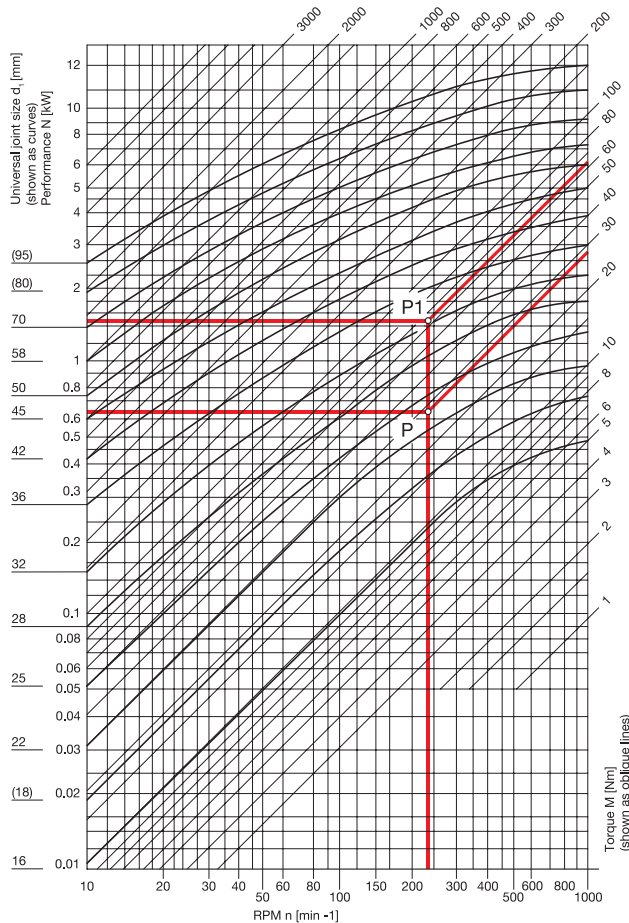


Universal Joints with Friction Bearing, Type EG

Determining the Size



The graph shows the transferable performance N and the torques M of universal joints DIN 808, 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⁻¹

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⁻¹ (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⁻¹

Inclination angle β = 30°

Correction coefficient k = 2.25

Indicative torque M = 2.25 x 27 Nm = 60 Nm

Intersection point P₁ results from 61 Nm and 230 min⁻¹ (which corresponds to an indicative performance N = 1.47 kW).

The next larger universal joint corresponding to point P₁ is the model with a diameter $d_1 = 36$ mm.

