

PD2S 39-2048

iC-PD3948 Encoder Disc and Code Description

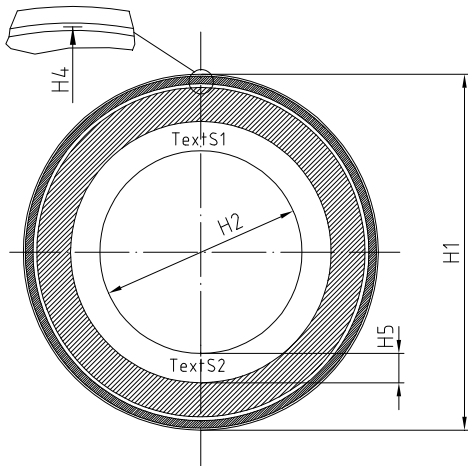


Rev A4, Page 1/2

ORDERING INFORMATION

Type	Order Designation	Description/Options
Encoder Disc	PD2S 39-2048	Incremental Code Disc A/B/Z 2048 PPR, C/D 1 PPR, dia 39 mm

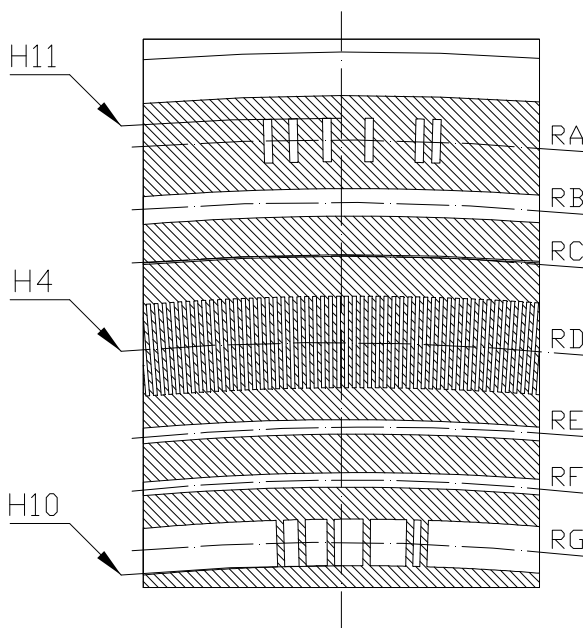
PHYSICAL DIMENSIONS



Design Example

Item	Parameter	Comments	[mm]	Tolerance
H1	Outer Diameter		39.0	$\pm 100 \mu\text{m}$
H2	Inner Diameter		18.0	$+ 200 \mu\text{m}$
H3	Thickness		1	$\pm 100 \mu\text{m}$
H4	Radius of Chip Center	referred to origin	17.5	
H5	Distance Pattern to Drill Hole		5.0	
H6	Code Track Eccentricity		± 0.2	
H7	Text S1	readable on side of pattern		PD2S
H8	Text S2	readable on side of pattern		39-2048

TRACK LAYOUT



Item	Parameter	Comments	[mm]
H4	Radius of Chip Center	referred to origin	17.500
H11	Code Pattern Radius	end	19.045
H10	Code Pattern Radius	begin	15.965
H12	Recommended LED Spot Diameter	LED Spot	> 3.2
H13	Recommended LED Spot Center	radius as center of illumination	17.500
RA	Track Radius PZ		18.895
RB	Track Radius PC		18.465
RC	Track Radius NC		18.100
RD	Track Radius A/B		17.500
RE	Track Radius PD		16.920
RF	Track Radius ND		16.555
RG	Track Radius NZ		16.125

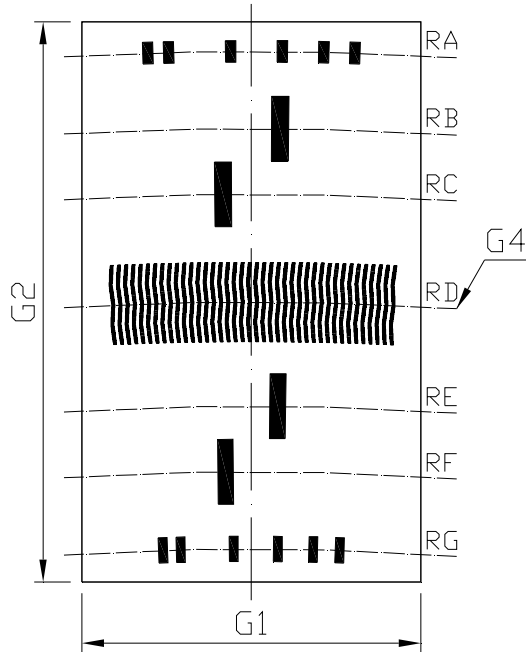
PD2S 39-2048

iC-PD3948 Encoder Disc and Code Description



Rev A4, Page 2/2

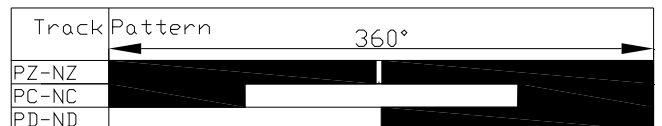
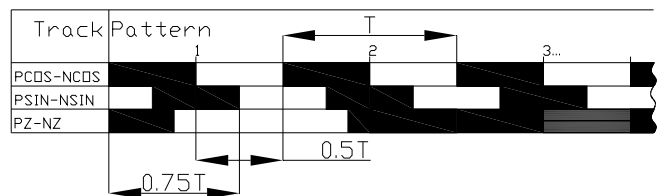
PHYSICAL DIMENSIONS: Photosensor Array



Item	Parameter	Comments	[mm]
G0	Name und Design Release	iC-PD3948	
G1	Window Width		1.90
G2	Window Height		3.24
G4	Radius of Chip Center		17.50
RA	Track Radius PZ		18.895
RB	Track Radius PC		18.465
RC	Track Radius NC		18.100
RD	Track Radius A/B		17.500
RE	Track Radius PD		16.920
RF	Track Radius ND		16.555
RG	Track Radius NZ		16.125

TRACK ASSIGNMENT: Photosensor Array

Radius	Signal			
RA	1 PPR PZ			
RB	1 PPR PC			
RC	1 PPR NC			
RD	2048 PPR PSIN	2048 PPR PCOS	2048 PPR NSIN	2048 PPR NCOS
RE	1 PPR PD			
RF	1 PPR ND			
RG	1 PPR NZ			



iC-Haus expressly reserves the right to change its products and/or specifications. An info letter gives details as to any amendments and additions made to the relevant current specifications on our internet website www.ichaus.com/infoletter; this letter is generated automatically and shall be sent to registered users by email. Copying – even as an excerpt – is only permitted with iC-Haus approval in writing and precise reference to source. iC-Haus does not warrant the accuracy, completeness or timeliness of the specification on this site and does not assume liability for any errors or omissions in the materials. The data specified is intended solely for the purpose of product description. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information/specification or the products to which information refers and no guarantee with respect to compliance to the intended use is given. In particular, this also applies to the stated possible applications or areas of applications of the product. iC-Haus conveys no patent, copyright, mask work right or other trade mark right to this product. iC-Haus assumes no liability for any patent and/or other trade mark rights of a third party resulting from processing or handling of the product and/or any other use of the product. As a general rule our developments, IPs, principle circuitry and range of Integrated Circuits are suitable and specifically designed for appropriate use in technical applications, such as in devices, systems and any kind of technical equipment, in so far as they do not infringe existing patent rights. In principle the range of use is limitless in a technical sense and refers to the products listed in the inventory of goods compiled for the 2008 and following export trade statistics issued annually by the Bureau of Statistics in Wiesbaden, for example, or to any product in the product catalogue published for the 2007 and following exhibitions in Hanover (Hannover-Messe). We understand suitable application of our published designs to be state-of-the-art technology which can no longer be classed as inventive under the stipulations of patent law. Our explicit application notes are to be treated only as mere examples of the many possible and extremely advantageous uses our products can be put to.