PRODUCT DATASHEET

ES-HG-S18-F14-R120

Precision Transmission Component

Hollow Shaft Harmonic Gearboxes | Simple High-Torque Hollow Shaft Gear Unit

Product Overview

Precision Transmission Component with reduction Ratio 120, frame Size 14 and angle Transmission Accuracy 1.5 arcmin.

Key Specifications

PARAMETER	VALUE	UNIT
Reduction Ratio	120	
Frame Size	14	
Angle Transmission Accuracy	1.5	arcmin
Hysteresis Loss	1	arcmin
Series Family	High-Torque Hat-Type Harmonic Gear Series	
Torsional Rigidity K1	0.47	×10⁴ N·m/rad
Torsional Rigidity K2	0.61	×10⁴ N·m/rad
Torsional Rigidity K3	0.71	×10⁴ N·m/rad
Torsional Rigidity T1	2	N·m

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
MECHANICAL			
Frame Size	14		Frame Size: 14; Reduction Ratio: 120; Size: 14
CONFIGURATION			
Variant Style	Simple Integrated Hollow-Shaft Type		Frame Size: 14; Reduction Ratio: 120
Unit Structure	Complete Unit		Frame Size: 14; Reduction Ratio: 120
Series Family	High-Torque Hat-Type Harmonic Gear Series		Frame Size: 14; Reduction Ratio: 120
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	120		Frame Size: 14; Reduction Ratio: 120; Size: 14
Angle Transmission Accuracy	1.5	arcmin	Frame Size: 14; Reduction Ratio Min: 50; Size: 14
Torsional Rigidity K2	0.61	$\times 10^4$ N·m/rad	Frame Size: 14; Reduction Ratio: 120; Rigidity Scope: reduction ratio above 50; Size: 14
Torsional Rigidity K1	0.47	$\times 10^4$ N·m/rad	Frame Size: 14; Reduction Ratio: 120; Rigidity Scope: reduction ratio above 50; Size: 14
Torsional Rigidity K3	0.71	$\times 10^4$ N·m/rad	Frame Size: 14; Reduction Ratio: 120; Rigidity Scope: reduction ratio above 50; Size: 14
Torsional Rigidity T2	6.9	N·m	Frame Size: 14; Rigidity Scope: all reduction ratios; Size: 14
Hysteresis Loss	1	arcmin	Frame Size: 14; Reduction Ratio Min: 50; Size: 14
Torsional Rigidity T1	2	N·m	Frame Size: 14; Rigidity Scope: all reduction ratios; Size: 14

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	14	

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01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.