

Short Description

Planetary Plug-in Gearbox PEG 1200



Liebherr has completed an ideal new gearbox to its series of planetary plug-in gearboxes in the form of the new PEG 1200, which is the largest version available to date. The coaxial planetary gearbox can be constructed as a two, three or four stage design with a transmission ratio $i = \text{approx. } 20 - 630^*$. According to FEM 1.001, its maximum dynamic torque is 1,250,000 Nm.

The gearbox can be adapted to be driven by both electrical or hydraulic motors and can be powered by multiple motors as an option. Upon customer request the gearboxes can be prepared for installation on motors or supplied as a complete unit with a drive unit already installed. The PEG 1200 is mainly used in ship and offshore cranes, deck winches, dredgers and in industrial applications.

Features:

- Very high power density
- Improved installation space
- Easy maintenance
- Long service life
- Condition monitoring
- Classification to conventional standards
- Variable adaptors for electric/hydraulic motors
- Floating bearing version for axial compensation

Date: 06.07.2017

Version: 02

*Other ratios are possible to order

Technical Data

Planetary Plug-in Gearbox PEG 1200

Dimensions

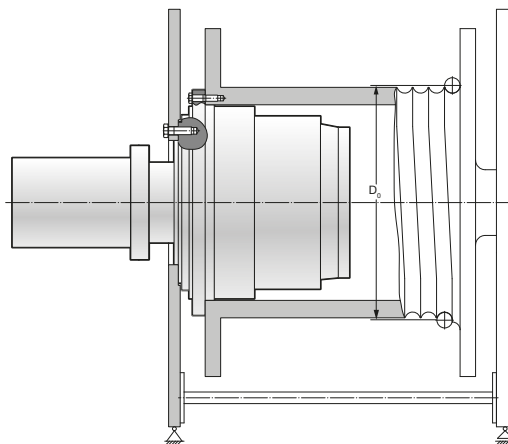
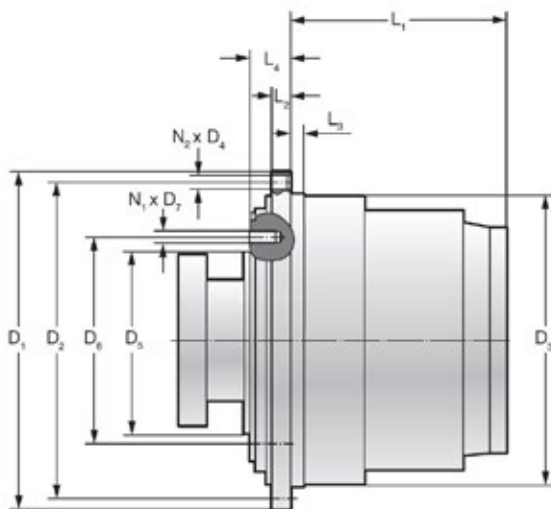
| | Torques | | Nominal data for rope drum | | Connection dimensions for rope drum | | | | | | |
|----------|------------------|------------|----------------------------|-----------|-------------------------------------|-------|----------------------|---------------------|-------|-------|-------|
| | $T_{dyn,r}^{1)}$ | T_{stat} | D_0 | F_{max} | D_1 | D_2 | D_3 | $N_2 \times D_4$ | L_1 | L_2 | L_3 |
| | [Nm] | [Nm] | [mm] | [kN] | [mm] | [mm] | [mm] | 1 x [mm] | [mm] | [mm] | [mm] |
| PEG 1200 | 1,250,000 | 2,000,000 | 1,350 | 1,852 | 1,260 | 1,200 | $\emptyset 1,140$ h7 | 60 x $\emptyset 39$ | 867.5 | 110 | 48 |

*Reference torque on the basis of FEM 1.001 M5/L2/T5 at an output speed of 15 rpm and an increasing load (use of rope winch)

Dimensions

| | Connection dimensions for winch frame | | | | Weight |
|----------|---------------------------------------|------------------------------------|----------------------|-------|-----------------|
| | D_5 | D_6 | $N_1 \times D_7$ | L_4 | 3-stage version |
| | Centering \emptyset | | | | Approx. value |
| | [mm] | [mm] | 1 x [mm] | [mm] | [kg] |
| PEG 1200 | $\emptyset 700$ h7 | $\emptyset 800$ $\emptyset 930$ | 30 x M42 29 x M42 | 161 | 4,800 |

T_{stat} = Static output torque
 D_0 = Minimum winding diameter for the first rope layer
 F_{max} = Maximum possible theoretical rope pull force
 D_{0-7} = Diameter
 L_{1-4} = Length
 $N_{1,2}$ = Number of fastening holes



Electric version



Hydraulic version

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