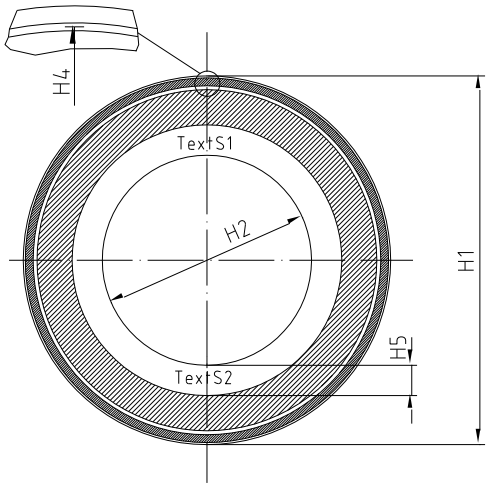
PNH4S 39-2048

iC-PNH3948 Encoder Disc and Code Description

ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	PNH4S 39-2048	Nonius Code Disc 2048 PPR, dia 39.0 mm

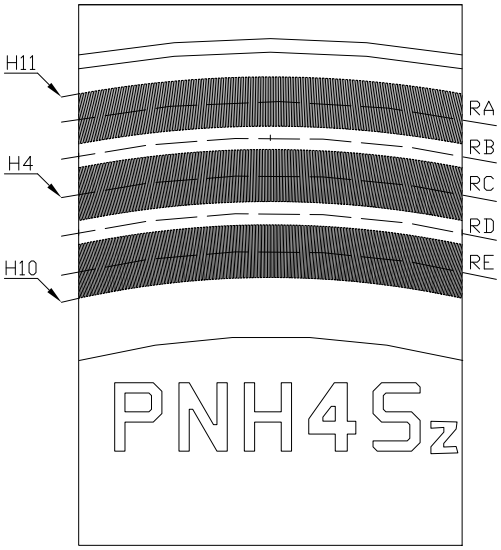
PHYSICAL DIMENSIONS



Design Example

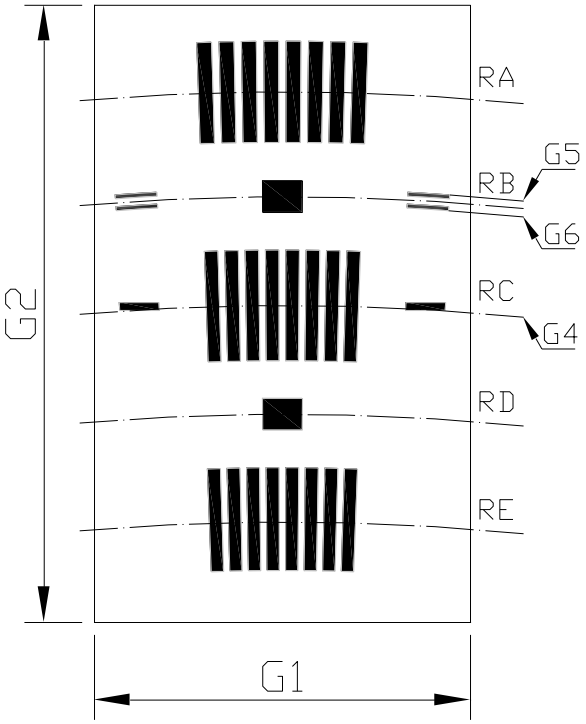
Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		39.0	± 100 µm
H2	Inner Diameter		18.0	+ 200 µm
H3	Thickness		1.0	± 100 µm
H4	Radius of Chip Center	referred to origin	17.5	
H5	Distance Pattern to Drill Hole		6.0	
H6	Code Track Eccentricity	referred to center of inner hole	± 0.2	
H7	TextS1	readable on side of pattern	PNH4S$_Z$	
H8	TextS2	readable on side of pattern	39-2048	

TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	17.500
H10	Code Pattern Radius	begin	16.060
H11	Code Pattern Radius	end	18.940
H12	Recommended LED Spot Diameter	LED Spot	> 3.2
H13	Recommended LED Spot Center	radius as center of illumination	17.500
RA	Track Radius Nonius		18.580
RB	Track Radius MTA		18.050
	Track Height MTA		0.08
RC	Track Radius Master		17.500
RD	Track Radius MTB		16.950
	Track Height MTB		0.08
RE	Track Radius Segment		16.420

PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name and Design Release	iC-PNH3948	
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	18.090
G6	Reflective Alignment Aid	begin of circle	18.010
RA	Track Radius Nonius		18.580
RB	Track Radius MTA		18.050
	Sensor Height MTA		0.160
RC	Track Radius Master		17.500
RD	Track Radius MTB		16.950
	Sensor Height MTB		0.160
RE	Track Radius Segment		16.420

TRACK ASSIGNMENT: Photosensor Array

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