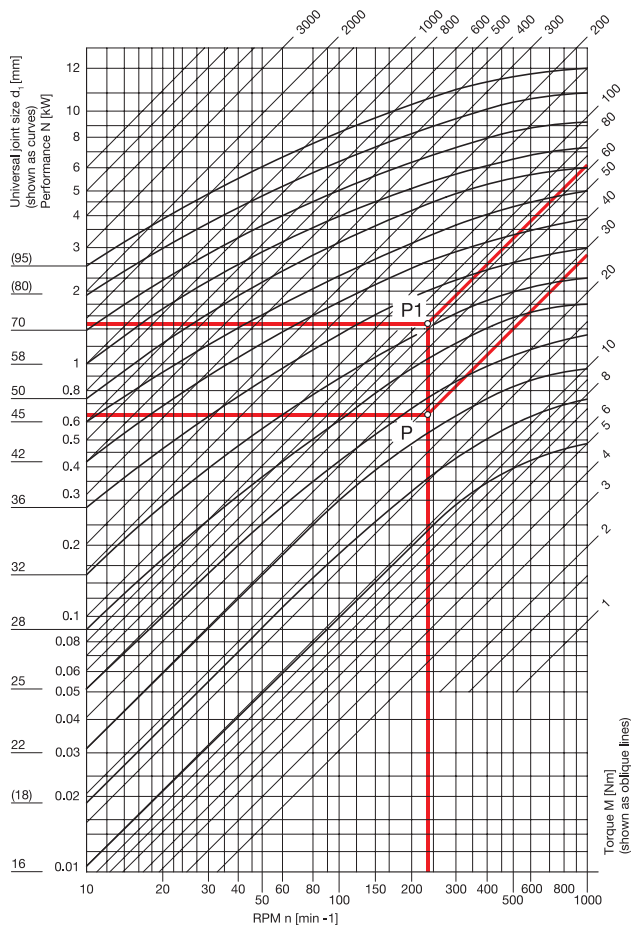


# Universal Joints with Friction Bearing DIN 808, Type EG

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  $\beta$ , 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:

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

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

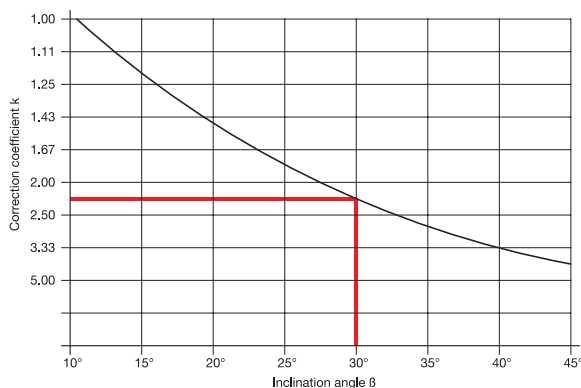
$$1 \text{ kW} = 1.36 \text{ PS} \quad 1 \text{ PS} = 0.736 \text{ kW}$$

### Example 1

Performance N to be transferred	= 0.65 kW
RPM n	= 230 min <sup>-1</sup>
Inclination angle $\beta$	= 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  $d_1 = 25$  mm.



### Example 2

Torque M to be transferred	= 27 Nm
RPM n	= 230 min <sup>-1</sup>
Inclination angle $\beta$	= 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  $d_1 = 36$  mm.