

PRODUCT DATASHEET

ES-HG-S11-F17-R80

Precision Transmission Component

Cup Harmonic Gearboxes | Lightweight Cup Unit Type I

Product Overview

Precision Transmission Component with rated Torque 22 N·m, instantaneous Maximum Torque 87 N·m and start/Stop Peak Torque 43 N·m.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	22	N·m
Instantaneous Maximum Torque	87	N·m
Start/Stop Peak Torque	43	N·m
Reduction Ratio	80	
Backlash	≤20	arc sec
Maximum Input Speed	7300	r/min
Allowable Average Torque	27	N·m
Frame Size	17	
Weight	0.52	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	22	Nm	Frame Size: 17; Reduction Ratio: 80
Instantaneous Maximum Torque	87	Nm	Frame Size: 17; Reduction Ratio: 80
Start/Stop Peak Torque	43	Nm	Frame Size: 17; Reduction Ratio: 80
Backlash	≤20	arc sec	Frame Size: 17; Reduction Ratio: 80
Allowable Average Torque	27	Nm	Frame Size: 17; Reduction Ratio: 80
MECHANICAL			
Frame Size	17		Frame Size: 17; Reduction Ratio: 80
Weight	0.52	kg	Frame Size: 17; Reduction Ratio: 80
Wave Generator Dimension T	9.4+0.10 / 12.8+0.10	mm	Frame Size: 17; Option Label: Wave generator - A φ8; Reduction Ratio: 80; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 17; Option Index: 1; Option Label: Wave generator - A φ11; Reduction Ratio: 80; Wave Generator Option: wave-generator-fd26f6670d9b
Wave Generator Bore U	φ11H7 / φ8H7		Frame Size: 17; Option Index: 1; Option Label: Wave generator - A φ11; Reduction Ratio: 80; Wave Generator Option: wave-generator-fd26f6670d9b / Frame Size: 17; Option Label: Wave generator - A φ8; Reduction Ratio: 80; Wave Generator Option: wave-generator-e6e55a341aa3
Wave Generator Keyway W	3JS9/P9 / 4JS9/P9		Frame Size: 17; Option Label: Wave generator - A φ8; Reduction Ratio: 80; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 17; Option Index: 1; Option Label: Wave generator - A φ11; Reduction Ratio: 80; Wave Generator Option: wave-generator-fd26f6670d9b
RELIABILITY			
Design Life	15000	h	Frame Size: 17; Reduction Ratio: 80
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	80		Frame Size: 17; Reduction Ratio: 80
Maximum Input Speed	7300	r/min	Frame Size: 17; Reduction Ratio: 80
Average Input Speed	3500	r/min	Frame Size: 17; Reduction Ratio: 80

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	17	
Weight	0.52	kg
Wave Generator Dimension T	9.4+0.10 / 12.8+0.10	mm
Wave Generator Bore U	φ11H7 / φ8H7	
Wave Generator Keyway W	3JS9/P9 / 4JS9/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.