PRODUCT DATASHEET

ES-PS-C32-S001-V144

Precision Linear Motion Assembly

Standard Planetary Roller Screws | Standard Planetary Roller Screw Series

Product Overview

Precision Linear Motion Assembly with nominal diameter 80 mm, ball Screw Lead 24 mm and rated dynamic load C_a 482 kN.

Key Specifications

PARAMETER	VALUE	UNIT
Nominal diameter	80	mm
Ball Screw Lead	24	mm
Rated dynamic load C_a	482	kN
Rated static load C_{oa}	1088	kN
Maximum dynamic load C_a	506	kN
Maximum static load C_{oa}	1172	kN
Forward theoretical efficiency η	0.89	ratio
Reverse theoretical efficiency η´	0.87	ratio
Body diameter D	140	mm

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated dynamic load C_a	482	kN
Rated static load C_{oa}	1088	kN
Maximum dynamic load C_a	506	kN
Maximum static load C_{oa}	1172	kN
MECHANICAL		
Nominal diameter	80	mm
Ball Screw Lead	24	mm
Interface thread Q	M8×1	
Mounting hole pattern G	8×φ17.5	
CONFIGURATION		
Development status	Standard listing	
ADDITIONAL SPECIFICATIONS		
Forward theoretical efficiency η	0.89	ratio

Technical Specifications

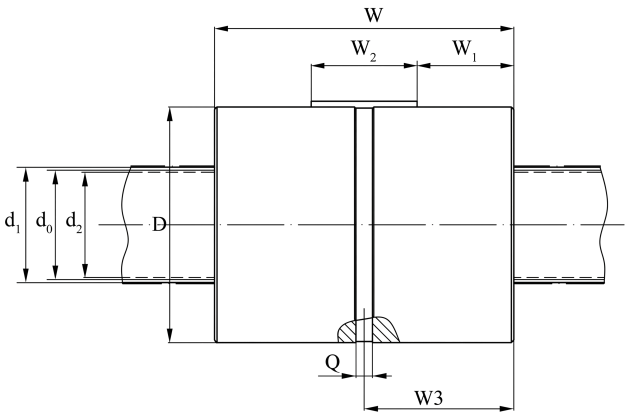
PARAMETER	SPECIFICATION	UNIT
ADDITIONAL SPECIFICATIONS		
Reverse theoretical efficiency η′	0.87	ratio
Body diameter D	140	mm
Overall length W	156	mm
Thread count N	6	
Segment length W_1	55.5	mm
Diameter d_0	80	mm
Segment length W_2	45	mm
Angle α	22.5	°
Diameter d_1	81.4	mm
Diameter d_2	78	mm

Dimensional & Integration Overview

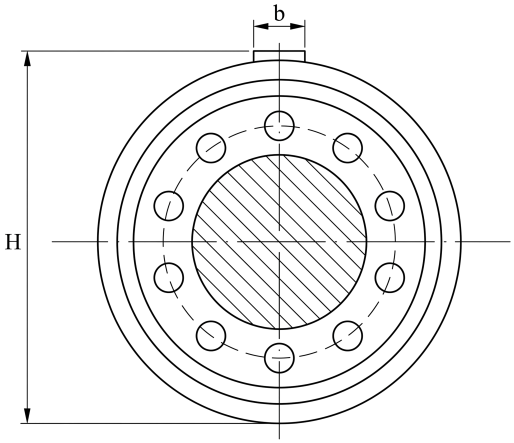
Mechanical Overview

PARAMETER	VALUE	UNIT
Nominal diameter	80	mm
Ball Screw Lead	24	mm
Interface thread Q	M8×1	
Mounting hole pattern G	8×φ17.5	
Body diameter D	140	mm
Overall length W	156	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.