PRODUCT DATASHEET

ES-HG-S01-F17-R120

Precision Transmission Component

Harmonic Component Sets | Cup Component Set

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	0.15	kg

Technical Specifications

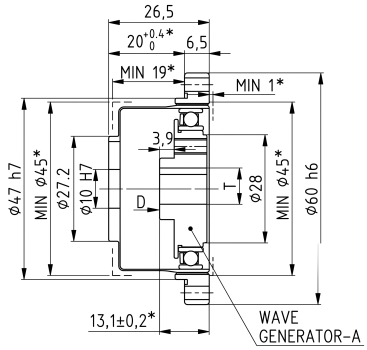
PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	24	N·m	Frame Size: 17; Reduction Ratio: 120
Instantaneous Maximum Torque	86	N·m	Frame Size: 17; Reduction Ratio: 120
Start/Stop Peak Torque	54	N·m	Frame Size: 17; Reduction Ratio: 120
Backlash	≤20	arc sec	Frame Size: 17; Reduction Ratio: 120
Allowable Average Torque	39	N·m	Frame Size: 17; Reduction Ratio: 120
MECHANICAL			
Frame Size	17		Frame Size: 17; Reduction Ratio: 120
Weight	0.15	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 φ8; Reduction Ratio: 120; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 17; Option Index: 1; Option Label: Wave generator - A φ11; Reduction Ratio: 120; Wave Generator Option: wave-generator-fd26f6670d9b
Wave Generator Bore U	φ11H7 / φ8H7		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 φ8; Reduction Ratio: 120; Wave Generator Option: wave-generator-e6e55a341aa3 / Frame Size: 17; Option Index: 1; Option Label: Wave generator - A φ11; 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

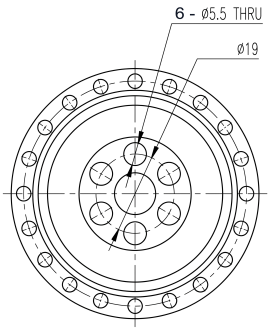
Mechanical Overview

PARAMETER	VALUE	UNIT
Frame Size	17	
Weight	0.15	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	

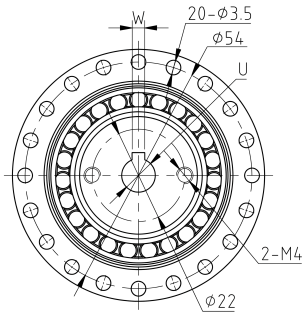
Dimensional Drawings



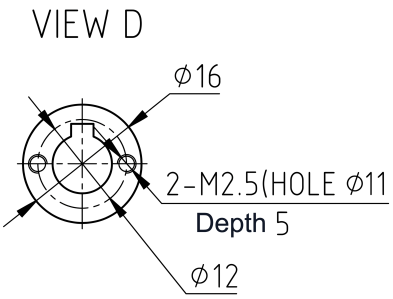
Mechanical View 1



Mechanical View 2



Mechanical View 3



Mechanical View 4

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Top overall width	26.5
	Step length with tolerance	20 +0.4/0
	Right-side step width	6.5
	Minimum inner length	Minimum 19
	Minimum clearance	Minimum 1
	Small step width	3.9
	Left-side minimum outside diameter	Minimum diameter 45
	Left-side fit diameter	Diameter 47 h7
	Left-side inner diameter	Diameter 27.2
	Hole diameter fit	Diameter 10 H7
	Parameter D	D, value not specified in this crop
	Parameter T	T, value not specified in this crop
	Right-side inner diameter	Diameter 28
	Right-side minimum outside diameter	Minimum diameter 45
	Right-side fit diameter	Diameter 60 h6
	Bottom offset dimension	13.1 ±0.2
	Component name	Wave Generator-A

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 2	Quantity and diameter of through holes	6 through holes, diameter 5.5 mm
	Hole pitch circle diameter	Pitch circle diameter 19 mm
Mechanical View 3	Circular hole quantity and diameter	20 holes, diameter 3.5 mm
	Width designation W	Dimension designated as W; numeric value not specified in this crop
	Bolt circle diameter	Diameter 54 mm
	Designation U	Dimension designated as U; numeric value not specified in this crop
	Threaded hole specification	2 threaded holes, M4
	Shaft bore diameter	Diameter 22 mm
Mechanical View 4	View identifier	View D
	Local outer diameter	Diameter 16
	Threaded hole specification and hole diameter	2 × M2.5, hole diameter 11
	Hole depth	Depth 5
	Hole circle diameter or local diameter	Diameter 12

View Product Online Request Engineering Data Request a Quote

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.