

PRODUCT DATASHEET

ES-HG-S02-F20-R120

Precision Transmission Component

Harmonic Component Sets | Hat Component Set

Product Overview

Precision Transmission Component with rated Torque 40 N·m, instantaneous Maximum Torque 147 N·m and start/Stop Peak Torque 87 N·m.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	40	N·m
Instantaneous Maximum Torque	147	N·m
Start/Stop Peak Torque	87	N·m
Reduction Ratio	120	
Backlash	≤20	arc sec
Maximum Input Speed	6500	r/min
Allowable Average Torque	49	N·m
Frame Size	20	
Weight	0.27	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	40	Nm	Frame Size: 20; Reduction Ratio: 120
Instantaneous Maximum Torque	147	Nm	Frame Size: 20; Reduction Ratio: 120
Start/Stop Peak Torque	87	Nm	Frame Size: 20; Reduction Ratio: 120
Backlash	≤20	arc sec	Frame Size: 20; Reduction Ratio: 120
Allowable Average Torque	49	Nm	Frame Size: 20; Reduction Ratio: 120
MECHANICAL			
Frame Size	20		Frame Size: 20; Reduction Ratio: 120
Weight	0.27	kg	Frame Size: 20; Reduction Ratio: 120
Wave Generator Dimension T	9.4+0.10 / 16.3+0.10 / 12.8+0.10	mm	Varies by published configuration.
Wave Generator Bore U	φ14H7 / φ8H7 / φ11H7		Varies by published configuration.
Wave Generator Keyway W	5JS9/P9 / 3JS9/P9 / 4JS9/P9		Varies by published configuration.
RELIABILITY			
Design Life	15000	h	Frame Size: 20; Reduction Ratio: 120
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	120		Frame Size: 20; Reduction Ratio: 120
Maximum Input Speed	6500	r/min	Frame Size: 20; Reduction Ratio: 120
Average Input Speed	3500	r/min	Frame Size: 20; Reduction Ratio: 120

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	20	
Weight	0.27	kg
Wave Generator Dimension T	9.4+0.10 / 16.3+0.10 / 12.8+0.10	mm
Wave Generator Bore U	φ14H7 / φ8H7 / φ11H7	
Wave Generator Keyway W	5JS9/P9 / 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.