

ABSTRACT

A joint configuration formed between a first member and a second member and including a contact member inserted into a gap defined in a first direction between the first member and the second member is provided. The contact member includes a first body portion including a first contact surface to be in surface contact with the first member and a second contact surface that is opposite to the first contact surface and is to be in surface contact with the second member, and an arm portion projecting from an end of the second contact surface and provided with at least one through hole extending along an axis intersecting the second contact surface or an extension plane of the second contact surface. The first contact surface and the second contact surface define a tapered shape of a taper angle θ in a cross section orthogonal to both of the first contact surface and the second contact surface. The arm portion projects from a narrower end or a broader end of the tapered shape. The taper angle θ of the tapered shape is in a range defined by formulae below, where a friction coefficient of the second contact surface is μ , a tolerance of the gap is Δg_{req} , and a movable range of the contact member in a direction within the cross section and perpendicular to the first direction is Δh ,

$$\theta \leq \theta_{max} = \tan^{-1} \left(\frac{1 - \sqrt{1 - 8\mu^2}}{2\mu} \right), \quad \theta \geq \theta_{min} = \tan^{-1} \frac{\Delta g_{req}}{\Delta h}$$

FIG. 2