

DXF: file Import, 'Maximum gap size'

AutoCAD DXF (Drawing Interchange Format, or Drawing Exchange Format) is a CAD data file format developed by Autodesk for enabling data interoperability between AutoCAD and other programs.
Codesys can import DXF files.



The current DXF standard (u19.1.01) by AutoCad is supported with the restrictions, see the OnlineHelp on [Command: Import from DXF File](#).

Maximum gap size

This specifies the distance up to which the endpoints of elements in the DXF file are considered as "contiguous".
The default is 0.001 units.

A technical exposition:

- If two points of different geometry elements are separated by no more than this set 'Maximum gap size' threshold, the two geometry elements are considered as one contiguous element.
- If these geometry elements are selected as consecutive elements during the sorting phase, then, the end position of the first element is shifted so, that this position exactly matches the start position of the second geometry element.



Only for ellipses this is not supported yet, here a gap remains which is filled by a G0 element.



The largest value for 'Maximum gap size' can be set to 1.

With large values for 'Maximum gap size', it can come to inaccuracies with the import procedure!
In the process, nonadjacent endpoints can then be shifted onto each other and lead to an incorrect representation.

The user will be asked in advance via a dialog if the current object is not empty.

After confirmation, the selected layers are imported and overwrite the existing program.