

DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

Specification	DTC-32-50-PE-M	Diagram	
Model	32		
Ratio	50		
Item		Value	Unit
Rated torque at input 2000rpm		53	Nm
Average torque		75	Nm
Repeated peak torque		151	Nm
Momentary peak torque		268	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		2	arc min
Lost motion		1	arc min
Torsional Stiffness K1		1.4	kgfm/arc min
Torsional Stiffness K2		1.8	kgfm/arc min
No load starting torque		34	cNm
No load running torque(25°C/2000rpm)		47.2	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