


DATORKER® Strain Wave Gear Technical Data

Date: 2024/11/20

Specification	DSC-20-50-AJ-M	Diagram	
Model	20		
Ratio	50		
Item	Value	Unit	
Rated torque at input 2000rpm	25	Nm	
Average torque	34	Nm	
Repeated peak torque	56	Nm	
Momentary peak torque	98	Nm	
Average input speed	3500	rpm	
Maximum input speed	6500	rpm	
Moment of inertia	0.173	$\times 10^{-4}$ 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	0.38	kgfm/arc min	
Torsional Stiffness K2	0.52	kgfm/arc min	
No load starting torque	14	cNm	
No load running torque(25°C/2000rpm)	18.6	cNm	
Weight	1.4	kg	
Permissible dynamic tilting moment	172	Nm	
Permissible axial load	4.486	kN	
Permissible radial load	3.006	kN	