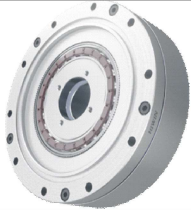


# DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

|                                       |                |  |         |                                                                                     |
|---------------------------------------|----------------|--|---------|-------------------------------------------------------------------------------------|
| Specification                         | DTC-25-80-PE-M |  | Diagram |  |
| Model                                 | 25             |  |         |                                                                                     |
| Ratio                                 | 80             |  |         |                                                                                     |
| Item                                  |                |  | Value   | Unit                                                                                |
| Rated torque at input 2000rpm         |                |  | 44      | Nm                                                                                  |
| Average torque                        |                |  | 60      | Nm                                                                                  |
| Repeated peak torque                  |                |  | 96      | Nm                                                                                  |
| Momentary peak torque                 |                |  | 179     | Nm                                                                                  |
| Average input speed                   |                |  | 3500    | rpm                                                                                 |
| Maximum input speed                   |                |  | 5600    | rpm                                                                                 |
| Moment of inertia                     |                |  | 0.282   | x10 <sup>-4</sup> kgm <sup>2</sup>                                                  |
| Transmission accuracy                 |                |  | 1       | arc min                                                                             |
| Repeatability                         |                |  | ±6      | arc sec                                                                             |
| Maximum backlash                      |                |  | -       | arc sec                                                                             |
| Hysteresis loss                       |                |  | 1       | arc min                                                                             |
| Lost motion                           |                |  | 1       | arc min                                                                             |
| Torsional Stiffness K1                |                |  | 0.8     | kgfm/arc min                                                                        |
| Torsional Stiffness K2                |                |  | 1.1     | kgfm/arc min                                                                        |
| No load starting torque               |                |  | 11      | cNm                                                                                 |
| No load running torque(25°C/2000rpm)  |                |  | 18.8    | cNm                                                                                 |
| Weight                                |                |  | 1.7     | kg                                                                                  |
| Crossed roller bearing specifications |                |  |         |                                                                                     |
| Pitch circle diameter of roller       |                |  | 0.085   | m                                                                                   |
| Offset amount                         |                |  | 0.014   | m                                                                                   |
| Basic dynamic load ratings            |                |  | 21.8    | kN                                                                                  |
| Basic static load ratings             |                |  | 35.8    | kN                                                                                  |
| Moment rigidity                       |                |  | 11.6    | kgfm/arc min                                                                        |
| Permissible dynamic tilting moment    |                |  | 258     | Nm                                                                                  |
| Permissible static tilting moment     |                |  | 383     | Nm                                                                                  |
| Permissible axial load                |                |  | 4.66    | kN                                                                                  |
| Permissible radial load               |                |  | 3.12    | kN                                                                                  |