


DATORKER® Strain Wave Gear Technical Data

Date: 2024/11/20

Specification	DSC-14-50-PO-M	Diagram	
Model	14		
Ratio	50		
Item	Value	Unit	
Rated torque at input 2000rpm	5.4	Nm	
Average torque	6.9	Nm	
Repeated peak torque	18	Nm	
Momentary peak torque	35	Nm	
Average input speed	3500	rpm	
Maximum input speed	8500	rpm	
Moment of inertia	0.033	x10 ⁻⁴ kgm ²	
Transmission accuracy	1.5	arc min	
Repeatability	±6	arc sec	
Maximum backlash	36	arc sec	
Hysteresis loss	2	arc min	
Lost motion	1	arc min	
Torsional Stiffness K1	0.1	kgfm/arc min	
Torsional Stiffness K2	0.14	kgfm/arc min	
No load starting torque	4.1	cNm	
No load running torque(25°C/2000rpm)	4.8	cNm	
Weight	0.54	kg	
Permissible dynamic tilting moment	73	Nm	
Permissible axial load	2.03	kN	
Permissible radial load	1.36	kN	