


# DATORKER® Strain Wave Gear Technical Data

Date: 2024/11/20

Specification	<b>DSH-14-50-PH</b>	Diagram	
Model	<b>14</b>		
Ratio	<b>50</b>		
Item	Value	Unit	
Rated torque at input 2000rpm	<b>5.4</b>	Nm	
Average torque	<b>6.9</b>	Nm	
Repeated peak torque	<b>18</b>	Nm	
Momentary peak torque	<b>35</b>	Nm	
Average input speed	<b>3500</b>	rpm	
Maximum input speed	<b>8500</b>	rpm	
Moment of inertia	<b>0.091</b>	x10 <sup>-4</sup> kgm <sup>2</sup>	
Transmission accuracy	<b>1.5</b>	arc min	
Repeatability	<b>±6</b>	arc sec	
Maximum backlash	-	arc sec	
Hysteresis loss	<b>2</b>	arc min	
Lost motion	<b>1</b>	arc min	
Torsional Stiffness K1	<b>0.1</b>	kgfm/arc min	
Torsional Stiffness K2	<b>0.14</b>	kgfm/arc min	
No load starting torque	<b>4.1</b>	cNm	
No load running torque(25°C/2000rpm)	<b>4.6</b>	cNm	
Weight	<b>0.45</b>	kg	
Permissible dynamic tilting moment	<b>74</b>	Nm	
Permissible axial load	<b>1.239</b>	kN	
Permissible radial load	<b>0.83</b>	kN	