

# LSHB2S 42-1024, LSHB2R

## iC-LSHB Encoder Disc and Reticle Description

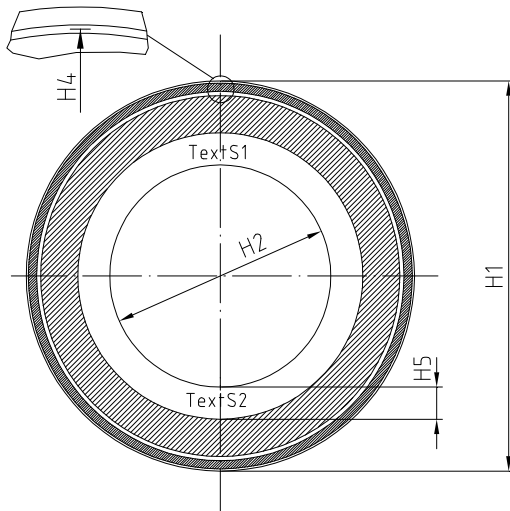


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### ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	LSHB2S 42-1024	Incremental Code Disc A/B/Z 1024 PPR, dia 42 mm

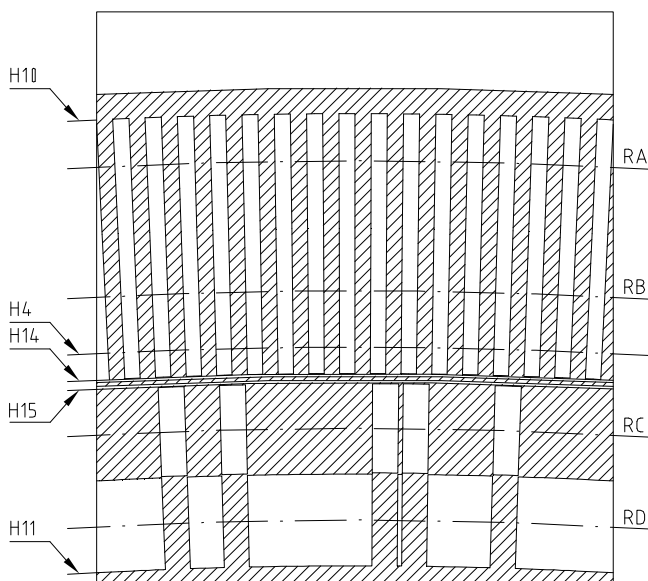
### PHYSICAL DIMENSIONS



Design Example

Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		42.0	$\pm 100 \mu\text{m}$
H2	Inner Diameter		18.0	$+ 200 \mu\text{m}$
H3	Thickness		1.0	$\pm 100 \mu\text{m}$
H4	Radius of Chip Center	referred to origin	19.71	
H5	Distance Pattern to Drill Hole		5.0	
H6	Code Track Eccentricity	referred to center of inner hole	$\pm 0.2$	
H7	TextS1	readable on side of pattern	LSHB2S	
H8	TextS2	readable on side of pattern	42-1024	

### TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	19.71
H10	Code Pattern Radius	end	20.60
H11	Code Pattern Radius	begin	18.825
H12	Recommended LED Spot Diameter	LED Spot	$> 3.2$
H13	Recommended LED Spot Center	radius as center of illumination	19.71
H14	Alignment Circle	end of circle	19.680
H15	Alignment Circle	begin of circle	19.545
RA	Track Radius A/B		20.350
RB	Track Radius NA/NB		19.900
RC	Track Radius PZ		19.352
RD	Track Radius NZ		18.987

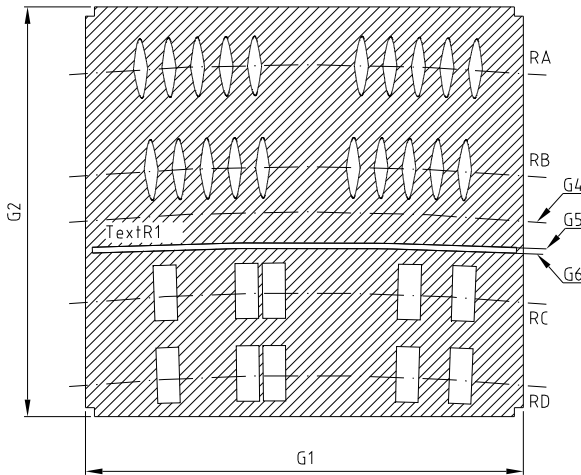
# LSHB2S 42-1024, LSHB2R

## iC-LSHB Encoder Disc and Reticle Description



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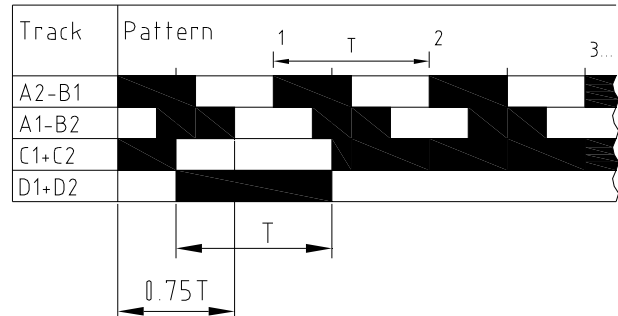
### PHYSICAL DIMENSIONS: Reticle



Item	Parameter	Comments	[mm]
G0	Name and Design Release	LSHB2R	
G1	Width		1.90
G2	Height		1.98
G3	Thickness		0.50 ± 10%
G4	Radius of Chip Center	referred to origin	19.71
G5	Alignment Circle	end of circle	19.575
G6	Alignment Circle	begin of circle	19.550
G7	TextR1	readable on side of pattern	LSHB2R

### TRACK ASSIGNMENT: Reticle

Output	Signal	Signal	Output
A1	1024 PPR PSIN	1024 PPR PCOS	A2
B1	1024 PPR NCOS	1024 PPR NSIN	B2
C1	1 PPR PZ	1 PPR PZ	C2
D1	1 PPR NZ	1 PPR NZ	D2



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