

The graph shows the transferable performance N and the torques M of universal joints DIN 808, type EW (single jointed, needle 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°.

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

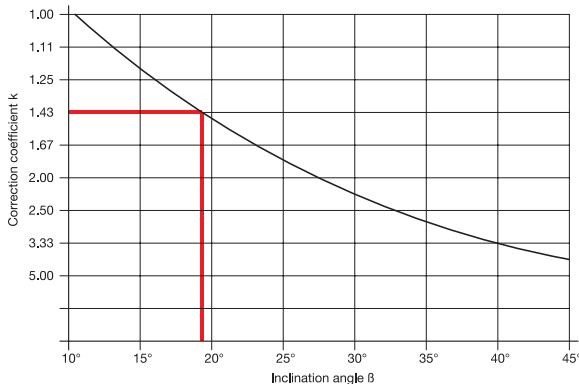
1 PS = 0.736 kW

Example 1

- Performance N to be transferred = 5.5 kW
- RPM n = 2300 min⁻¹
- Inclination angle β = 10°
- Correction coefficient k = 1
- Indicative performance N = Nominal performance N

Intersection point P results from 5.5 kW and 2300 min⁻¹ (which corresponds to a torque of 23 Nm).

The next larger universal joint corresponding to point P is the model with a diameter $d_1 = 28$ mm.



Example 2

- Torque M to be transferred = 23 Nm
- RPM n = 2300 min⁻¹
- Inclination angle β = 18°
- Correction coefficient k = 1.43
- Indicative torque M = 1.43 x 23 Nm = 33 Nm

Intersection point P₁ results from 33 Nm and 2300 min⁻¹ (which corresponds to an indicative performance N = 7.9 kW).

The next larger universal joint corresponding to point P₁ is the model with a diameter $d_1 = 32$ mm.

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9

