



## HUBDISK-2 Features

- 2 in. outside diameter
- 64 to 10,000 CPR (256 to 40,000 PPR)



## HUBDISK-2 Product Description

US Digital offers a wide variety of standard HubDisk assemblies (optical encoder disk attached to an aluminum hub) to aid mounting onto a shaft. Encoder disks may also be ordered as stand-alone items. The rotary encoder disks are made from 0.007 in. thick Mylar polyester film, and the material allows for a -40C to 100C temperature range. The disk on the HubDisk assembly comes attached with the emulsion side up when the disk text is right-reading.

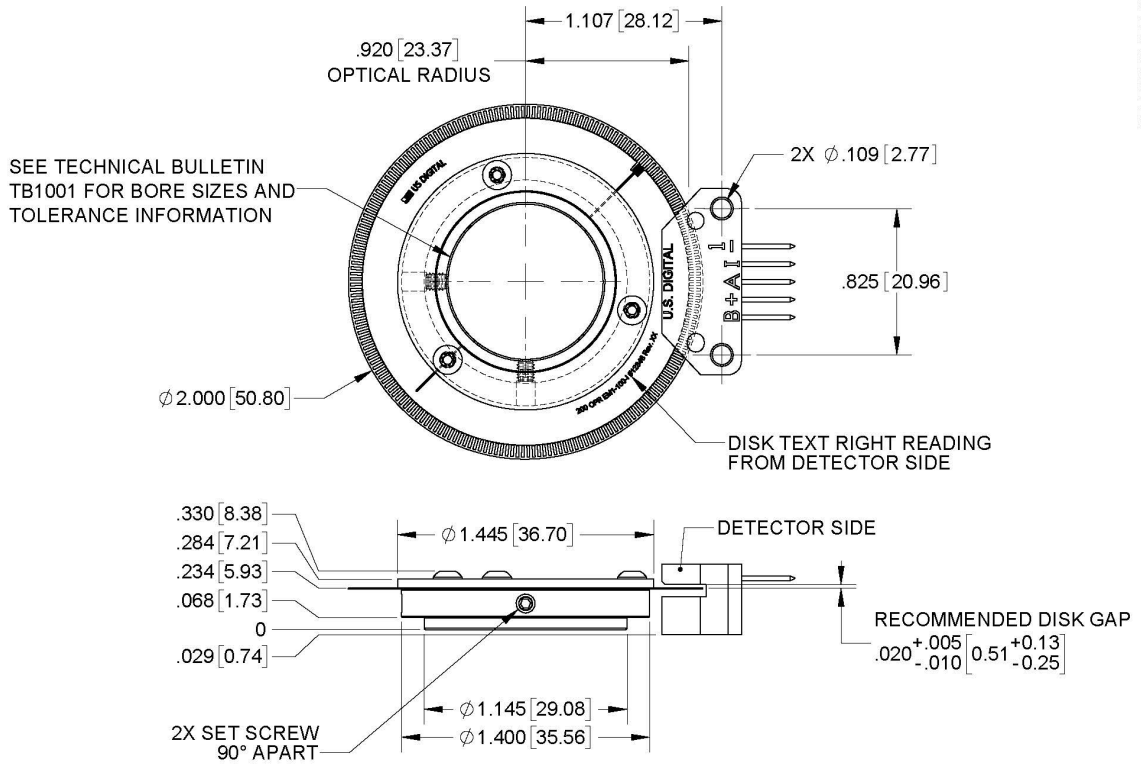


HUBDISK-2 consists of a precision machined aluminum hub fastened to a 2 in. diameter optical encoder disk (DISK-2 (<https://www.usdigital.com/products/encoders/incremental/components/disk-2/>)). One or two set screws (depending on the hub's bore size) are used to fasten the hub to a shaft. The HubDisk assembly is available with bore sizes ranging from 2mm to 1 in. All HubDisk assembly bores are held to a very tight tolerance defined by US Digital Technical Bulletin Shaft and Bore Tolerances TB1001 (<https://www.usdigital.com/support/resources/reference/technical-docs/technical-bulletins/shaft-and-bore-tolerances-tb1001/>).

## Mechanical Drawings

## HUBDISK-2 2" Transmissive Rotary Codewheel (Bores 12mm & Greater)

RELEASE DATE: 05/13/2020



**US DIGITAL** 1400 NE 136th Avenue  
 Vancouver, Washington 98684, USA

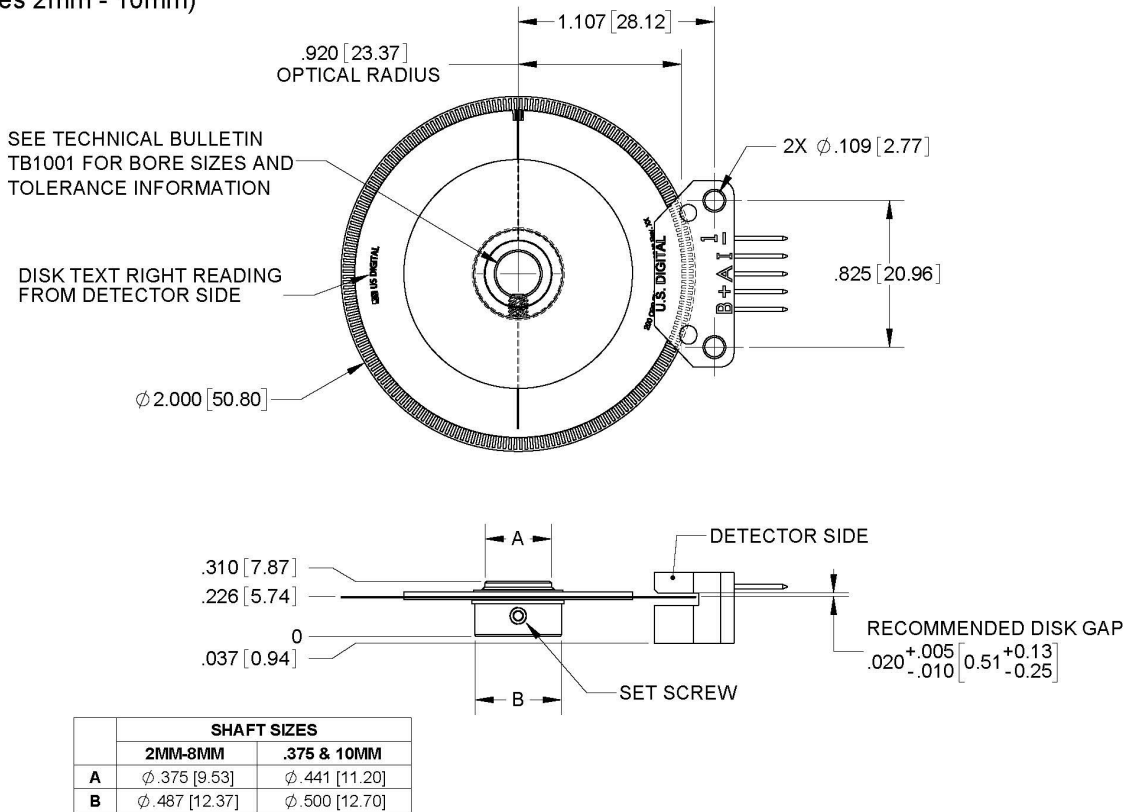
info@usdigital.com  
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Local: 360.260.2468  
 Toll-free: 800.736.0194

UNITS: INCHES [MM]  
 METRIC SHOWN FOR REFERENCE ONLY

## HUBDISK-2 2" Transmissive Rotary Codewheel (Bores 2mm - 10mm)

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## Specifications

### SPECIFICATIONS

Temperature Range	-40C to 100C
Hub Set Screw Torque	2-3 in-lbs
Outside Disk Diameter (OD)	2" $\pm$ 0.010 in.
Bore Diameter Tolerance	See Technical Bulletin TB1001 ( <a href="https://www.usdigital.com/support/resources/reference/technical-docs/technical-bulletins/shaft-and-bore-tolerances-tb1001/">https://www.usdigital.com/support/resources/reference/technical-docs/technical-bulletins/shaft-and-bore-tolerances-tb1001/</a> )
Disk Thickness	0.007"



## TECHNICAL BULLETINS

TITLE	DOWNLOAD
Technical Bulletin TB1001 - Shaft and Bore Tolerances	Download ( <a href="https://www.usdigital.com/support/resources/reference/technical-docs/technical-bulletins/shaft-and-bore-tolerances-tb1001/">https://www.usdigital.com/support/resources/reference/technical-docs/technical-bulletins/shaft-and-bore-tolerances-tb1001/</a> )

## PRODUCT CHANGE NOTIFICATIONS

Title	Date	Description	Download
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2" Hub/Disk Assembly Packaging - PCN 7115	2/15/2021	As part of our ongoing continuous improvement efforts, US Digital is implementing a change to the packaging of our 2 in. Hubdisk assemblies.	Download <a href="https://www.usdigital.com/support/resources/product-change-notifications/pcn-7115-hubdisk-2-packaging/">(https://www.usdigital.com/support/resources/product-change-notifications/pcn-7115-hubdisk-2-packaging/)</a>
		<p>We are replacing the current plastic tube packaging with a 10-count plastic tray. The tray is a two-piece design with snap-on lid and anti-static coated for ESD-sensitive environments. This change is designed to enhance the ease of handling for our customers, provide easy removal of the individual hubdisks, and protect against potential damage due to the long-term storage of hubdisk assemblies.</p> <p>This change does not affect the form, fit, or function of the final product.</p>	



2" Hub/Disk Assembly Screw Change - PCN 6644	9/27/2018	As part of our ongoing continuous improvement efforts, the screws used in the assembly of the 2" hub/disk assembly, that is with a bore of 12mm and larger, will be changed from a black oxide to a zinc plated screw.	Download <i>(<a href="https://www.usdigital.com/support/resources/product-change-notifications/pcn-6644-2-hub-disk-assembly-screw-change/">https://www.usdigital.com/support/resources/product-change-notifications/pcn-6644-2-hub-disk-assembly-screw-change/</a>)</i>
		The zinc plating improves corrosion resistance as well as alleviates any potential for oil residue.	
		The plating change has no effect on the form, fit, or function of our hubdisk assembly.	



Hub Set Screw Production Change - PCN 5367	7/20/2015	<p>As part of our ongoing continuous improvement efforts, US Digital is implementing a change related to the production of our 5/16" (.313), 8mm (.315), 3/8" (.375), and 10mm (.394) HUBDISK assemblies. We are adding a low strength threadlocker to the set screw during our assembly process to assist in securing the set screw in the hub during transportation. This will aid in the set screw retention of these specific hub sizes; ensuring the retention is sufficient and avoid the potential of them backing out of the hub assembly during transit. This change does not affect form, fit, or function.</p>	<p>Download (<a href="https://www.usdigital.com/support/resources/product-change-notifications/pcn-5367-hub-set-screw-production-change/">https://www.usdigital.com/support/resources/product-change-notifications/pcn-5367-hub-set-screw-production-change/</a>)</p>
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## Notes

- US Digital® warrants its products against defects in materials and workmanship for two years. See complete warranty (<https://www.usdigital.com/company/warranty>) for details.

