



## HUBDISK-1 Features

- 1 in. disk with hub
- 32 to 5,000 CPR (128 to 20,000 PPR)



## HUBDISK-1 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.

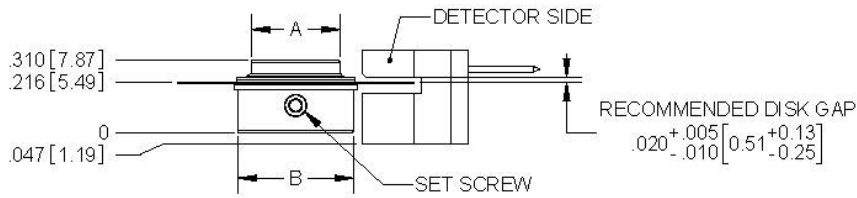
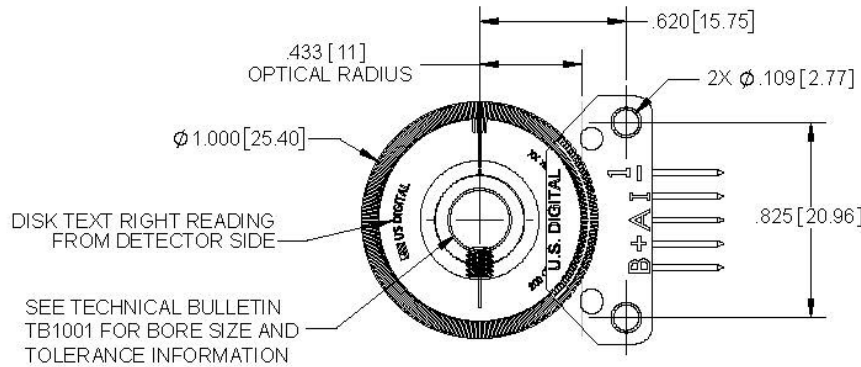


HUBDISK-1 consists of a precision machined aluminum hub fastened to a 1 in. diameter optical encoder disk (DISK-1 (<https://www.usdigital.com/disk-1>)). One set screw is used to fasten the hub to a shaft. The HubDisk assembly is available with bore sizes ranging from 2mm to 10mm. All HubDisk assembly 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-1 1" Transmissive Rotary Codewheel

RELEASE DATE: 10/23/2019



SHAFT SIZES		
	2MM-8MM	.375 & 10MM
A	φ .375 [9.53]	φ .441 [11.20]
B	φ .487 [12.37]	φ 500 [12.70]

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UNITS: INCHES [MM]  
METRIC SHOWN FOR REFERENCE ONLY

## Specifications

### SPECIFICATIONS

Temperature Range	-40C to 100C
Hub Set Screw Torque	2-3 in-lbs
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> )
Outside Disk Diameter (OD)	1" ± 0.010 in.
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
HUBDISK-1 Packaging Change Notification - PCN 6297	4/30/2018	<p>As part of our ongoing continuous improvement efforts, US Digital is implementing a change to the packaging of our 1-inch Hubdisk assemblies.</p> <p>We are replacing the current plastic tube packaging with a 25-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, easy removal of the individual hubdisk, and protection against potential damage due to long-term storage of hubdisk assemblies.</p> <p>This change does not affect form, fit, or function of the final product.</p>	<p>Download (<a href="https://www.usdigital.com/support/resources/product-change-notifications/pcn-6297-hubdisk-1-packaging/">https://www.usdigital.com/support/resources/product-change-notifications/pcn-6297-hubdisk-1-packaging/</a>)</p>
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>

## 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.