

PRODUCT DATASHEET

ES-HG-S11-F8-R50

Precision Transmission Component

Cup Harmonic Gearboxes | Lightweight Cup Unit Type I

Product Overview

Precision Transmission Component with rated Torque 1.8 N·m, instantaneous Maximum Torque 6.6 N·m and start/Stop Peak Torque 3.3 N·m.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	1.8	N·m
Instantaneous Maximum Torque	6.6	N·m
Start/Stop Peak Torque	3.3	N·m
Reduction Ratio	50	
Backlash	≤30	arc sec
Maximum Input Speed	8500	r/min
Allowable Average Torque	2.3	N·m
Frame Size	8	
Weight	0.08	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	1.8	Nm	Frame Size: 8; Reduction Ratio: 50
Instantaneous Maximum Torque	6.6	Nm	Frame Size: 8; Reduction Ratio: 50
Start/Stop Peak Torque	3.3	Nm	Frame Size: 8; Reduction Ratio: 50
Backlash	≤30	arc sec	Frame Size: 8; Reduction Ratio: 50
Allowable Average Torque	2.3	Nm	Frame Size: 8; Reduction Ratio: 50
MECHANICAL			
Frame Size	8		Frame Size: 8; Reduction Ratio: 50
Weight	0.08	kg	Frame Size: 8; Reduction Ratio: 50
Wave Generator Dimension T	7+0.10 / 9.4+0.10	mm	Frame Size: 8; Option Label: Wave generator - A φ6; Reduction Ratio: 50; Wave Generator Option: wave-generator-39713db786bd / Frame Size: 8; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 50; Wave Generator Option: wave-generator-e6e55a341aa3
Wave Generator Bore U	φ6H7 / φ8H7		Frame Size: 8; Option Label: Wave generator - A φ6; Reduction Ratio: 50; Wave Generator Option: wave-generator-39713db786bd / Frame Size: 8; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 50; Wave Generator Option: wave-generator-e6e55a341aa3
Wave Generator Keyway W	3JS9/P9 / 2JS9/P9		Frame Size: 8; Option Index: 1; Option Label: Wave generator - A φ8; Reduction Ratio: 50; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 8; Option Label: Wave generator - A φ6; Reduction Ratio: 50; Wave Generator Option: wave-generator-39713db786bd
RELIABILITY			
Design Life	10000	h	Frame Size: 8; Reduction Ratio: 50
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	50		Frame Size: 8; Reduction Ratio: 50
Maximum Input Speed	8500	r/min	Frame Size: 8; Reduction Ratio: 50
Average Input Speed	3500	r/min	Frame Size: 8; Reduction Ratio: 50

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	8	
Weight	0.08	kg
Wave Generator Dimension T	7+0.10 / 9.4+0.10	mm
Wave Generator Bore U	φ6H7 / φ8H7	
Wave Generator Keyway W	3JS9/P9 / 2JS9/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.