

Bearing-types for Groschopp AC- and DC- motors

## **E3**

reinforced, smooth compact-gearbox

#### Worm wheel gearboxes single reduction

cap-design gear ratio from 7:1 to 56:1 double-sided shaft transfer





#### Certifications

CE

E3 | Worm wheel gearboxes – single reduction | 01.04.25 BRETZEL GmbH · Antriebs- und Elektrotechnik

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Page 1 of 3

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#### **Technical Data**

maximum allowed torque	1300 Ncm
maximum load of the drive shaft	
maximum radial load	150 N (at center of output shaft extension)
maximum axial load	100 N
static self-locking <sup>[1]</sup>	i=56:1
dynamic self-locking <sup>[1]</sup>	-
maximum thermal dissipation (continuous operation)	35 W
weight	ca. 0,9 kg
material of worm wheel	bronze
material of casing	AL-diecast
surface of casing	painted, RAL 5002

#### <sup>[1]</sup> self-locking

The self-locking is being influenced by the pitch angle, surface-roughness, shoulders, sliding speed, and by the lubricant as well as the warming. There are dynamic and static self-locking, which two distinct forms of self-locking.

dynamic self-locking	
pitch angle up to 3°	using grease
pitch angle up to 2,5°	using synthetic oils as lubricant
static self-locking	
pitch angle from 3° to 5°	using grease
pitch angle from 2,5° to 4,5°	using synthetic oils as lubricant
pitch angle above 4,5° and 5° respectively	no self-locking

Shock or vibrations can stop self-locking from occurring. Furthermore several different factors connected to lubrication, sliding speed and load capacity can cause favorable sliding-properties, so that the self-locking is negatively influenced. This is the reason, why we will not assume indemnity bonds concerning self-locking.

#### **Available ratios**

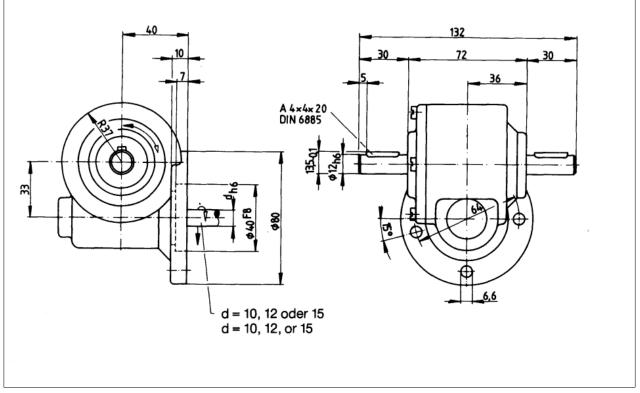
i = 7:1 11,3:1 17:1 20:1 28:1 30:1 32:1 38:1 (
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E3   Worm wheel gearboxes – single reduction   01.04.25	Page 2 of 3
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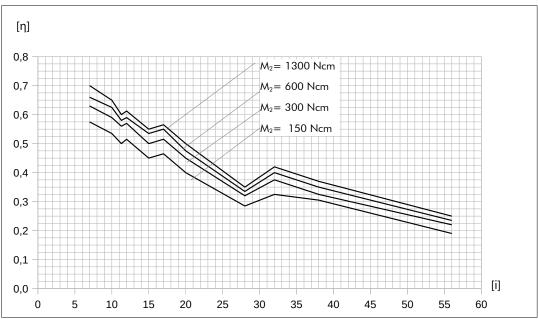


### drawings E3



<sup>(</sup>Dimensions without tolerances are not binding)

## efficiency factor



<b>E3</b>   Worm wheel gearboxes – single reduction   01.04.25	Page 3 of 3
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