

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

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

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

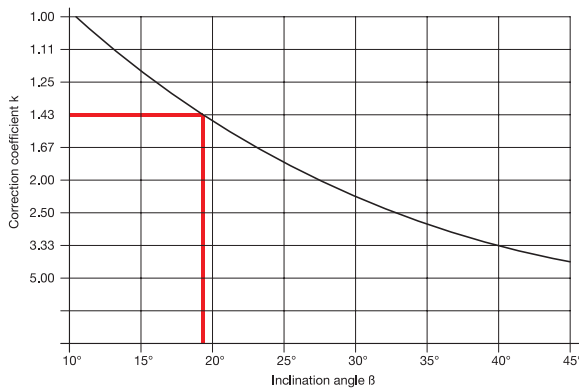
$$1 \text{ kW} = 1.36 \text{ PS} \quad 1 \text{ PS} = 0.736 \text{ kW}$$

### Example 1

- Performance N to be transferred = 5.5 kW
- RPM n = 2300 min<sup>-1</sup>
- 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<sup>-1</sup> (which corresponds to a torque of 23 Nm).

The next larger universal joint corresponding to point P is the model with a diameter d<sub>1</sub> = 28 mm.



### Example 2

- Torque M to be transferred = 23 Nm
- RPM n = 2300 min<sup>-1</sup>
- Inclination angle β = 18°

- Correction coefficient k = 1.43
- Indicative torque M = 1.43 x 23 Nm = 33 Nm

Intersection point P<sub>1</sub> results from 33 Nm and 2300 min<sup>-1</sup> (which corresponds to an indicative performance N = 7.9 kW).

The next larger universal joint corresponding to point P<sub>1</sub> is the model with a diameter d<sub>1</sub> = 32 mm.

3.1  
3.2  
3.3  
3.4  
3.5  
3.6  
3.7  
3.8  
3.9  
3.10

