


DATORKER® Strain Wave Gear Technical Data

Date: 2024/11/20

| Specification | DSH-20-80-PO | Diagram |  |
|--------------------------------------|--------------|-----------------------------------|---|
| Model | 20 | | |
| Ratio | 80 | | |
| Item | Value | Unit | |
| Rated torque at input 2000rpm | 34 | Nm | |
| Average torque | 47 | Nm | |
| Repeated peak torque | 74 | Nm | |
| Momentary peak torque | 127 | Nm | |
| Average input speed | 3500 | rpm | |
| Maximum input speed | 6500 | rpm | |
| Moment of inertia | 0.193 | $\times 10^{-4}$ kgm ² | |
| Transmission accuracy | 1 | arc min | |
| Repeatability | ±6 | arc sec | |
| Maximum backlash | 11 | arc sec | |
| Hysteresis loss | 1 | arc min | |
| Lost motion | 1 | arc min | |
| Torsional Stiffness K1 | 0.47 | kgfm/arc min | |
| Torsional Stiffness K2 | 0.75 | kgfm/arc min | |
| No load starting torque | 4.9 | cNm | |
| No load running torque(25°C/2000rpm) | 10 | cNm | |
| Weight | 0.81 | kg | |
| Permissible dynamic tilting moment | 187 | Nm | |
| Permissible axial load | 3.119 | kN | |
| Permissible radial load | 2.09 | kN | |