

DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

Date: 2020/1/9

Specification	DTH-14-50-AH	Diagram	
Model	14		
Ratio	50		
Item		Value	Unit
Rated torque at input 2000rpm		3.7	Nm
Average torque		4.8	Nm
Repeated peak torque		12	Nm
Momentary peak torque		23	Nm
Average input speed		3500	rpm
Maximum input speed		8500	rpm
Moment of inertia		0.064	x10 ⁻⁴ kgm ²
Transmission accuracy		1.5	arc min
Repeatability		±6	arc sec
Maximum backlash		-	arc sec
Hysteresis loss		2.5	arc min
Lost motion		1	arc min
Torsional Stiffness K1		0.085	kgfm/arc min
Torsional Stiffness K2		0.11	kgfm/arc min
No load starting torque		11	cNm
No load running torque(25°C/2000rpm)		17	cNm
Weight		0.49	kg
Crossed roller bearing specifications			
Pitch circle diameter of roller		0.0503	m
Offset amount		0.0111	m
Basic dynamic load ratings		2.9	kN
Basic static load ratings		4.3	kN
Moment rigidity		2.1	kgfm/arc min
Permissible dynamic tilting moment		37	Nm
Permissible static tilting moment		55	Nm
Permissible axial load		0.62	kN
Permissible radial load		0.415	kN