# **Detrenching Grapnel**

The Detrenching Grapnel is manufactured from high tensile steel, suitable for withstanding the harsh offshore environments. The structure and material of the grapnel is tested using finite element analysis which is performed during the design phase. This simulates the various stresses and strains acting on the grapnel in a variety of different seabed conditions and allowed for optimisation of the design.

The Grapnel itself is scissor shaped at one end, which is designed to break the surface of the seabed and fitted with stabilising bars at the other end, to assist its dynamics and balance in the water column, while also for use in the seabed. In addition, there is an option to fit two Tynes if required either side of the grapnel, Tynes are removable and fitted with wear tips at the end, prolonging Tyne life.

The grapnel, has been designed to withstand tow tensions of up to 15t. It has a built in shear pin rated to a breaking load of 15t which shears and protects the tow line and the Tyne if tension is exceeded beyond this point.

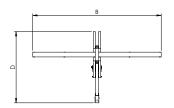


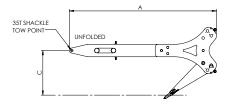
### **Features:**

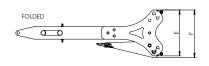
- Manufactured from high strength structural steel
- Removable shear pin to prevent damage in overload conditions
- Replacement wear tip
- Wide stabilisers to improve subsea stability removable for storage
- · Flux core welded for increased strength

## **Applications:**

- Detrenching buried subsea cables (Power or Telecoms)
- · Subsea Cable recovery for repair
- · Removal of out of service cables
- · Route clearance







### **Dimensions**

Part Number	Description	A	В	С	D	E	F	WLL	Proof Load
0001-1426	670mm	3018mm	3080mm	670mm	1362mm	1100mm	1140mm	15t	22.5t*
0001-1427	1070mm	3528mm	3080mm	1070mm	1707mm	1100mm	1140mm	15t	22.5t*
0001-1428	1500mm	4818mm	3080mm	1500mm	2111mm	1100mm	1140mm	15t	22.5t*
0001-1429	1800mm	5718mm	3080mm	1800mm	2543mm	1100mm	1140mm	15t	22.5t*

## **Spares and Accessories Table**

Part Number	Description
P0040-1245	Fluke Tooth
P0040-1246	Tooth Retainer set
P0050-0716	35T Shackle
S0070-0047	670mm Fluke
S0070-0020	1070mm Fluke
S0070-0023	1500mm Fluke
S0070-0045	1800mm Fluke

Part Number	Description
0070-0022	Stabiliser & Bolts
P0040-1152	Shear Pin 670mm
P0040-0931	Shear Pin 1070mm
P0040-1025	Shear Pin 1500mm
P0040-1149	Shear Pin 1800mm
P0040-0933	Inner Bush
P0040-0934	Outer Bush
P0040-0932	Pivot Pin

<sup>\*</sup>Not supplied with shackles