Coupling block element for a Kenter shackle, formed from two half elements which can be pushed into one another, for anchor chains

The invention relates to a coupling block element for a Kenter shackle, formed from two half elements which can be pushed into on another, for anchor chains.

A coupling block element of the type is known from WO2017/186236A1. The coupling block element inserted between the half elements is reliably locked by the two locking elements, which can be moved in opposite directions. The disadvantage is that the expansion element is secured in the housing by a thread. To assemble the coupling block element, the expansion element must first be screwed into the housing by turning it many times, which is time-consuming and energy-consuming in view of the dimensions of such Kenter shackles and the tools required for them. If the thread becomes stuck,, e.g., due to the influence of sand and seawater, non-destructive dismantling of the coupling block element is no longer possible.

Embodiments of the invention facilitate assembly and disassembly of the coupling block element and to make it less susceptible to corrosion.

According to a first aspect of the present invention, there is provided a coupling block element for a Kenter shackle, formed from two half elements which can be pushed into one another, for anchor chains, wherein the half elements each have one short limb with a profile structure at the end and one long limb with a receiving chamber therefor, and the coupling block element can be inserted between the half elements which are pushed into one another, and wherein: the coupling block element has a housing which is profiled on its side surfaces, which are to face the half elements, for positive locking guidance on the half elements; at least one locking element which can be displaced in a locking element guide bore, and the ends of which, which exit to the outside, are configured for engaging in locking element receptacles on the inner flanks of the half

elements is arranged on each of the opposite sides of the housing, the two locking elements can be displaced to the outside by means of a common expansion element which engages between the locking elements; wherein the expansion element is formed by an eccentric bolt, which is arranged rotatably in a central bore, oriented at a right angle with respect to the locking element guide bores of the locking elements, in the housing, and which has a non-round cross-section at least in a region which adjoins the locking element guide bores of the locking elements.

According to a second aspect of the present invention, there is provided a Kenter shackle or anchor Kenter shackle for anchor chains, at least including two half elements which can be pushed into one another, each with one short limb with a profile structure at the end and one long limb with a receiving chamber therefor, wherein locking element receptacles are formed on the inner flanks of the half elements, as well as the coupling block element inserted between the half elements pushed into one another.

The advantage is that the eccentric bolt only needs to be rotated by a maximum of 180°, and in particular only by 90°, to lock and unlock the locking elements. During locking, the base bodies of the locking elements, which are rounded on their inside, are moved away from the eccentric surfaces on the eccentric bolt and brought into contact with the cylindrical outer surface of the eccentric bolt. As a result, the locking elements are displaced to the outside and at the same time positively locked in place. To unlock, the reverse movement takes place: the eccentric bolt is rotated, and the locking elements can move back from the outer housing to the eccentric surfaces, supported by inserted springs.