

PRODUCT DATASHEET

ES-PS-C32-S001-V112

Precision Linear Motion Assembly

Standard Planetary Roller Screws | Standard Planetary Roller Screw Series

Product Overview

Precision Linear Motion Assembly with nominal diameter 42 mm, ball Screw Lead 5 mm and rated dynamic load C_a 170 kN.

Key Specifications

PARAMETER	VALUE	UNIT
Nominal diameter	42	mm
Ball Screw Lead	5	mm
Rated dynamic load C_a	170	kN
Rated static load C_{0a}	368	kN
Maximum dynamic load C_a	181	kN
Maximum static load C_{0a}	405	kN
Forward theoretical efficiency η	0.83	ratio
Reverse theoretical efficiency η'	0.8	ratio
Body diameter D	86	mm

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated dynamic load C_a	170	kN
Rated static load C_{0a}	368	kN
Maximum dynamic load C_a	181	kN
Maximum static load C_{0a}	405	kN
MECHANICAL		
Nominal diameter	42	mm
Ball Screw Lead	5	mm
Interface thread Q	M6	
Mounting hole pattern G	6× ϕ 11	
CONFIGURATION		
Development status	Standard listing	
ADDITIONAL SPECIFICATIONS		
Forward theoretical efficiency η	0.83	ratio

Technical Specifications

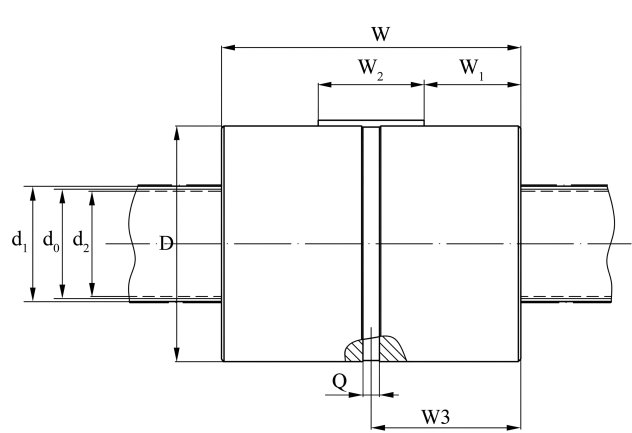
PARAMETER	SPECIFICATION	UNIT
ADDITIONAL SPECIFICATIONS		
Reverse theoretical efficiency η'	0.8	ratio
Body diameter D	86	mm
Overall length W	118	mm
Thread count N	5	
Segment length W_1	41.5	mm
Diameter d_0	42	mm
Segment length W_2	35	mm
Angle α	30	°
Diameter d_1	42.3	mm
Diameter d_2	41.5	mm

Dimensional & Integration Overview

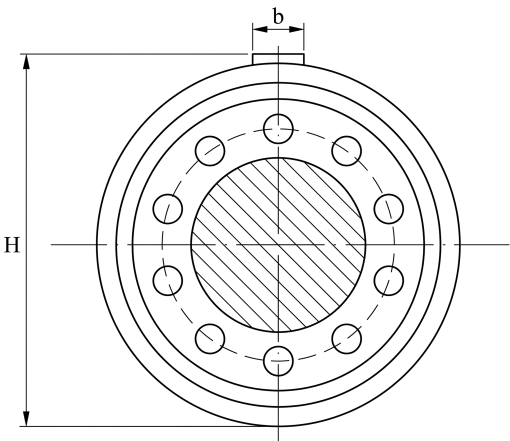
Mechanical Overview

PARAMETER	VALUE	UNIT
Nominal diameter	42	mm
Ball Screw Lead	5	mm
Interface thread Q	M6	
Mounting hole pattern G	6×φ11	
Body diameter D	86	mm
Overall length W	118	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.