



Bearing-types for Groschopp AC- and DC- motors

# Z14

up to 25 Nm

highly efficient smooth compact-gearbox

## Combined worm wheel/spur wheel gearboxes

- high gear-ratios due to worm wheel
- high effectiveness due to spurwheel
- Ratios from 25:1 to 375:1 possible
- increased load capacity
- low-noise version
- double sided shaft transfer
- compact version
- output shaft with ball bearing
- input shaft with key



## Certifications







## technical data

<b>maximum output torque</b>	<b>25 Nm</b>
<b>maximum load of drive shaft</b>	
<b>maximum radial load</b>	300 N (at center of output shaft extension)
<b>maximum axial load</b>	140 N
<b>static self-locking<sup>2)</sup></b>	i=250:1 i=275:1, i=350:1
<b>dynamic self-locking<sup>2)</sup></b>	i=350:1
<b>maximum thermal dissipation (continuous operation)</b>	60 W <sup>1)</sup>
<b>weight</b>	ca. 1,7 kg
<b>material of worm wheel</b>	bronze

<sup>1)</sup> According to the mounting position a venting hole is required at the highest point outside the centrifugal range.

### <sup>2)</sup> self-locking

Self-locking is influenced by the lead angle, the roughness of the surface on the flanks, the gliding speed, the lubricant used and the temperature rise experienced. It can be differentiated between dynamic and static self-locking.

#### dynamic self-locking

- lead angle up to 3° using fat-lubricants
- lead angle up to 2,5° using synthetic oils as a lubricant

#### static self-locking

- lead angle between 3° to 5° using fat-lubricants
- lead angle between 2,5° to 4,5° using synthetic oils as a lubricant
- lead angles of 4,5° or 5° no self-locking

Shocks and vibrations can hinder or even deactivate self-locking. Furthermore, several factors such as lubrication, gliding speed as well as current load can create such great gliding parameters that the self-locking is negatively influenced. For this reason it is not possible for us to provide warranty concerning self-locking.



efficiency factor

