



Features of the 1 in. Transmissive Rotary Disk



- 1 in. outside diameter
- Mylar film construction
- 32 to 5,000 CPR
- Index track option
- Compatible with US Digital's EM1 and EM2 encoder modules

Description

US Digital offers a wide variety of standard rotary encoder disks. They may be ordered as a stand-alone disk or as a hub disk. These rotary encoder disks are made from Mylar polyester film. This material allows for a wide temperature range.



The 32 CPR is only available without an index (NE); other resolutions 1250 CPR and below, may be ordered with or without an index, while 2000 CPR and above are only available with an index (IE).

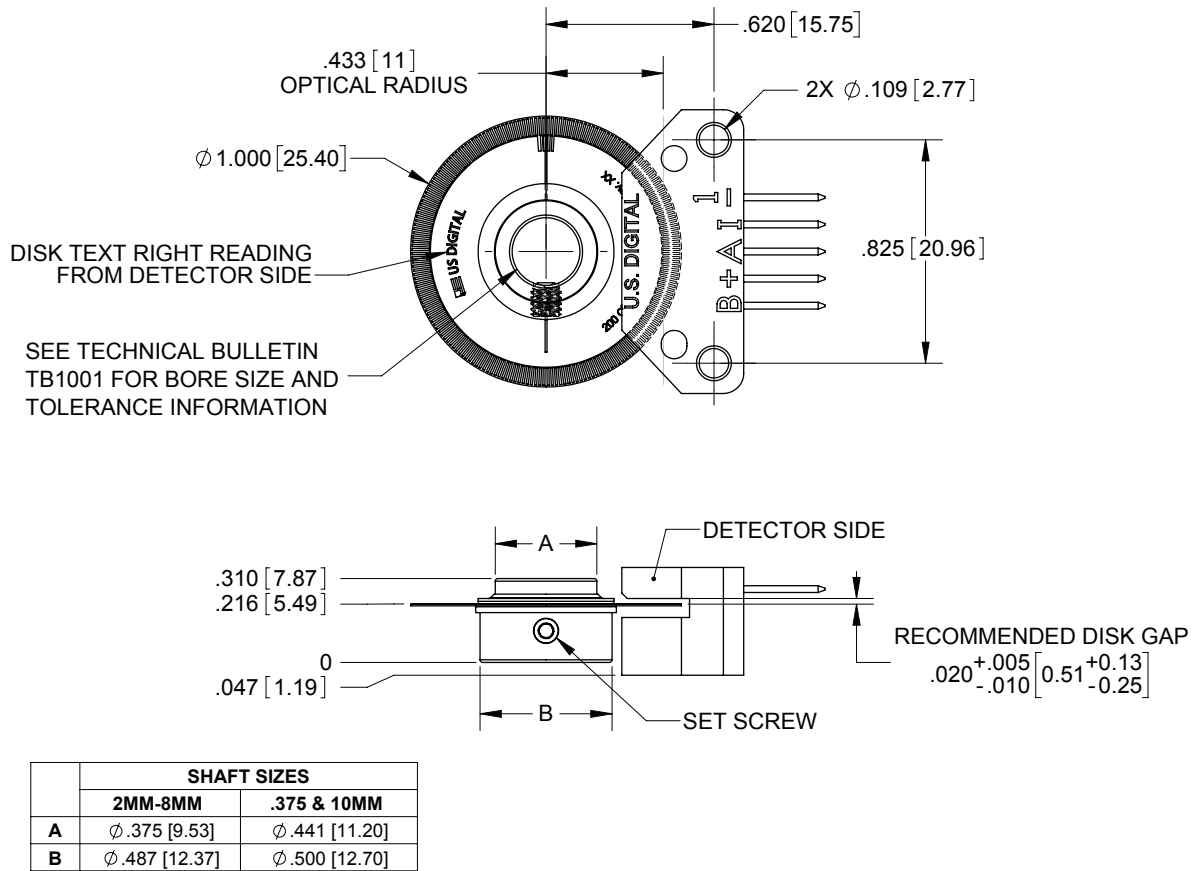
Mechanical alignment drawings for optical encoder rotary disks and optical encoder modules are available (see the [EM1\(1\)](#) and [EM2\(2\)](#) pages).

1 in. Transmissive Rotary Disk

Product ID | HUBDISK-1



Mechanical Drawings



HUBDISK-1 1 in. Transmissive Rotary Disk

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Specifications

General

Parameter	Value
Temperature Range	-40C to 100C
Hub Set Screw Torque	2-3 in-lbs
Bore Diameter Tolerance	<u>See Technical Bulletin TB1001⁽³⁾</u>
Outside Disk Diameter (OD)	1 in. $\pm$ 0.010 in.
Disk Thickness	0.007 in.

Technical Bulletins

Title	Download
Technical Bulletin TB1001 - Shaft and Bore Tolerances	<u>Download⁽³⁾</u>

Compatible Encoder Modules

CPR	1 in. HUBDISK Non-Index	MODULE Non-Index	1 in. HUBDISK Index	MODULE Index
32	HUBDISK-1-32-*-NE	EM1-1-32-N		
50	HUBDISK-1-50-*-NE	EM1-1-50-N	HUBDISK-1-50-*-IE	EM1-1-50-I
96	HUBDISK-1-96-*-NE	EM1-1-100-N	HUBDISK-1-96-*-IE	EM1-1-100-I
100	HUBDISK-1-100-*-NE	EM1-1-100-N	HUBDISK-1-100-*-IE	EM1-1-100-I
120	HUBDISK-1-120-*-NE	EM1-1-100-N		
200	HUBDISK-1-200-*-NE	EM1-1-200-N	HUBDISK-1-200-*-IE	EM1-1-200-I
192	HUBDISK-1-192-*-NE	EM1-1-200-N	HUBDISK-1-192-*-IE	EM1-1-200-I
250	HUBDISK-1-250-*-NE	EM1-1-250-N	HUBDISK-1-250-*-IE	EM1-1-250-I
256	HUBDISK-1-256-*-NE	EM1-1-250-N	HUBDISK-1-256-*-IE	EM1-1-250-I
360	HUBDISK-1-360-*-NE	EM1-1-360-N	HUBDISK-1-360-*-IE	EM1-1-360-I
400	HUBDISK-1-400-*-NE	EM1-1-400-N	HUBDISK-1-400-*-IE	EM1-1-400-I
500	HUBDISK-1-500-*-NE	EM1-1-500-N	HUBDISK-1-500-*-IE	EM1-1-500-I
512	HUBDISK-1-512-*-NE	EM1-1-512-N	HUBDISK-1-512-*-IE	EM1-1-512-I

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Specifications

Compatible Encoder Modules

CPR	1 in. HUBDISK Non-Index	MODULE Non-Index	1 in. HUBDISK Index	MODULE Index
540	HUBDISK-1-540-*-NE	EM1-1-540-N	HUBDISK-1-540-*-IE	EM1-1-540-I
720	HUBDISK-1-720-*-NE	EM1-1-720-N	HUBDISK-1-720-*-IE	EM1-1-720-I
800	HUBDISK-1-800-*-NE	EM1-1-800-N	HUBDISK-1-800-*-IE	EM1-1-800-I
1000	HUBDISK-1-1000-*-NE	EM1-1-1000-N	HUBDISK-1-1000-*-IE	EM1-1-1000-I
1024	HUBDISK-1-1024-*-NE	EM1-1-1024-N	HUBDISK-1-1024-*-IE	EM1-1-1024-I
2000			HUBDISK-1-2000-*-IE	EM2-1-2000-I
2048			HUBDISK-1-2048-*-IE	EM2-1-2048-I
2500			HUBDISK-1-2500-*-IE	EM2-1-2500-I
4000			HUBDISK-1-4000-*-IE	EM2-1-4000-I
4096			HUBDISK-1-4096-*-IE	EM2-1-4096-I
5000			HUBDISK-1-5000-*-IE	EM2-1-5000-I

*Represents the bore size

Notes

- Cables and connectors are not included and must be ordered separately.
- US Digital® warrants its products against defects in materials and workmanship for two years. See complete [warranty^{\(4\)}](#) for details.

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Product ID | HUBDISK-1



Part Number Guide and Configuration Options

Product ID -

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HUBDISK-1	CPR	Bore Size	Index
	32	079 (2.0mm)	IE (Index)
	50	118 (3.0mm)	I (Index)
	96	125 (1/8 in.)	NE (Non-Index)
	100	156 (5/32 in.)	
	120	157 (4.0mm)	
	192	188 (3/16 in.)	
	200	197 (5.0mm)	
	250	236 (6.0mm)	
	256	250 (1/4 in.)	
	360	276 (7.0mm)	
	400	313 (5/16 in.)	
	500	315 (8.0mm)	
	512	375 (3/8 in.)	
	540	394 (10.0mm)	
	720		
	800		
	900		
	1000		
	1024		
	1250		
	2000		
	2048		
	2500		
	4000		
	4096		
	5000		

PLEASE NOTE: This chart is for informational use only. Certain product configuration combinations are not available. Visit the [HUBDISK-1^{\(5\)}](#) product page for pricing and additional information.

1 in. Transmissive Rotary Disk

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Reference Links



(1) EM1 Transmissive Optical Encoder Module



(2) EM2 Transmissive Optical Encoder Module



(3) Technical Bulletin TB1001 - Shaft and Bore Tolerances



(4) Legal Terms and Conditions, Warranty



(5) DISK-1 1 In. Transmissive Rotary Disk