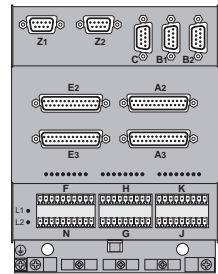


EcoController GEL 8135 - Rotating Cutter



07/98

General information, pin layout



Functional characteristics

The EcoController GEL 8135 is based on the positioning Controller GEL 8110, i.e. it has the same characteristics and functions. Consequently, the information supplied in the data sheet of the EcoController GEL 8110 applies to the GEL 8135, too.

The principle of this function is that one drive (cutter wheel) is synchronized with a second drive (material) or the material movement. During the synchronous operation the cutter penetrates the material. An initiator at the cutter wheel signalizes the position where the cutter has lost contact with the material. At this point the synchronization process for the next step is already initiated. For this purpose the cutter drive reduces or increases its speed for a short moment in order to compensate for the difference between the circumference of the cutter wheel and the preset length to be cut.

Two axes are joint together to form a unit for the control of a rotating cutter, the first axis being assigned to the cutter drive and the second to the material.

The material axis can be configured in such a manner that the Controller adjusts the material transport. This task, however, may as well be performed by a separate control. In this case the signals of the material displacement must be supplied to the Controller. For both axes you can only use incremental encoders.

To cut the desired length two operating modes are available:

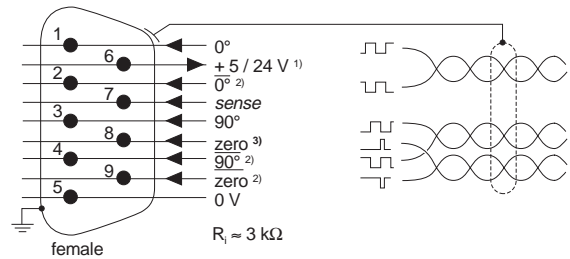
- the nominal length processing
- the mark detection

The length to be cut is preset in an actual-value sentence. Even different lengths to be cut can be preset in several sentences and processed one after the other. If required, piece numbers can be preset.

In case of mark detection the cutting point at the material is determined by a sensor and the respective marks applied to the material thus achieving a synchronized cutting process. The cut can be offset by an additional entry.

Connectors Z1, Z2

(count input for an incremental encoder)



¹⁾ adjustable by a DIP switch (same voltage level as N4, max. 26 V)

²⁾ do not connect if not used

³⁾ **reference fine (Z1)**
mark detection (Z2)

E281347Z

Note:

The pin layout is different from the one of the standard version GEL 8110. The divergences are **printed in bold**. For all other pin layouts please refer to the GEL 8110 data sheet.