## How to determine Universal Joint angular torque capacity

Peak torque values apply only when the working angle is zero. This calculation takes into account dynamic loading at the joint bearings. To determine angular operating torque, determine application speed, torque and operating angle.

Then:

1) Multiply speed x working angle
2) Subtract the result from10,000
3) Divide the answer into 10,000
4) Multiply this result by the application torque

For example:

| | |
|---|---|
| speed | = 400 rpm |
| application torque | = 0.1Nm |
| working angle | = 20 degrees |

Then:

| | |
|---|---|
| 1) 400 rpm x 20 degrees | = 8,000 |
| 2) 10,000 - 8,000 | = 2,000 |
| 3) 10,000/ 2000 | = 5 |
| 4) 5 x 0.1 Nm | = 0.5Nm |

Select a joint where the Peak Torque exceeds 0.5Nm

Note: To remain within the capacity of the joint, the result of speed x working angle must be less than 10,000.

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