

DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

Specification	DTC-17-50-PE-M		Diagram	
Model	17			
Ratio	50			
Item			Value	Unit
Rated torque at input 2000rpm			11	Nm
Average torque			18	Nm
Repeated peak torque			23	Nm
Momentary peak torque			48	Nm
Average input speed			3500	rpm
Maximum input speed			7300	rpm
Moment of inertia			0.054	x10 ⁻⁴ kgm ²
Transmission accuracy			1.5	arc min
Repeatability			±6	arc sec
Maximum backlash			-	arc sec
Hysteresis loss			2	arc min
Lost motion			1	arc min
Torsional Stiffness K1			0.2	kgfm/arc min
Torsional Stiffness K2			0.26	kgfm/arc min
No load starting torque			7.5	cNm
No load running torque(25°C/2000rpm)			8	cNm
Weight			0.66	kg
Crossed roller bearing specifications				
Pitch circle diameter of roller			0.06	m
Offset amount			0.0123	m
Basic dynamic load ratings			10.4	kN
Basic static load ratings			16.3	kN
Moment rigidity			4.6	kgfm/arc min
Permissible dynamic tilting moment			124	Nm
Permissible static tilting moment			180	Nm
Permissible axial load			2.22	kN
Permissible radial load			1.49	kN