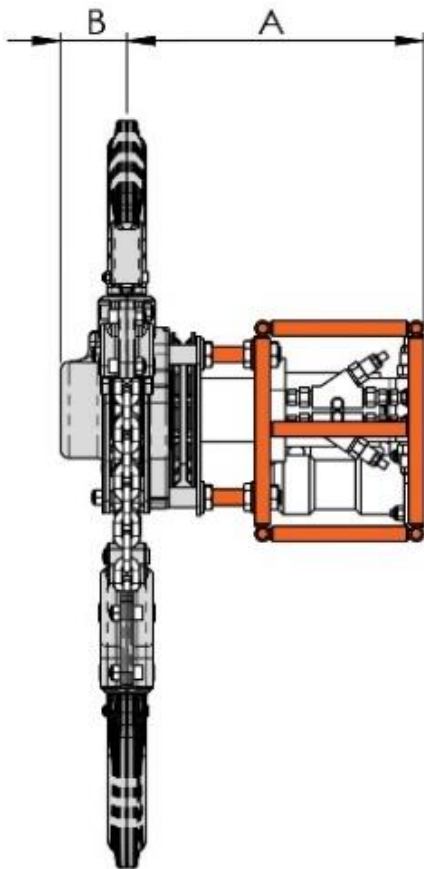


An alternative **Rotary** Torque option is available (as shown in image to the right). Please contact us for details

**Our innovation, your safety**

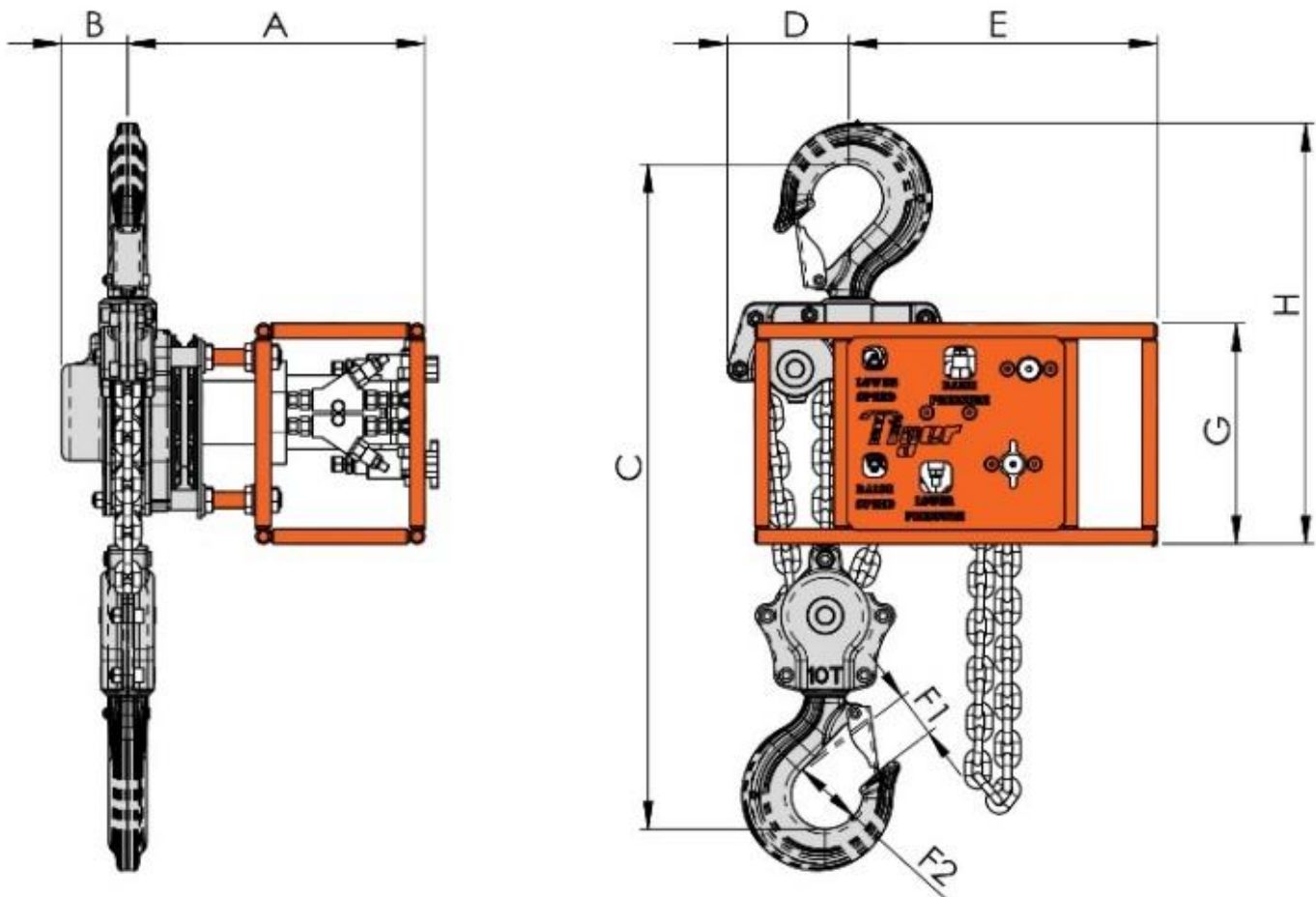
## ROV Chain Block with Hot Stab

Product code	Dimensions (mm)								
	A	B	C	D	E	F1	F2	G	H
RCB-030H	374	84	550	420	280	36	56	273	420
RCB-060H	374	84	703	354	346	49	70	273	482
RCB-080H	374	84	749	320	380	51	78	273	503
RCB-100H	374	84	660	300	400	54	87	273	530
RCB-150H	374	84	840	225	510	59	81	273	570
RCB-200H	374	90	1050	200	500	81	110	273	700
RCB-300H	485	220	1200	388	495	91	135	273	695



ROV Chain Block with QD Drive

Product code	Dimensions (mm)								
	A	B	C	D	E	F1	F2	G	H
RCB-030H-QD	374	84	550	228	280	36	56	273	420
RCB-060H-QD	374	84	703	162	346	49	70	273	481
RCB-080H-QD	374	84	749	162	380	51	78	273	503
RCB-100H-QD	374	84	660	153	400	54	87	273	530
RCB-150H-QD	374	84	840	225	510	59	81	273	570
RCB-200H-QD	374	90	1050	148	500	81	110	273	700
RCB-300H-QD	485	220	1200	388	515	91	135	273	695



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