

ABSTRACT

ELECTRIC CONNECTOR

An electric connector 1 of the invention has a first connector 14, a second connector 2 and a mating sensing member 8. The first connector 14 has a first latching protrusion 16 on the outer surface of a housing in which first contact terminals 19 are installed. The second connector 2 has an inner housing 4 in which second contact terminals 12 are installed and an outer housing 5 that covers the outer peripheries of the inner housing 4 except a portion defining an insertion opening for the first connector 14. A gap S_1 for insertion of the first connector 14 is left between the inner housing 4 and outer housing 5. A receiving cavity S_2 is provided for insertion of the mating sensing member 8, and inside the receiving cavity there are provided a pair of first stopper projections 5_1 , a second stopper projections 5_2 and an elastically deformable locking arm 7 that has one end fixed to the inner housing 4 and the other, front end as a free extremity. In the locking arm 7 there is provided an engagement slot 7_1 with which the first latching protrusion 16 engages, and at the front end portion 7_C , a pushing portion 7_2 and a first stopper 7_4 on each of the two sides. The mating sensing member 8 has a pair of elastically deformable first and second fingers 8_A , 8_B positioned opposing each other in parallel; the first and second fingers 8_A , 8_B being each provided, on the opposed faces thereof, with an actuation portion 8_0 and with a stopper engaging portion 8_D . Thanks to such structure, joining together the first and second connectors 14, 2 is carried out by a sequence of alternating connector insertion manipulations and mating sensing member push-in manipulations, and by means of such series of manipulations, the mating can be effected while verifying the linkage of the two connectors and the mating sensing member 8. As a result, the first and second connectors 14, 2 will be reliably joined.

Selected Drawing: Fig. 1