

# LSHC1S 26-1024N, LSHC1R

iC-LSHC Encoder Disc and Reticle

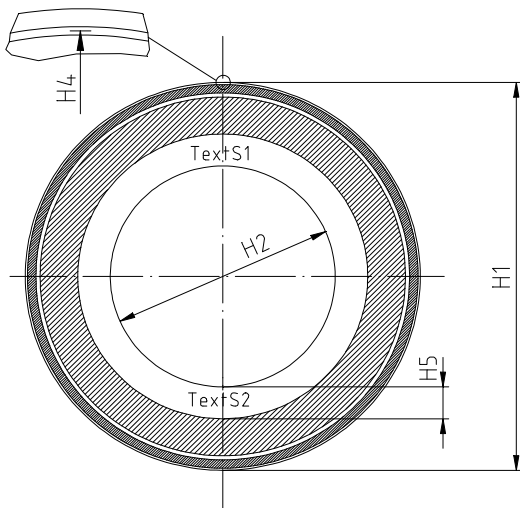


Rev A3, Page 1/3

## CODE DISC ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	LSHC1S 26-1024N	Nonius Code Disc 1024 PPR, dia 26 mm

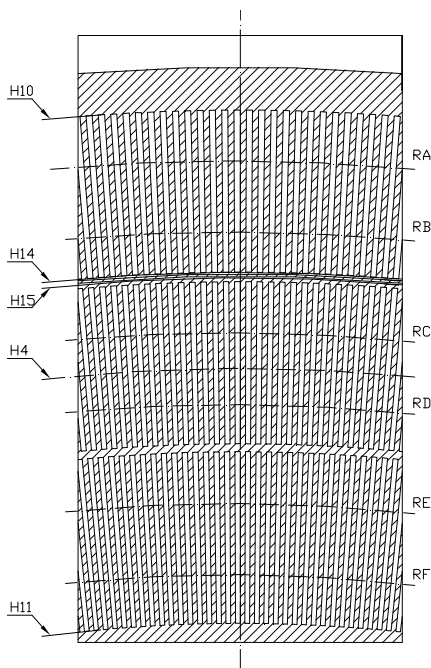
## PHYSICAL DIMENSIONS



Design Example

Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		26.0	$\pm 100 \mu\text{m}$
H2	Inner Diameter		11.6	$+ 200 \mu\text{m}$
H3	Thickness		1	$\pm 100 \mu\text{m}$
H4	Radius of Chip Center	referred to origin	10.905	
H5	Distance Pattern to Drill Hole		2.0	
H6	Code Track Eccentricity	referred to center of inner hole	$\pm 0.2$	
H7	TextS1	readable on side of pattern	LSHC1S	
H8	TextS2	readable on side of pattern	26-1024	

## TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	10.905
H10	Code Pattern Radius	end	12.53
H11	Code Pattern Radius	begin	9.30
H12	Recommended LED Spot Diameter	LED Spot	$> 3.2$
H13	Recommended LED Spot Center	radius as center of illumination	10.905
H14	Alignment Circle	end of circle	11.510
H15	Alignment Circle	begin of circle	11.475
RA	Track Radius	RA	12.21
RB	Track Radius	RB	11.76
RC	Track Radius	RC	11.13
RD	Track Radius	RD	10.68
RE	Track Radius	RE	10.05
RF	Track Radius	RF	9.60

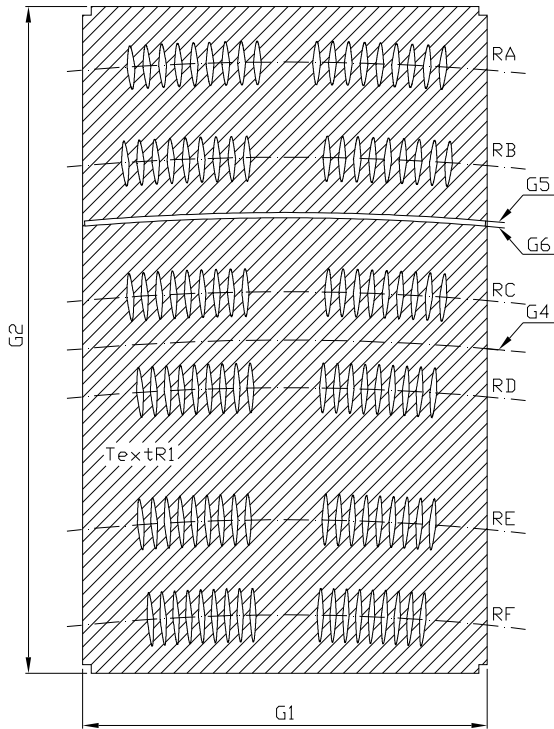
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iC-LSHC Encoder Disc and Reticle



Rev A3, Page 2/3

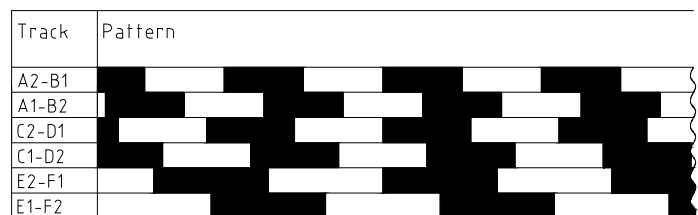
## PHYSICAL DIMENSIONS: Reticle



Item	Parameter	Comments	[mm]	Tolerance
G1	Width		1.90	
G2	Height		3.30	
G3	Thickness		0.50	± 10%
G4	Radius of Chip Center	referred to origin	10.905	
G5	Alignment Circle	end of circle	11.505	
G6	Alignment Circle	begin of circle	11.480	
G7	TextR1	readable on side of pattern	LSHC1R	
RA	Track Radius Nonius	RA	12.21	
RB	Radius Track Nonius	RB	11.76	
RC	Track Radius Master	RC	11.13	
RD	Track Radius Master	RD	10.68	
RE	Track Radius Segment	RE	10.05	
RF	Track Radius Segment	RF	9.60	

## TRACK ASSIGNMENT: Reticle

Output	Signal	Signal	Output
A1	1023 PPR PSINN	1023 PPR PCOSN	A2
B1	1023 PPR NCOSN	1023 PPR NSINN	B2
C1	1024 PPR PSINM	1024 PPR PCOSM	C2
D1	1024 PPR NCOSM	1024 PPR NSINM	D2
E1	992 PPR PSINS	992 PPR PCOSS	E2
F1	992 PPR NCOSS	992 PPR NSINS	F2



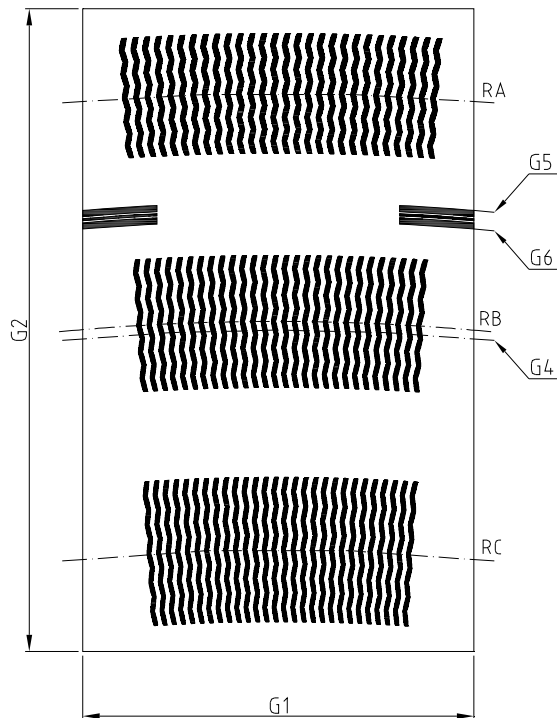
# LSHC1S 26-1024N, LSHC1R

## iC-LSHC Encoder Disc and Reticle



Rev A3, Page 3/3

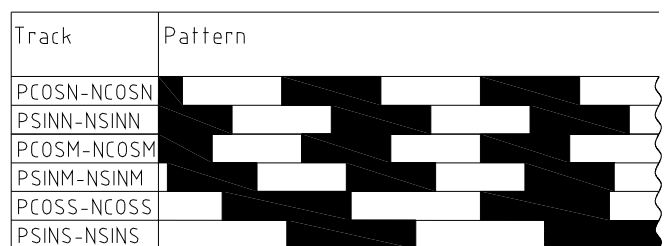
### PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name and Design Release	iC-PN2624	
G1	Window Width		1.90
G2	Window Height		3.24
G4	Radius of Chip Center	referred to origin	10.905
G5	Reflective Alignment Aid	end of circle	11.525
G6	Reflective Alignment Aid	begin of circle	11.435
RA	Track Radius Nonius		12.054
RB	Track Radius Master		10.947
RC	Track Radius Segment		9.840

### TRACK ASSIGNMENT: Photosensor Array

Radius	Signal			
	RA	1023 PPR PSINN	1023 PPR PCOSN	1023 PPR NSINN
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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