PRODUCT DATASHEET

# ES-PS-C32-S001-V090

Precision Linear Motion Assembly

Standard Planetary Roller Screws | Standard Planetary Roller Screw Series

## Product Overview

Precision Linear Motion Assembly with nominal diameter 20 mm, ball Screw Lead 5 mm and rated dynamic load $C_a$ 48 kN.

## Key Specifications

| PARAMETER | VALUE | UNIT |
|---|---|---|
| Nominal diameter | 20 | mm |
| Ball Screw Lead | 5 | mm |
| Rated dynamic load $C_a$ | 48 | kN |
| Rated static load $C_{oa}$ | 91 | kN |
| Maximum dynamic load $C_a$ | 51 | kN |
| Maximum static load $C_{oa}$ | 100 | kN |
| Forward theoretical efficiency η | 0.88 | ratio |
| Reverse theoretical efficiency η´ | 0.87 | ratio |
| Body diameter D | 44 | mm |

# Technical Specifications

| PARAMETER | SPECIFICATION | UNIT |
|---|---|---|
| **PERFORMANCE** | | |
| Rated dynamic load $C_a$ | 48 | kN |
| Rated static load $C_{oa}$ | 91 | kN |
| Maximum dynamic load $C_a$ | 51 | kN |
| Maximum static load $C_{oa}$ | 100 | kN |
| **MECHANICAL** | | |
| Nominal diameter | 20 | mm |
| Ball Screw Lead | 5 | mm |
| Interface thread Q | M6 | |
| Mounting hole pattern G | 6×φ5.8 | |
| **CONFIGURATION** | | |
| Development status | Standard listing | |
| **ADDITIONAL SPECIFICATIONS** | | |
| Forward theoretical efficiency η | 0.88 | ratio |

# Technical Specifications

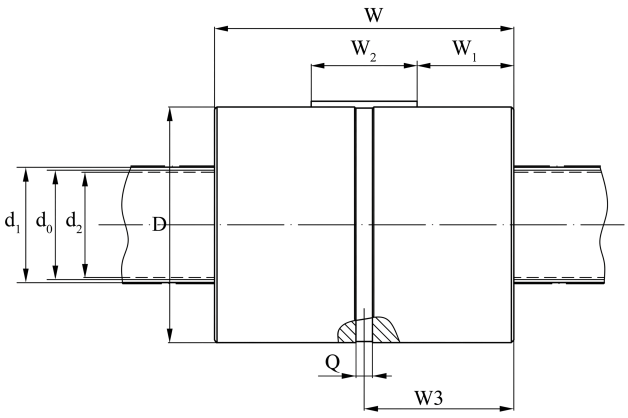
| PARAMETER | SPECIFICATION | UNIT |
|---|---|---|
| **ADDITIONAL SPECIFICATIONS** | | |
| Reverse theoretical efficiency η′ | 0.87 | ratio |
| Body diameter D | 44 | mm |
| Overall length W | 65 | mm |
| Thread count N | 5 | |
| Segment length $W_1$ | 23.5 | mm |
| Diameter $d_0$ | 19.5 | mm |
| Segment length $W_2$ | 18 | mm |
| Angle α | 30 | ° |
| Diameter $d_1$ | 19.8 | mm |
| Diameter $d_2$ | 19 | mm |

# Dimensional & Integration Overview

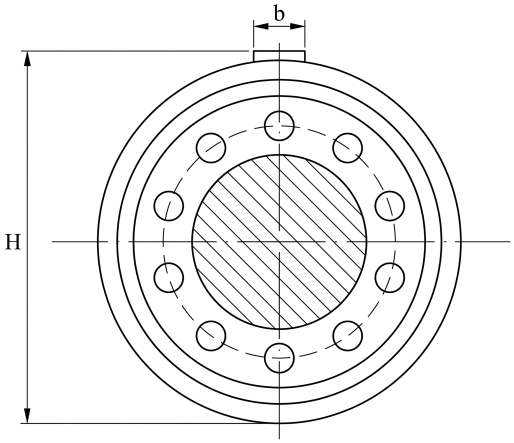
## Mechanical Overview

| PARAMETER | VALUE | UNIT |
|---|---|---|
| Nominal diameter | 20 | mm |
| Ball Screw Lead | 5 | mm |
| Interface thread Q | M6 | |
| Mounting hole pattern G | 6×φ5.8 | |
| Body diameter D | 44 | mm |
| Overall length W | 65 | mm |

## Dimensional Drawings




Mechanical View 1




Mechanical View 2

## 2D Drawing Dimensions & Callouts

| VIEW | FIELD | VALUE |
|---|---|---|
| Mechanical View 1 | Overall length W | W |
| | Segment length W2 | W2 |
| | Segment length W1 | W1 |
| | Shaft diameters d1, d0 and d2 | d1; d0; d2 |
| | Body diameter D | D |
| | Slot or keyway width Q | Q |
| | Lower segment length W3 | W3 |
| Mechanical View 2 | Mounting hole pattern pitch/width symbol | b, value Not specified |
| | Overall height | H, value Not specified |

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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.