

PNH1S 33-2048

iC-PNH3348 Encoder Disc and Code Description

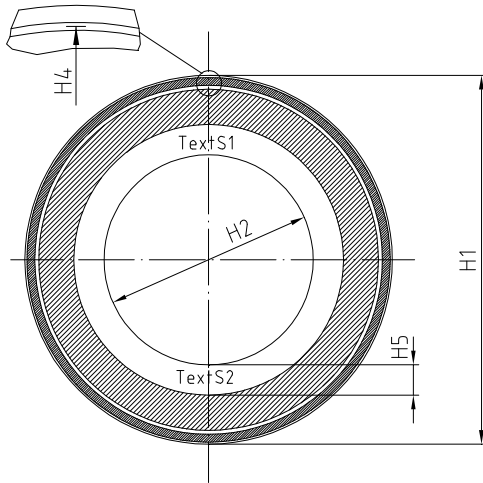


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ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	PNH1S 33-2048	Nonius Code Disc 2048 PPR, dia 33.2 mm

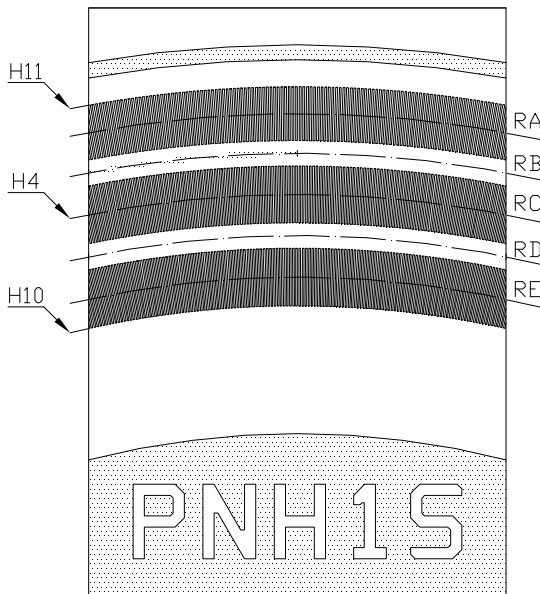
PHYSICAL DIMENSIONS



Design Example

Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		33.2	$\pm 100 \mu\text{m}$
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	14.5	
H5	Distance Pattern to Drill Hole		2.3	
H6	Code Track Eccentricity	referred to center of inner hole	± 0.2	
H7	TextS1	readable on side of pattern	PNH1SZ	
H8	TextS2	readable on side of pattern	33-2048	

TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	14.500
H10	Code Pattern Radius	begin	13.010
H11	Code Pattern Radius	end	15.940
H12	Recommended LED Spot Diameter	LED Spot	> 3.2
H13	Recommended LED Spot Center	radius as center of illumination	14.500
RA	Track Radius Nonius		15.580
RB	Track Radius MTA		15.050
	Track Height MTA		0.08
RC	Track Radius Master		14.500
RD	Track Radius MTB		13.950
	Track Height MTB		0.08
RE	Track Radius Segment		13.410

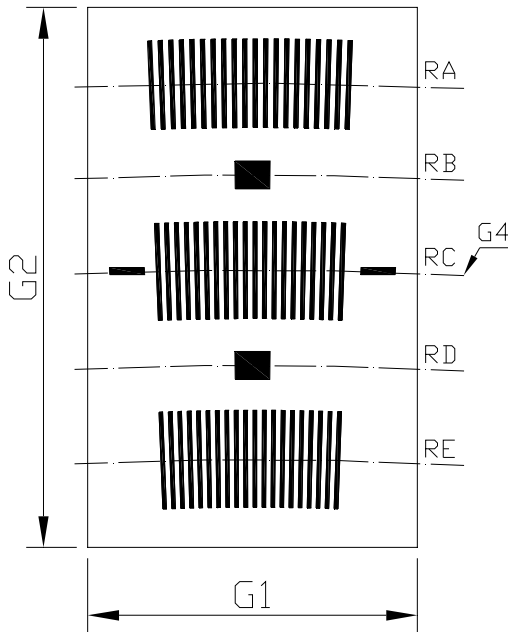
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PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name and Design Release	iC-PNH3348	
G1	Window Width		1.90
G2	Window Height		3.24
G4	Radius of Chip Center	referred to origin	14.500
RA	Track Radius Nonius		15.580
RB	Track Radius MTA		15.050
	Sensor Height MTA		0.16
RC	Track Radius Master		14.500
RD	Track Radius MTB		13.950
	Sensor Height MTB		0.16
RE	Track Radius Segment		13.410

TRACK ASSIGNMENT: Photosensor Array

Radius	Signal			
RA	2046 PPR PSINN	2046 PPR PCOSN	2046 PPR NSINN	2046 PPR NCOSN
RB	1 PPR			
RC	2048 PPR PSINM	2048 PPR PCOSM	2048 PPR NSINM	2048 PPR NCOSM
RD	1 PPR			
RE	1984 PPR PSINS	1984 PPR PCOSS	1984 PPR NSINS	1984 PPR NCOSS

Track	Pattern
	0° 45° 90° 135° 180° 225° 270° 315° 0°
MTA	
MTB	

Track	Pattern
	0°
PCOSN-NCOSN	
PSINN-NSINN	
PCOSM-NCOSM	
PSINM-NSINM	
PCOSS-NCOSS	
PSINS-NSINS	

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