PRODUCT DATASHEET

# ES-HG-S24-F11-R50

Precision Transmission Component

Hat Harmonic Gearboxes | Standard Hat Unit Type I

## Product Overview

Precision Transmission Component with rated Torque 3.5 N·m, instantaneous Maximum Torque 17 N·m and start/Stop Peak Torque 8.3 N·m.

## Key Specifications

| PARAMETER | VALUE | UNIT |
|---|---|---|
| Rated Torque | 3.5 | N·m |
| Instantaneous Maximum Torque | 17 | N·m |
| Start/Stop Peak Torque | 8.3 | N·m |
| Reduction Ratio | 50 | |
| Backlash | ≤30 | arc sec |
| Maximum Input Speed | 8500 | r/min |
| Allowable Average Torque | 5.5 | N·m |
| Frame Size | 11 | |
| Weight | 0.27 | kg |

# Technical Specifications

| PARAMETER | SPECIFICATION | UNIT | NOTES |
|---|---|---|---|
| **PERFORMANCE** | | | |
| Rated Torque | 3.5 | N·m | Frame Size: 11; Reduction Ratio: 50 |
| Instantaneous Maximum Torque | 17 | N·m | Frame Size: 11; Reduction Ratio: 50 |
| Start/Stop Peak Torque | 8.3 | N·m | Frame Size: 11; Reduction Ratio: 50 |
| Backlash | ≤30 | arc sec | Frame Size: 11; Reduction Ratio: 50 |
| Allowable Average Torque | 5.5 | N·m | Frame Size: 11; Reduction Ratio: 50 |
| **MECHANICAL** | | | |
| Frame Size | 11 | | Frame Size: 11; Reduction Ratio: 50 |
| Weight | 0.27 | kg | Frame Size: 11; Reduction Ratio: 50 |
| Wave Generator Bore U | φ5H7 / φ7H7 | | Frame Size: 11; Option Label: Wave generator - A φ5; Reduction Ratio: 50; Wave Generator Option: wave-generator-9b68021d3e2c / Frame Size: 11; Option Index: 1; Option Label: Wave generator - A φ6; Reduction Ratio: 50; Wave Generator Option: wave-generator-f718b59102f4 |
| **RELIABILITY** | | | |
| Design Life | 10000 | h | Frame Size: 11; Reduction Ratio: 50 |
| **ADDITIONAL SPECIFICATIONS** | | | |
| Reduction Ratio | 50 | | Frame Size: 11; Reduction Ratio: 50 |
| Maximum Input Speed | 8500 | r/min | Frame Size: 11; Reduction Ratio: 50 |
| Average Input Speed | 3500 | r/min | Frame Size: 11; Reduction Ratio: 50 |

# Dimensional & Integration Overview

## Mechanical Overview

| PARAMETER | VALUE | UNIT |
|---|---|---|
| Frame Size | 11 | |
| Weight | 0.27 | kg |
| Wave Generator Bore U | φ5H7 / φ7H7 | |

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.