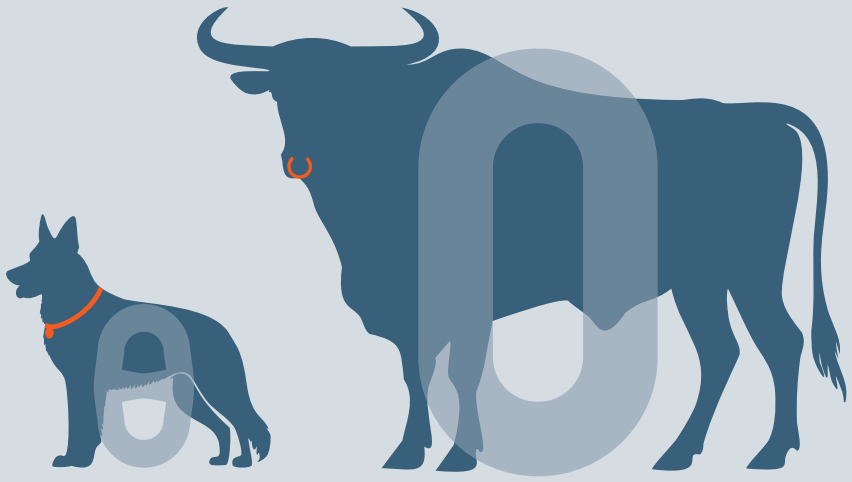
UNDERSTANDING THE SCALE OF MOORING COMPONENTS FOR FLOATING WIND PROJECTS

The size of the mooring components needed for floating wind farms is substantially higher than those used in oil and gas projects.

The mooring lines for floating wind turbines will be a mix of chain and fibre rope.

1



Chain link weight

76 mm stud link chain is used to moor oil rigs. Each link weighs 42 kg.

175 mm - 230 mm studless chain will be used for floating wind turbines. Each link weighs between 476 kg and 1,100 kg.

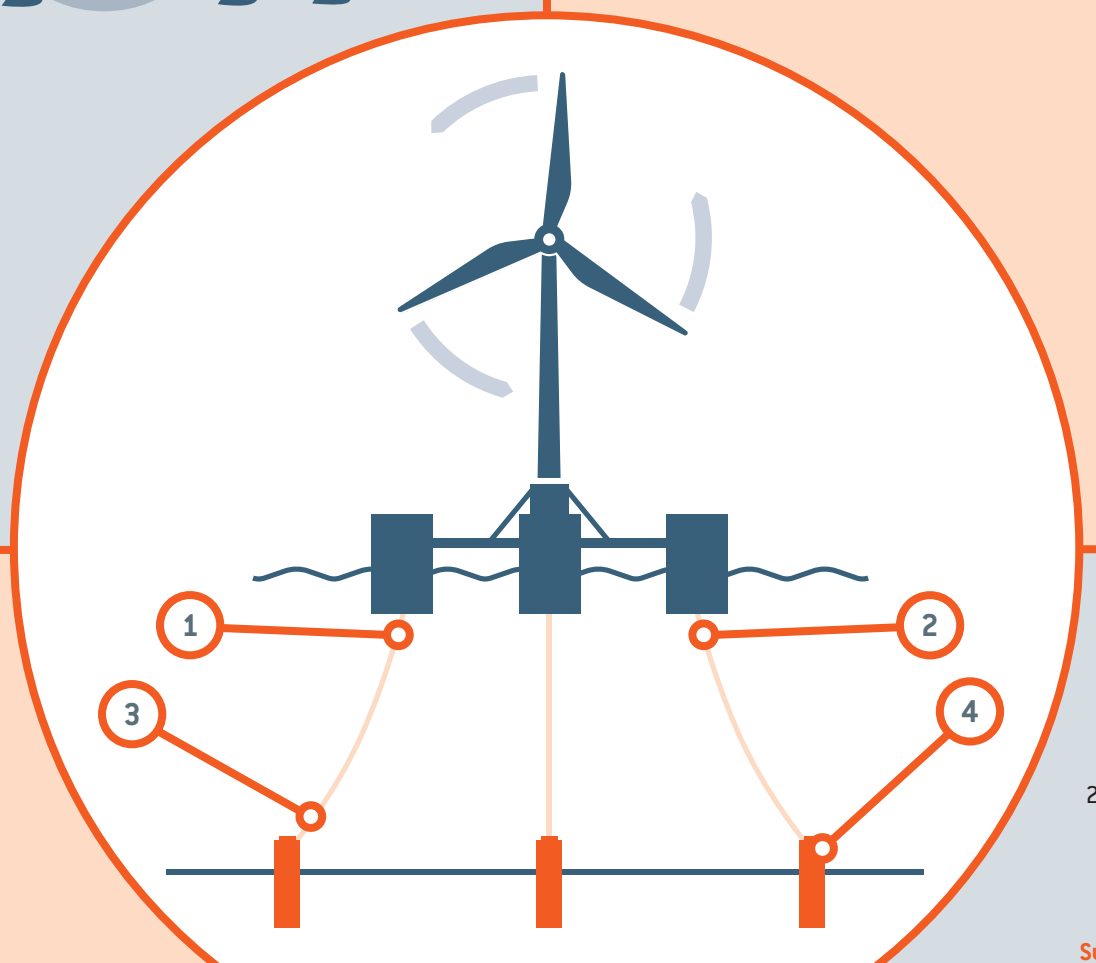
2

Grade	76 mm Proof Load kN	76 mm Break Load kN	230 mm Proof Load kN	230 mm Break Load kN
R3	3417	4884	21126	30200
R3S	3942	5454	23564	33721
R4	4731	6001	26001	37106

Chain break load

About 2,000 average-sized cars could hang from ONE R4 230 mm diameter chain link.

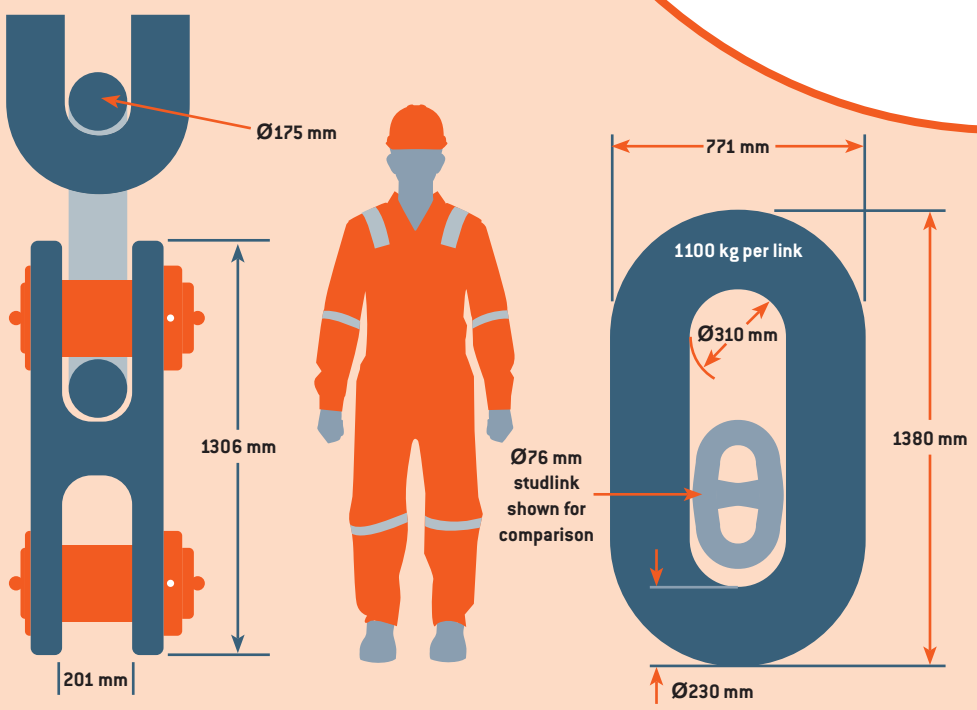
In comparison, an R4 76 mm diameter chain link has a break load six times lower.



3

Dimensions

Connectors and pins are in proportion to the other mooring components



4

Anchor size and weight

There are a variety of anchors that can be used for floating wind. The anchor selection will depend on factors such as mooring loads, soil conditions, supply chain, logistics and installation.