GL 300.03
Cutaway model: spur gear

Learning objectives/experiments

- principle of operation and design of a spur gear

Specification

[1] hand-operated cutaway model for demonstrating the function of a spur gear
[2] industrial original component, fully functional cutaway model
[3] solid metal base plate, handles

Technical data

Transmission ratio
- pinion
  - number of teeth: z=24
  - real pitch module: m=1mm
- gear wheel
  - number of teeth: z=68
  - real pitch module: m=1mm
- transmission ratio: i=2,83

Max. output torque
- 54Nm at 494min^{-1}

LxWxH: 350x300x200mm
Weight: approx. 11kg

Scope of delivery

1 cutaway model
1 description
1 sectional view

Description

- **demonstration of complex machine elements and demonstration of their principle of operation**

Using cutaway models it is possible to clearly demonstrate the operational principles of complex machine elements such as a multi-disc clutch, various gear units or a pedestal bearing. The GL 300.01 to GL 300.12 cutaway models form a meaningful addition to the assembly kits, models and model kits for the engineering drawing discipline.

In order to be able to use the cutaway models in engineering teaching, each model comes with a standards-compliant and practical drawing and a technical description.

Problems of engineering drawing, fasteners and machine parts or production and testing technology can be studied in a clear and practical manner using the cutaway models.

The cutaway models represent original components in which the active parts are clearly visible to the user while fully maintaining their mechanical functionality. Each of the cutaway models is securely mounted on a base plate, which also has handles to allow them to be carried. They are powered by hand.

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Optional accessories

MT 120	Assembly exercise: spur gear