PRODUCT DATASHEET

ES-HG-S27-F14-R100

Precision Transmission Component

Ultra-Thin Harmonic Gearboxes | Thin Cup Gear Unit

Product Overview

Precision Transmission Component with rated Torque 5.4 N·m, instantaneous Maximum Torque 35 N·m and start/Stop Peak Torque 19 N·m.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	5.4	N·m
Instantaneous Maximum Torque	35	N·m
Start/Stop Peak Torque	19	N·m
Reduction Ratio	100	
Backlash	≤20	arc sec
Maximum Input Speed	8500	r/min
Allowable Average Torque	7.7	N·m
Frame Size	14	
Weight	0.37	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	5.4	N·m	Frame Size: 14; Reduction Ratio: 100
Instantaneous Maximum Torque	35	N·m	Frame Size: 14; Reduction Ratio: 100
Start/Stop Peak Torque	19	N·m	Frame Size: 14; Reduction Ratio: 100
Backlash	≤20	arc sec	Frame Size: 14; Reduction Ratio: 100
Allowable Average Torque	7.7	N·m	Frame Size: 14; Reduction Ratio: 100
MECHANICAL			
Frame Size	14		Frame Size: 14; Reduction Ratio: 100
Weight	0.37	kg	Frame Size: 14; Reduction Ratio: 100
Wave Generator Dimension T	9.4+0.10 / 7+0.10	mm	Frame Size: 14; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 100; Wave Generator Option: wave-generator-dd7ad026bda9 / Frame Size: 14; Option Label: Wave generator - A φ6; Reduction Ratio: 100; Wave Generator Option: wave-generator-4d941c778cf8
Wave Generator Bore U	φ11H7 / φ6H7 / φ8H7		Varies by published configuration.
Wave Generator Keyway W	2P9/JS9 / 3P9/JS9		Frame Size: 14; Option Label: Wave generator - A φ6; Reduction Ratio: 100; Wave Generator Option: wave-generator-4d941c778cf8 / Frame Size: 14; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 100; Wave Generator Option: wave-generator-dd7ad026bda9
RELIABILITY			
Design Life	10000	h	Frame Size: 14; Reduction Ratio: 100
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	100		Frame Size: 14; Reduction Ratio: 100
Maximum Input Speed	8500	r/min	Frame Size: 14; Reduction Ratio: 100
Average Input Speed	3500	r/min	Frame Size: 14; Reduction Ratio: 100

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	14	
Weight	0.37	kg
Wave Generator Dimension T	9.4+0.10 / 7+0.10	mm
Wave Generator Bore U	φ11H7 / φ6H7 / φ8H7	
Wave Generator Keyway W	2P9/JS9 / 3P9/JS9	

View Product Online Request Engineering Data Request a Quote

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.