


DATORKER® Strain Wave Gear Technical Data

Date: 2024/11/20

| Specification | DSC-25-120-PO-M | Diagram |  |
|--------------------------------------|------------------------|-----------------------------------|---|
| Model | 25 | | |
| Ratio | 120 | | |
| Item | Value | Unit | |
| Rated torque at input 2000rpm | 67 | Nm | |
| Average torque | 108 | Nm | |
| Repeated peak torque | 167 | Nm | |
| Momentary peak torque | 304 | Nm | |
| Average input speed | 3500 | rpm | |
| Maximum input speed | 5600 | rpm | |
| Moment of inertia | 0.413 | $\times 10^{-4}$ kgm ² | |
| Transmission accuracy | 1 | arc min | |
| Repeatability | ±6 | arc sec | |
| Maximum backlash | 8 | arc sec | |
| Hysteresis loss | 1 | arc min | |
| Lost motion | 1 | arc min | |
| Torsional Stiffness K1 | 0.92 | kgfm/arc min | |
| Torsional Stiffness K2 | 1.5 | kgfm/arc min | |
| No load starting torque | 7.3 | cNm | |
| No load running torque(25°C/2000rpm) | 17.5 | cNm | |
| Weight | 1.95 | kg | |
| Permissible dynamic tilting moment | 254 | Nm | |
| Permissible axial load | 5.298 | kN | |
| Permissible radial load | 3.55 | kN | |