

DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

Specification	DTC-32-80-PE-M		Diagram	
Model	32			
Ratio	80			
Item			Value	Unit
Rated torque at input 2000rpm			83	Nm
Average torque			117	Nm
Repeated peak torque			213	Nm
Momentary peak torque			398	Nm
Average input speed			3500	rpm
Maximum input speed			4800	rpm
Moment of inertia			1.09	x10 ⁻⁴ kgm ²
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			1.8	kgfm/arc min
Torsional Stiffness K2			2.3	kgfm/arc min
No load starting torque			23	cNm
No load running torque(25°C/2000rpm)			40.5	cNm
Weight			3.3	kg
Crossed roller bearing specifications				
Pitch circle diameter of roller			0.111	m
Offset amount			0.0168	m
Basic dynamic load ratings			38.2	kN
Basic static load ratings			65.4	kN
Moment rigidity			29.6	kgfm/arc min
Permissible dynamic tilting moment			580	Nm
Permissible static tilting moment			1000	Nm
Permissible axial load			8.17	kN
Permissible radial load			5.47	kN