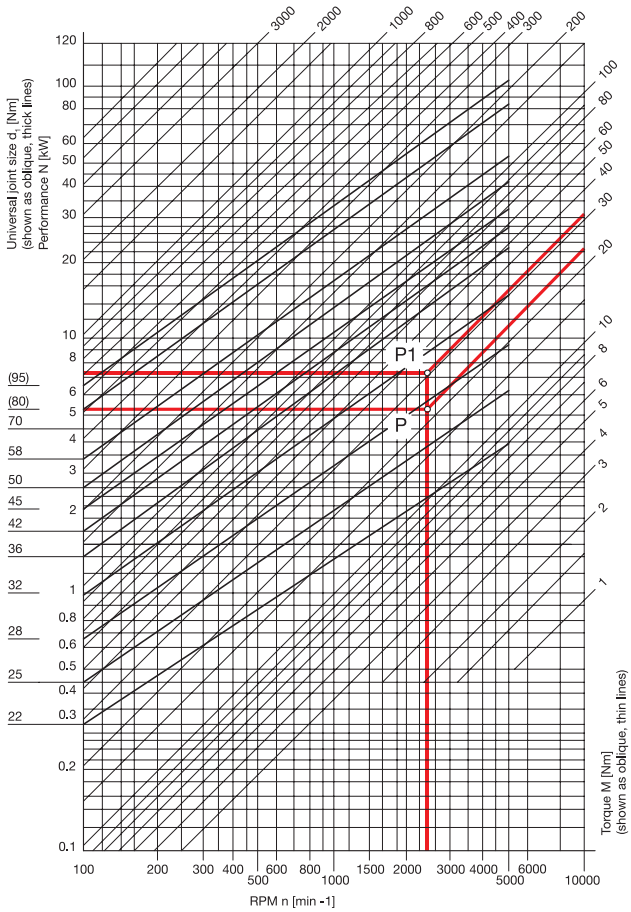
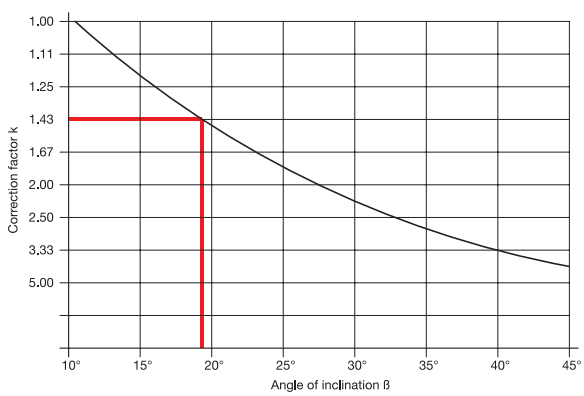
# Universal joints with needle bearing, Type EW

Selection of the size




The table shows the transferable output N and/or torques M of universal joints Kreuzgelenken DIN 808, type EW (single needle bearing) in relation to the r.p.m. n.

The values are only applicable to a constant speed of rotation, constant load and an operating inclination angle of max. 10°.

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

Conversion formulae:

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

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

1 kW = 1,36 PS  1 PS = 0,736 kW

**Example 1**

Torque to be transferred N = 5,5 kW
R.p.m. n = 2300 min$^{-1}$
Angle of inclination ß = 10°

Correction coefficient k = 1
Indicative output N = Nominal output N

Intersection point P is arrived at from 5,5 kW and 2300 min$^{-1}$ (which corresponds to a torque of 23 Nm).

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

**Example 2**

Torque to be transferred M = 23 Nm
R.p.m. n = 2300 min$^{-1}$
Angle of inclination ß = 18°

Correction coefficient k = 1,43
Indicative torque = 1,43 x 23 Nm = 33 Nm

Intersection point $P_1$ is arrived at from 33 Nm and 2300 min$^{-1}$ (which is equivalent to an indicative output N = 7,9 kW).

The next size up universal joint corresponding to P1 is the model with a diameter $d_1$ = 32.