WILLBRANDT Movement Diagram for Combined Movement Absorption (axial and lateral)

The rhombus below illustrates how a permissible combination of movement absorption can be represented for expansion joints.

The combination of lateral and axial movement may result in a maximum of 100% utilisation for the expansion joint as a whole. The combined movements must fit into the rhombus as a rectangle.

Example:
For movement of -20 mm and +15 mm axially, the expansion joint can absorb another +/-15 mm laterally.

This rhombus can be used for all nominal diameters and sizes if the corresponding permissible maximum values for the expansion joint are plotted in the rhombus.

Any combination of movements can be found in this diagram.

The combined current movements must fit into the rhombus as a rectangle.