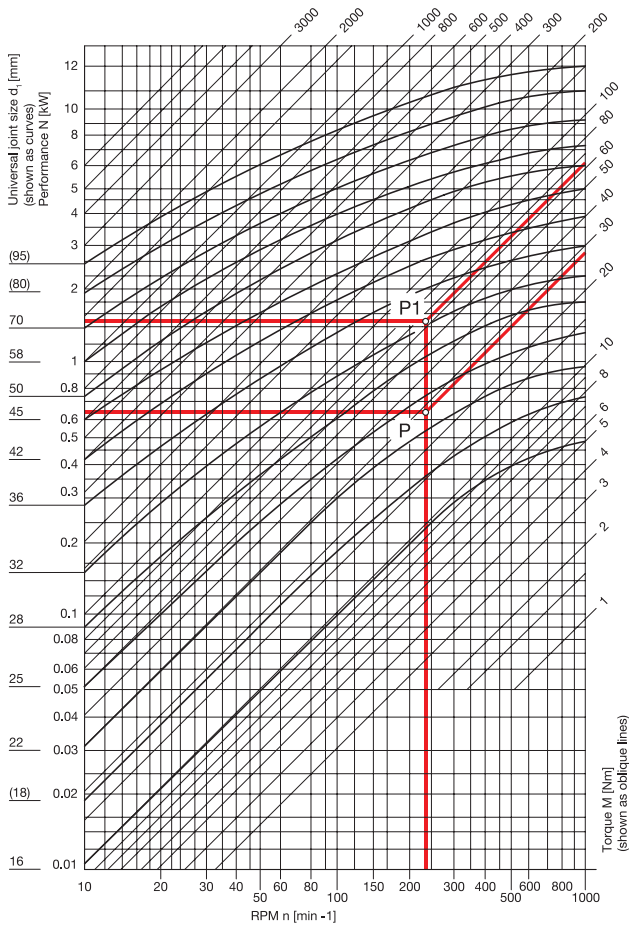


# Universal Joints with Friction Bearing DIN 808, Type EG

Determining the Size



The graph shows the transferable performance N and the torques M of DIN 808 universal joints, type EG (single jointed, friction bearing) in relation to the RPM n.

The values are applicable to a steady RPM, a steady load and an inclination angle of max. 10°. They are not applicable to stainless steel universal joints.

For larger inclination angles β, a nominal performance N increased by the correction coefficient k and/or a nominal torque M has to be selected (see example below).

Conversion formulae:

$$\text{Torque M [Nm]} = 9550 \frac{N \text{ [kW]}}{n \text{ [min}^{-1}\text{]}}$$

$$\text{Performance N [kW]} = \frac{M \text{ [Nm]} \times n \text{ [min}^{-1}\text{]}}{9550}$$

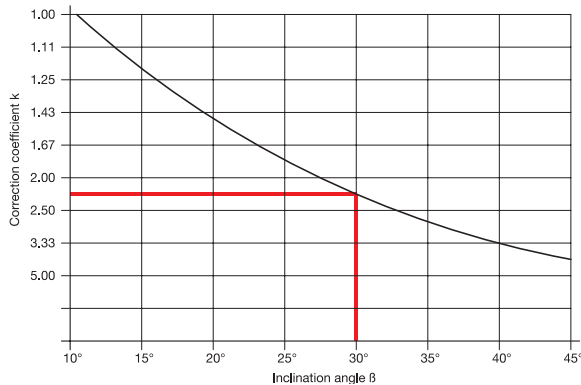
1 kW = 1.36 PS      1 PS = 0.736 kW

### Example 1

- Performance N to be transferred = 0.65 kW
- RPM n = 230 min<sup>-1</sup>
- Inclination angle β = 10°
- Correction coefficient k = 1
- Indicative performance N = Nominal performance N

Intersection point P results from 0.65 kW and 230 min<sup>-1</sup> (which corresponds to a torque of 27 Nm).

The next larger universal joint corresponding to point P is the model with a diameter d<sub>1</sub> = 25 mm.



### Example 2

- Torque M to be transferred = 27 Nm
- RPM n = 230 min<sup>-1</sup>
- Inclination angle β = 30°
- Correction coefficient k = 2.25
- Indicative torque M = 2.25 x 27 Nm = 60 Nm

Intersection point P<sub>1</sub> results from 61 Nm and 230 min<sup>-1</sup> (which corresponds to an indicative performance N = 1.47 kW).

The next larger universal joint corresponding to point P<sub>1</sub> is the model with a diameter d<sub>1</sub> = 36 mm.