

PRODUCT DATASHEET

ES-HG-S11-F17-R120

Precision Transmission Component

Cup Harmonic Gearboxes | Lightweight Cup Unit Type I

Product Overview

Precision Transmission Component with rated Torque 24 N·m, instantaneous Maximum Torque 86 N·m and start/Stop Peak Torque 54 N·m.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	24	N·m
Instantaneous Maximum Torque	86	N·m
Start/Stop Peak Torque	54	N·m
Reduction Ratio	120	
Backlash	≤20	arc sec
Maximum Input Speed	7300	r/min
Allowable Average Torque	39	N·m
Frame Size	17	
Weight	0.52	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	24	Nm	Frame Size: 17; Reduction Ratio: 120
Instantaneous Maximum Torque	86	Nm	Frame Size: 17; Reduction Ratio: 120
Start/Stop Peak Torque	54	Nm	Frame Size: 17; Reduction Ratio: 120
Backlash	≤20	arc sec	Frame Size: 17; Reduction Ratio: 120
Allowable Average Torque	39	Nm	Frame Size: 17; Reduction Ratio: 120
MECHANICAL			
Frame Size	17		Frame Size: 17; Reduction Ratio: 120
Weight	0.52	kg	Frame Size: 17; Reduction Ratio: 120
Wave Generator Dimension T	9.4+0.10 / 12.8+0.10	mm	Frame Size: 17; Option Label: Wave generator - A ϕ 8; Reduction Ratio: 120; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 17; Option Index: 1; Option Label: Wave generator - A ϕ 11; Reduction Ratio: 120; Wave Generator Option: wave-generator-fd26f6670d9b
Wave Generator Bore U	ϕ 11H7 / ϕ 8H7		Frame Size: 17; Option Index: 1; Option Label: Wave generator - A ϕ 11; Reduction Ratio: 120; Wave Generator Option: wave-generator-fd26f6670d9b / Frame Size: 17; Option Label: Wave generator - A ϕ 8; Reduction Ratio: 120; Wave Generator Option: wave-generator-e6e55a341aa3
Wave Generator Keyway W	3JS9/P9 / 4JS9/P9		Frame Size: 17; Option Label: Wave generator - A ϕ 8; Reduction Ratio: 120; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 17; Option Index: 1; Option Label: Wave generator - A ϕ 11; Reduction Ratio: 120; Wave Generator Option: wave-generator-fd26f6670d9b
RELIABILITY			
Design Life	15000	h	Frame Size: 17; Reduction Ratio: 120
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	120		Frame Size: 17; Reduction Ratio: 120
Maximum Input Speed	7300	r/min	Frame Size: 17; Reduction Ratio: 120
Average Input Speed	3500	r/min	Frame Size: 17; Reduction Ratio: 120

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.