### **HUBDISK-2 Features**

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



### **HUBDISK-2 Product Description**

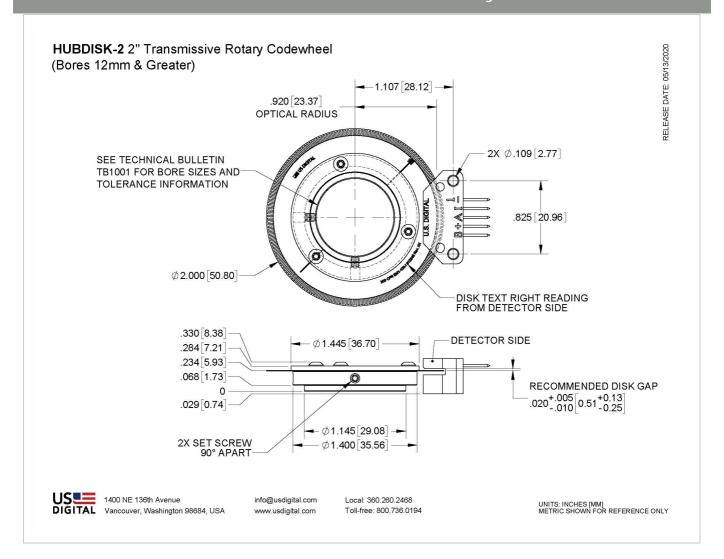
US Digital offers a wide variety of standard HubDisk assemblies (optical encoder disk attached to an aluminum hub) to aid mounting onto a shaft. Encoder disks may also be ordered as stand-alone items. The rotary encoder disks are made from 0.007 in. thick Mylar polyester film, and the material allows 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.



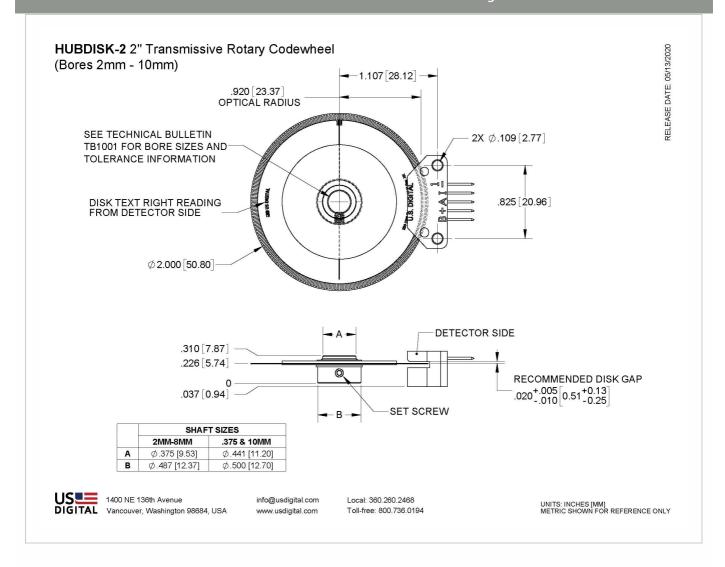
HUBDISK-2 consists of a precision machined aluminum hub fastened to a 2 in. diameter optical encoder disk (DISK-2 (https://www.usdigital.com/products/encoders/incremental/components/disk-2/)). One or two set screws (depending on the hub's bore size) are used to fasten the hub to a shaft. The HubDisk 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**









### **Specifications**

### **SPECIFICATIONS**

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



#### **TECHNICAL BULLETINS**

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

#### PRODUCT CHANGE NOTIFICATIONS

Title	Date	Description	Download
1			20



2" Hub/Disk Assembly Packaging - PCN 7115 2/15/2021 As part of our

ongoing continuous improvement efforts, US Digital is implementing Download

(https://www.usdigital.com/support/resources/productchange-notifications/pcn-7115-hubdisk-2packaging/)

efforts, US
Digital is
implementing
a change to
the packaging
of our 2 in.
Hubdisk
assemblies.

We are replacing the current plastic packaging with a 10count 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

This change does not affect the form, fit, or function of the final product.

against potential damage due to the long-term storage of hubdisk assemblies.



2" 9/27/2018 As part of our Hub/Disk ongoing Assembly continuous Screw improvement Change - PCN 6644 screws used in the assembly of the 2" hub/disk

Download

(https://www.usdigital.com/support/resources/productchange-notifications/pcn-6644-2-hub-disk-assemblyscrew-change/)

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.

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** 7/20/2015 As part of our Download Screw ongoing (https://www.usdigital.com/support/resources/product-Production continuous change-notifications/pcn-5367-hub-set-screw-Change improvement production-change/) PCN 5367 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.

#### **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.



