

PRODUCT DATASHEET

ES-PS-C32-S001-V124

Precision Linear Motion Assembly

Standard Planetary Roller Screws | Standard Planetary Roller Screw Series

Product Overview

Precision Linear Motion Assembly with nominal diameter 51 mm, ball Screw Lead 10 mm and rated dynamic load C_a 288 kN.

Key Specifications

PARAMETER	VALUE	UNIT
Nominal diameter	51	mm
Ball Screw Lead	10	mm
Rated dynamic load C_a	288	kN
Rated static load C_{0a}	645	kN
Maximum dynamic load C_a	307	kN
Maximum static load C_{0a}	710	kN
Forward theoretical efficiency η	0.87	ratio
Reverse theoretical efficiency η'	0.85	ratio
Body diameter D	102	mm

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated dynamic load C_a	288	kN
Rated static load C_{0a}	645	kN
Maximum dynamic load C_a	307	kN
Maximum static load C_{0a}	710	kN
MECHANICAL		
Nominal diameter	51	mm
Ball Screw Lead	10	mm
Interface thread Q	M8×1	
Mounting hole pattern G	6× ϕ 13.5	
CONFIGURATION		
Development status	Standard listing	
ADDITIONAL SPECIFICATIONS		
Forward theoretical efficiency η	0.87	ratio

Technical Specifications

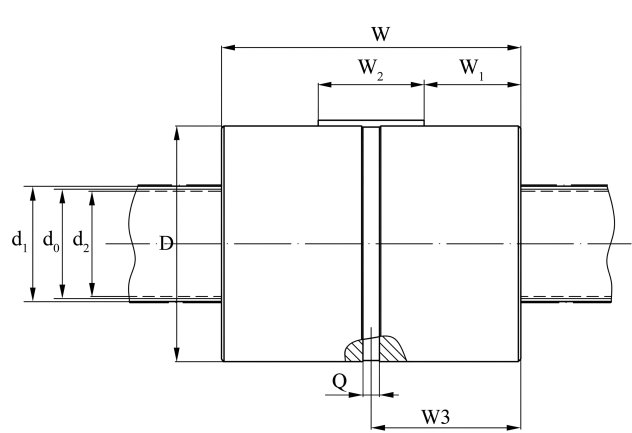
PARAMETER	SPECIFICATION	UNIT
ADDITIONAL SPECIFICATIONS		
Reverse theoretical efficiency η'	0.85	ratio
Body diameter D	102	mm
Overall length W	139	mm
Thread count N	5	
Segment length W_1	52	mm
Diameter d_0	51	mm
Segment length W_2	35	mm
Angle α	30	°
Diameter d_1	51.7	mm
Diameter d_2	50	mm

Dimensional & Integration Overview

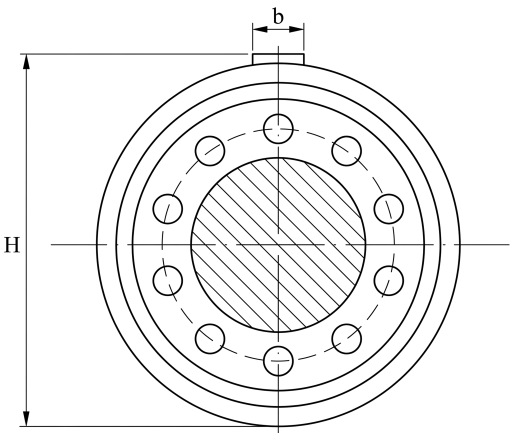
Mechanical Overview

PARAMETER	VALUE	UNIT
Nominal diameter	51	mm
Ball Screw Lead	10	mm
Interface thread Q	M8×1	
Mounting hole pattern G	6× $\varnothing$ 13.5	
Body diameter D	102	mm
Overall length W	139	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.