

Multiple-Joint Hinges

General Information



Multiple-joint hinges are a new type of hinge for the construction sector. Mounted inside the housing to save space and protect against vandalism, they allow opening angles of up to 180° on flaps, hatches, and doors. This ensures optimum accessibility to the inside of the housing. In general, the outside of the housing remains free of attachments that do not match the design or must be avoided entirely due to special requirements, such as ease of cleaning.

Multiple-joint hinges replace existing conventional hinge solutions while opening up entirely new motion sequences since they can do more than pivot flaps and doors. The zero-play, self-lubricated multiple-joint mechanism was designed with simulation software and allows a flap to be lifted first on opening and only then pivoted by 180°.

Jointed hinges or cup hinges have been used in the furniture sector for quite some time. These allow similar motion sequences, but the challenges to mount them in technical environments often make them difficult to use. In addition, they are usually only designed for lower load capacities.

The assembly angle brackets or mounting flanges of the multiple-joint hinges, which are mounted on the housing or door, feature slotted holes. Together with the spacer plates available as accessories, the hinges can be adjusted in three planes. This allows them to be used universally in any design. Spacer plates with tapped holes or mounting plates with threaded studs are also available for quick and easy mounting.

Since the development process was focused on creating a design with the most uniform possible gradations of achievable door geometry and load capacity, the hinges are ideal for applications in logistics and vehicle manufacturing in addition to a wide range of industrial applications. The use of high-quality materials and the attractive design open up an even greater range of applications. This means that these hinges are also suitable for use in building services engineering as well as in furniture making and display cases.

To support more complex applications with specific motion sequences, special versions are available that go beyond the typical applications on flaps, hatches and doors. Examples include 4x, 7x or 10x joint mechanisms for corresponding lifting, scissor or extension systems.

