

LSHC12S 39-1024N

iC-LSHC Encoder Disc and Code Description

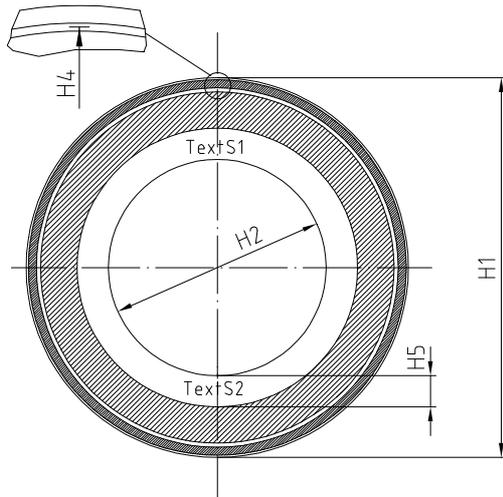


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CODE DISC ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	LSHC12S 39-1024N	Nonius Code Disc 1024 PPR, dia 39 mm

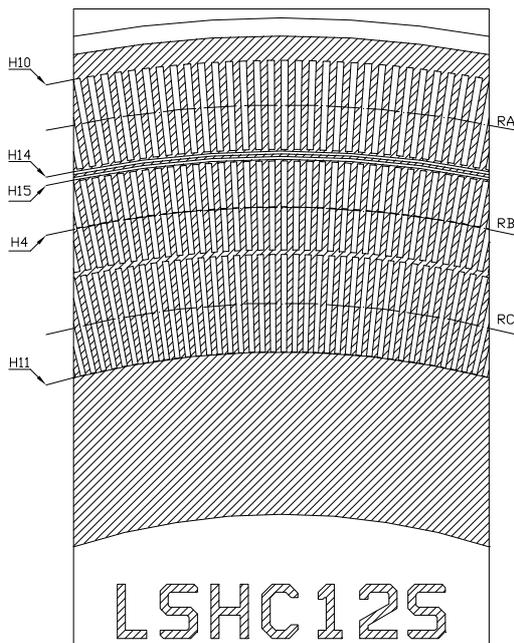
PHYSICAL DIMENSIONS



Design Example

Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		39.0	$\pm 100 \mu\text{m}$
H2	Inner Diameter		13.0	$+ 200 \mu\text{m}$
H3	Thickness		1	$\pm 100 \mu\text{m}$
H4	Radius of Chip Center	referred to origin	17.5	
H5	Distance Pattern to Drill Hole		6.4	
H6	Code Track Eccentricity	referred to center of inner hole	± 0.2	
H7	TextS1	readable on side of pattern	LSHC12S	
H8	TextS2	readable on side of pattern	39-1024	

TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	17.50
H10	Code Pattern Radius	end	19.125
H11	Code Pattern Radius	begin	15.895
H12	Recommended LED Spot Diameter	LED Spot	> 3.2
H13	Recommended LED Spot Center	radius as center of illumination	17.500
H14	Alignment Circle	end of circle	18.120
H15	Alignment Circle	begin of circle	18.030
RA	Track Radius	RA	18.580
RB	Track Radius	RB	17.500
RC	Track Radius	RC	16.420

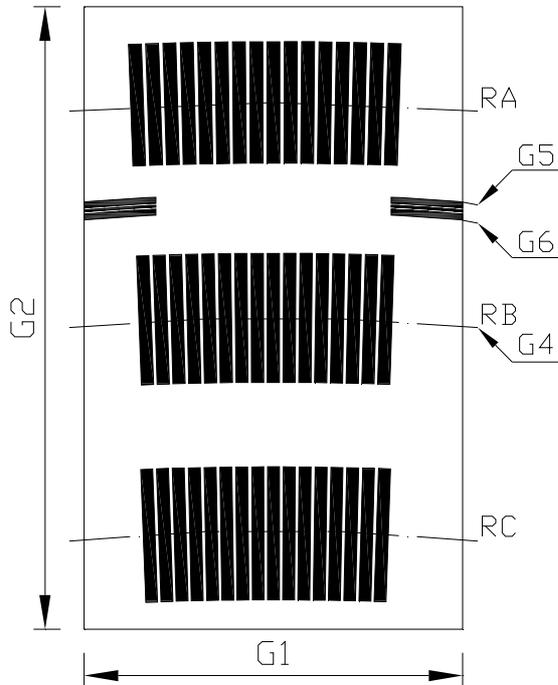
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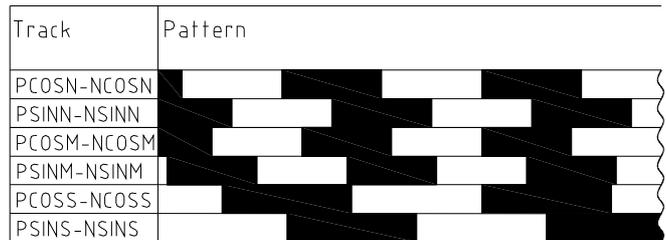
PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name and Design Release	iC-PN3924	
G1	Window Width		1.90
G2	Window Height		3.24
G4	Radius of Chip Center	referred to origin	17.500
G5	Reflective Alignment Aid	end of circle	18.120
G6	Reflective Alignment Aid	begin of circle	18.030
RA	Track Radius Nonius		18.580
RB	Track Radius Master		17.500
RC	Track Radius Segment		16.420

TRACK ASSIGNMENT: Photosensor Array

Radius	Signal			
RA	1023 PPR PSINN	1023 PPR PCOSN	1023 PPR NSINN	1023 PPR NCOSN
RB	1024 PPR PSINM	1024 PPR PCOSM	1024 PPR NSINM	1024 PPR NCOSM
RC	992 PPR PSINS	992 PPR PCOSS	992 PPR NSINS	992 PPR NCOSS



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