

PRODUCT DATASHEET

ES-HG-S01-F25-R80

Precision Transmission Component

Harmonic Component Sets | Cup Component Set

Product Overview

Precision Transmission Component with rated Torque 63 Nm, instantaneous Maximum Torque 255 Nm and start/Stop Peak Torque 137 Nm.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	63	Nm
Instantaneous Maximum Torque	255	Nm
Start/Stop Peak Torque	137	Nm
Reduction Ratio	80	
Backlash	≤20	arc sec
Maximum Input Speed	5600	r/min
Allowable Average Torque	87	Nm
Frame Size	25	
Weight	0.42	kg

Technical Specifications

PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Rated Torque	63	Nm	Frame Size: 25; Reduction Ratio: 80
Instantaneous Maximum Torque	255	Nm	Frame Size: 25; Reduction Ratio: 80
Start/Stop Peak Torque	137	Nm	Frame Size: 25; Reduction Ratio: 80
Backlash	≤20	arc sec	Frame Size: 25; Reduction Ratio: 80
Allowable Average Torque	87	Nm	Frame Size: 25; Reduction Ratio: 80
MECHANICAL			
Frame Size	25		Frame Size: 25; Reduction Ratio: 80
Weight	0.42	kg	Frame Size: 25; Reduction Ratio: 80
Wave Generator Dimension T	16.3+0.10 / 12.8+0.10	mm	Frame Size: 25; Option Index: 1; Option Label: Wave generator - A φ14; Reduction Ratio: 80; Wave Generator Option: wave-generator-307ae5fd0846 / Frame Size: 25; Option Label: Wave generator - A φ11; Reduction Ratio: 80; Wave Generator Option: wave-generator-fd26f6670d9b
Wave Generator Bore U	φ11H7 / φ14H7		Frame Size: 25; Option Label: Wave generator - A φ11; Reduction Ratio: 80; Wave Generator Option: wave-generator-fd26f6670d9b / Frame Size: 25; Option Index: 1; Option Label: Wave generator - A φ14; Reduction Ratio: 80; Wave Generator Option: wave-generator-307ae5fd0846
Wave Generator Keyway W	5JS9/P9 / 4JS9/P9		Frame Size: 25; Option Index: 1; Option Label: Wave generator - A φ14; Reduction Ratio: 80; Wave Generator Option: wave-generator-307ae5fd0846 / Frame Size: 25; Option Label: Wave generator - A φ11; Reduction Ratio: 80; Wave Generator Option: wave-generator-fd26f6670d9b
RELIABILITY			
Design Life	15000	h	Frame Size: 25; Reduction Ratio: 80
ADDITIONAL SPECIFICATIONS			
Reduction Ratio	80		Frame Size: 25; Reduction Ratio: 80
Maximum Input Speed	5600	r/min	Frame Size: 25; Reduction Ratio: 80
Average Input Speed	3500	r/min	Frame Size: 25; Reduction Ratio: 80

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Top overall width	34 mm
	Upper step length with unilateral tolerance	24 mm +0.4/0
	Upper right step length	10 mm
	Minimum clearance	Minimum 1.5 mm
	Minimum length	Minimum 23 mm
	Outer diameter fit	Diameter 67 h7
	Minimum outside diameter	Minimum diameter 66 mm
	Diameter dimension	Diameter 39 mm
	Bore diameter fit	Diameter 20 H7
	Small step width	4.4 mm
	D view or datum marker	D
	Diameter dimension	Diameter 40 mm
	Outer diameter fit	Diameter 85 h6
	Axial height with unilateral tolerance	14.5 mm +0/-0.1
	Bottom length with symmetric tolerance	16.5 mm $\pm$ 0.2
	Component label	Wave Generator-A
	T marker	T

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 2	Four counterbored holes	4 holes, through/pre-drill diameter $\Phi 3.5$, counterbore diameter $\Phi 6$, counterbore depth 3.5
	Width designation	Width designation W; numeric value not specified in this crop
	Outer diameter	Outer diameter $\Phi 77$
	Four diameter 3.5 holes	4 holes, diameter $\Phi 3.5$
	Process holes quantity	Process holes, quantity 4
	Sixteen diameter 4.5 holes	16 holes, diameter $\Phi 4.5$
	Feature designation U	Feature designation U; detailed value not specified in this crop
	Diameter 32	Diameter $\Phi 32$
	Angular spacing 11.25 degrees	11.25° angular dimension
	Four M5 threaded holes	4 × M5 threaded holes
	Angular spacing 33.75 degrees	33.75° angular dimension
	Angular spacing 45 degrees	45° angular dimension
Mechanical View 3	Mounting hole quantity and diameter	8 holes, diameter 6.5
	Central bore diameter	Diameter 30
Mechanical View 4	View identifier	View D
	Hole or circular feature diameter	Diameter 22 mm
	Local dimension value	2 mm

[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.