PRODUCT DATASHEET

ES-HG-S21-F14-R80

Precision Transmission Component

Cup Harmonic Gearboxes | Special Standard Cup Unit

Product Overview

Precision Transmission Component with rated Torque 7.8 N·m, instantaneous Maximum Torque 47 N·m and start/Stop Peak Torque 23 N·m.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	7.8	N·m
Instantaneous Maximum Torque	47	N·m
Start/Stop Peak Torque	23	N·m
Reduction Ratio	80	
Backlash	≤20	arc sec
Maximum Input Speed	8500	r/min
Allowable Average Torque	11	N·m
Frame Size	14	
Weight	0.25	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	7.8	N·m	Frame Size: 14; Reduction Ratio: 80
Instantaneous Maximum Torque	47	N·m	Frame Size: 14; Reduction Ratio: 80
Start/Stop Peak Torque	23	N·m	Frame Size: 14; Reduction Ratio: 80
Backlash	≤20	arc sec	Frame Size: 14; Reduction Ratio: 80
Allowable Average Torque	11	N·m	Frame Size: 14; Reduction Ratio: 80
MECHANICAL			
Frame Size	14		Frame Size: 14; Reduction Ratio: 80
Weight	0.25	kg	Frame Size: 14; Reduction Ratio: 80
Wave Generator Dimension T	7+0.10 / 9.4+0.10	mm	Frame Size: 14; Option Label: Wave generator - A φ6; Reduction Ratio: 80; Wave Generator Option: wave-generator-39713db786bd / Frame Size: 14; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 80; Wave Generator Option: wave-generator-e6e55a341aa3
Wave Generator Bore U	φ6H7 / φ8H7		Frame Size: 14; Option Label: Wave generator - A φ6; Reduction Ratio: 80; Wave Generator Option: wave-generator-39713db786bd / Frame Size: 14; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 80; Wave Generator Option: wave-generator-e6e55a341aa3
Wave Generator Keyway W	2JS9/P9 / 3JS9/P9		Frame Size: 14; Option Label: Wave generator - A φ6; Reduction Ratio: 80; Wave Generator Option: wave-generator-39713db786bd / Frame Size: 14; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 80; Wave Generator Option: wave-generator-e6e55a341aa3
RELIABILITY			
Design Life	15000	h	Frame Size: 14; Reduction Ratio: 80
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	80		Frame Size: 14; Reduction Ratio: 80
Maximum Input Speed	8500	r/min	Frame Size: 14; Reduction Ratio: 80
Average Input Speed	3500	r/min	Frame Size: 14; Reduction Ratio: 80

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	14	
Weight	0.25	kg
Wave Generator Dimension T	7+0.10 / 9.4+0.10	mm
Wave Generator Bore U	φ6H7 / φ8H7	
Wave Generator Keyway W	2JS9/P9 / 3JS9/P9	

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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.