


DATORKER® Strain Wave Gear Technical Data

Date: 2024/11/20

Specification	DSH-40-50-PO	Diagram	
Model	40		
Ratio	50		
Item	Value	Unit	
Rated torque at input 2000rpm	137	Nm	
Average torque	196	Nm	
Repeated peak torque	402	Nm	
Momentary peak torque	686	Nm	
Average input speed	3000	rpm	
Maximum input speed	4000	rpm	
Moment of inertia	4.5	$\times 10^{-4}$ kgm ²	
Transmission accuracy	1	arc min	
Repeatability	±6	arc sec	
Maximum backlash	14	arc sec	
Hysteresis loss	2	arc min	
Lost motion	1	arc min	
Torsional Stiffness K1	3	kgfm/arc min	
Torsional Stiffness K2	4.2	kgfm/arc min	
No load starting torque	55	cNm	
No load running torque(25°C/2000rpm)	79	cNm	
Weight	5.1	kg	
Permissible dynamic tilting moment	849	Nm	
Permissible axial load	9.25	kN	
Permissible radial load	6.198	kN	