

DATORKER® Strain Wave Gear Technical Data

Date: 2026/1/5

Specification	DTH-17-50-AH	Diagram	
Model	17		
Ratio	50		
Item		Value	Unit
Rated torque at input 2000rpm		11	Nm
Average torque		18	Nm
Repeated peak torque		23	Nm
Momentary peak torque		48	Nm
Average input speed		3500	rpm
Maximum input speed		7300	rpm
Moment of inertia		0.141	x10 ⁻⁴ kgm ²
Transmission accuracy		1.5	arc min
Repeatability		±6	arc sec
Maximum backlash		-	arc sec
Hysteresis loss		2	arc min
Lost motion		1	arc min
Torsional Stiffness K1		0.2	kgfm/arc min
Torsional Stiffness K2		0.26	kgfm/arc min
No load starting torque		39	cNm
No load running torque(25°C/2000rpm)		23.6	cNm
Weight		0.66	kg
Crossed roller bearing specifications			
Pitch circle diameter of roller		0.061	m
Offset amount		0.0115	m
Basic dynamic load ratings		5.2	kN
Basic static load ratings		8.1	kN
Moment rigidity		3.8	kgfm/arc min
Permissible dynamic tilting moment		62	Nm
Permissible static tilting moment		101	Nm
Permissible axial load		1.111	kN
Permissible radial load		0.744	kN