

# Multiple-Joint Hinges

General Notes

Multiple-joint hinges are a new type of hinge offering freedom of design. Mounted inside the housing to save space and protect against vandalism, they allow an opening angle of up to 180° on flaps, hatches and doors. This ensures that the inside of the housing is optimally accessible. 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 types of motion since they can do more than directly 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 and cup hinges have long been used in building furniture. These allow similar movements to a certain extent, but the challenges to mounting them in technical environments frequently make them difficult to use. They are also usually designed for low loads.

The fixing angle piece or fastening flange of the multiple-joint hinge is installed on the housing or the door and features slotted holes. Together with the spacer plates available as accessories, the hinges can be adjusted in three planes. This allows them to be used in practically any design. Plates with tapped holes or threaded studs are also available for fast 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 high-quality materials and attractive design open up an even greater range of applications. For example, these hinges are suitable for use in building services equipment as well as in furniture and display cases.

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

