

DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

Specification	DTC-25-50-PE-M		Diagram	
Model	25			
Ratio	50			
Item			Value	Unit
Rated torque at input 2000rpm			27	Nm
Average torque			38	Nm
Repeated peak torque			69	Nm
Momentary peak torque			127	Nm
Average input speed			3500	rpm
Maximum input speed			5600	rpm
Moment of inertia			0.282	x10 ⁻⁴ kgm ²
Transmission accuracy			1	arc min
Repeatability			±6	arc sec
Maximum backlash			-	arc sec
Hysteresis loss			2	arc min
Lost motion			1	arc min
Torsional Stiffness K1			0.6	kgfm/arc min
Torsional Stiffness K2			0.8	kgfm/arc min
No load starting torque			17	cNm
No load running torque(25°C/2000rpm)			22.3	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