US DIGITAL

RoHS COMPLIANT

💬 Description

US Digital offers a wide variety of standard rotary encoder disks. They may be ordered as a stand alone disk (see below) or as a encoder disk (see the Disks page). These rotary encoder disks are made from mylar polyester film. This material allows for a wide temperature range.

DISK-2 has an outer diameter (OD) of 2". We recommend that the shaft or hub diameter the disk is designed to fit be .001" to .002" larger than the disk hole diameter (ID). This gives an interference fit that ensures disk concentricity. The drawings shown represent our standard disks.

The maximimum allowed RPM of the disk is typically limited by the maximum output frequency of the encoder module. The maximum allowed RPM is calculated as follows:

Max. RPM = (60 * Fmax) / CPR

Where Fmax = maximum encoder module output frequency and CPR is the Cycles per Revolution of the disk.

Only the *No* Index, EM1 Compatible option (NE) is available with the 64 CPR option. Other resolutions are available with or without an index track.
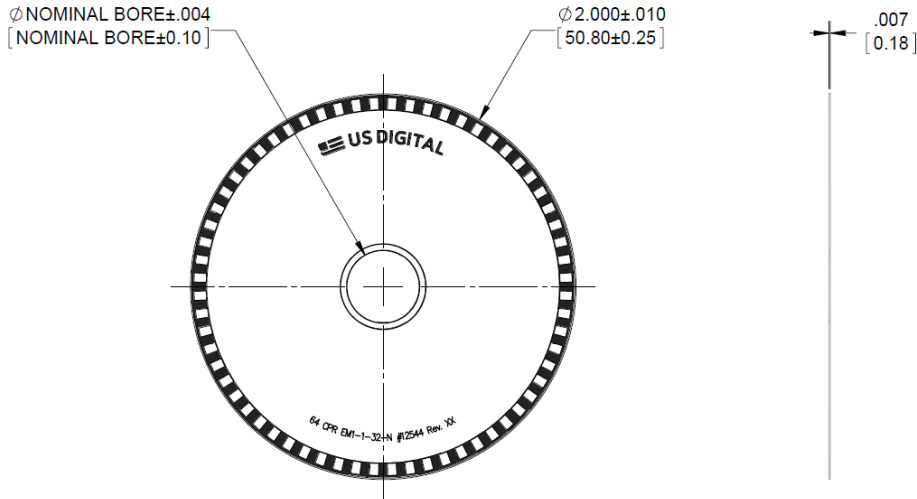
Mechanical alignment drawings for optical encoder rotary disks and optical encoder modules are available (see the EM1 and EM2 page).

Features

‣ 2" Outside Diameter
‣ Up to 10000 CPR (when paired with EM2)
‣ Index track option

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Mechanical Drawing

RELEASE DATE: 01/15/2016

Specifications

Inside Diameter (ID) tolerance	±0.004"
Outside Diameter (OD)	2" ± 0.010"
Thickness	0.007"
Temperature Range	-40C to 100C

Ordering Information

DISK-2 - [   ] - [   ] - [   ]

1400 NE 136th Avenue
Vancouver, Washington 98684, USA

info@usdigital.com
www.usdigital.com

Local: 360.260.2468
Toll-free: 800.736.0194

Rev. 160519085104

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CPR		ID		Index	
64 =	EM1	093 =	.093"	NE =	No Index, EM1 Compatible Only
100 =	EM1	125 =	.125"	IE =	Index, EM1 & EM2 Compatible
200 =	EM1	375 =	.375"		
400 =	EM1	441 =	.441"		
500 =	EM1	472 =	.472"		
512 =	EM1	500 =	.500"		
1000 =	EM1	551 =	.551"		
1024 =	EM1	625 =	.625"		
1800 =	EM1	750 =	.750"		
2000 =	EM1	875 =	.875"		
2048 =	EM1	984 =	.984"		
2500 =	EM1	1000 =	1.00"		
3600 =	EM2				
4000 =	EM2				
4096 =	EM2				
5000 =	EM2				
7200 =	EM2				
8000 =	EM2				
8192 =	EM2				
10000 =	EM2				

Notes

‣ US Digital warrants its products against defects in materials and workmanship for two years. See complete warranty for details.

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