

DATORKER® Strain Wave Gear Technical Data

Date: 2025/12/30

Specification	DTC-17-120-PE		Diagram	
Model	17			
Ratio	120			
Item			Value	Unit
Rated torque at input 2000rpm			16	Nm
Average torque			27	Nm
Repeated peak torque			37	Nm
Momentary peak torque			71	Nm
Average input speed			3500	rpm
Maximum input speed			7300	rpm
Moment of inertia			0.054	x10 ⁻⁴ kgm ²
Transmission accuracy			1.5	arc min
Repeatability			±6	arc sec
Maximum backlash			-	arc sec
Hysteresis loss			1	arc min
Lost motion			1	arc min
Torsional Stiffness K1			0.25	kgfm/arc min
Torsional Stiffness K2			0.28	kgfm/arc min
No load starting torque			3.6	cNm
No load running torque(25°C/2000rpm)			5.8	cNm
Weight			0.46	kg
Crossed roller bearing specifications				
Pitch circle diameter of roller			0.0425	m
Offset amount			0.0099	m
Basic dynamic load ratings			5.3	kN
Basic static load ratings			7.6	kN
Moment rigidity			2.3	kgfm/arc min
Permissible dynamic tilting moment			64	Nm
Permissible static tilting moment			88	Nm
Permissible axial load			1.13	kN
Permissible radial load			0.758	kN