

Abstract

The invention relates to energy chains (1; 101) having flexible joint connectors, and lateral tabs (2, 3; 6; 103) and a joint connector (5) therefor. The lateral tabs (2, 3; 6) are symmetrical by means of the stop surfaces thereof, wherein each lateral tab (2, 3; 6) comprises two protrusions (21A, 21B; 31A, 31B) having stop surfaces (211A, 211B; 311A, 311B and 212A, 212B; 312A, 312B) and two pockets (22A, 22B; 32A, 32B) having counterpart stop surfaces (221A, 221B; 321A, 321B and 222A, 222B; 322A, 322B). According to one aspect, the two protrusions (21A, 21B; 31A, 31B) and the two pockets (22A, 22B; 32A, 32B) are provided symmetrically on the lateral tab (2, 3; 6), in particular mirror-symmetrically with respect to a vertical plane (S1) or rotation-symmetrically with respect to a vertical axis (H; R) of the lateral tab (2, 3; 6). According to one aspect, the joint connector (5) for lateral tabs has a plate-like body having a resiliently flexible joint region (52), two material regions (521, 522) opposingly arched outward having a cavity (523) therebetween, and two opposite fastening regions (51A, 51B) on the end. The cross section of the fastening region (51A, 51B) is designed for a non-rotatable, interlocking connection in a fastening receptacle (25; 35) and/or has a flattened and/or curved contact surface (54) on an end face. According to one aspect, the energy chain (101) is designed such that, continuously over a chain portion (130) comprising at least more than three adjacent chain links (102), which comprises the at least two tab strands (150, 160, 170), the tab strands are structured overall continuously from tabs (103) which are identical to each other.

(Fig. 1, Fig 8C)