



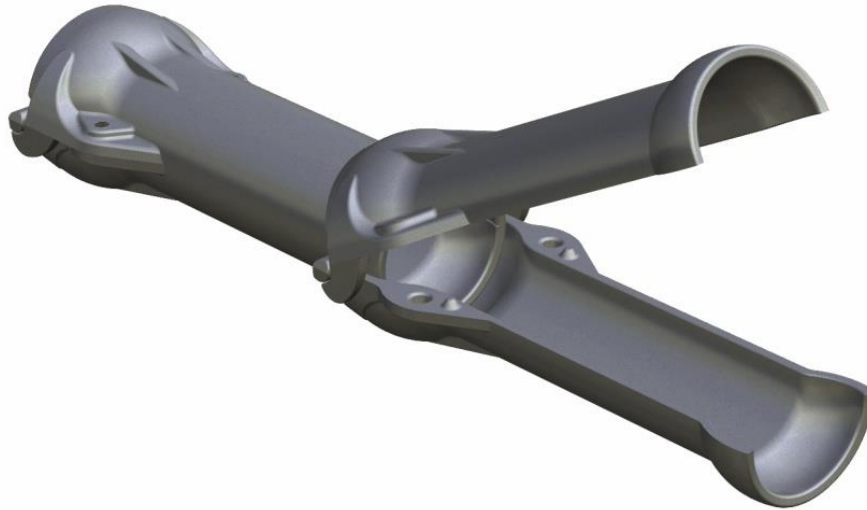
# Protectorshell

**Protectorshell Articulated Pipe** has been developed to provide shallow water abrasion and impact protection for submarine cables.

**Protectorshell** is unique in that it clips together, avoiding the nuts and bolts of traditional articulated pipe. This clip together feature allows quick real time application during laying and a much simplified diver installation onto pre-laid cables.

The **Protectorshell** system comprises two different cast segments which are identified as uppers and lowers. Each successive pair of segments clips over and retains the end of the preceding pair.

A wide range of adaptors and attachments are available for use with **Protectorshell** Articulated Pipe. These adaptors and attachments allow the reversal of application direction and interfacing with other cable protection measures such as directionally drilled pipes, pipe flanges and concrete abutments.



## PS100/500/09

### Specifications

Segment Length - Overall	550mm
Effective Installed Length/segment pair	500mm
Minimum Internal Diameter	100mm - for cables up to 88mm diameter
Maximum External Diameter	214mm
Wall Thickness	9mm
Material	Ductile Iron to ISO 1083
Tensile Strength / Elongation	400MPa / 15% elongation
Impact Resistance	>7.5kJ
Minimum Bend Diameter	4.0m
Weight per Segment	15.99kg
Weight per installed metre (air)	31.98kg
Weight per installed metre (water)	27.54kg
Fasteners	M12x50 Bolt and M12 Nyloc Nut – Material: Stainless Steel G316/A4 Recommended usage: 1 pair per 10 metres of installed pipe

#### Protectorshell SL

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