

# ACCESSORIES

## IOS MOTOR ACCESSORIES

### ENCODERS

IOS motors are available with single-end or differential output, dual channel incremental optical rotary encoders for closed loop position control. These come standard with quadrature style outputs (Channels A & B) and an index mark, except where noted.

Line counts: 100, 200, 250, 400, 500 & 1000.

Encoders may be ordered factory-mounted to the motor or as separate ready-to-mount encoder kits. \*

\* IOS 42 encoder available factory-mounted only.

NOTE: IOS 17 is not available with an encoder.

Encoder Line Count	Factory-Mounted Encoders	Encoder Kits
100	X* E (S/D**) - 100	E (S/D**)   XX* - 100 - K
200	X* E (S/D**) - 200	E (S/D**)   XX* - 200 - K
250	X* E (S/D**) - 250 <sup>1</sup>	E (S/D**)   XX* - 250 <sup>1</sup> - K
400	X* E (S/D**) - 400 <sup>2</sup>	E (S/D**)   XX* - 400 <sup>2</sup> - K
500	X* E (S/D**) - 500	E (S/D**)   XX* - 500 - K
1000	X* E (S/D**) - 1000 <sup>3</sup>	E (S/D**)   XX* - 1000 <sup>3</sup> - K

\* X Motor Part Number

XX Motor Frame Size

\*\*S/D S = Single-End Encoder

D = Differential Encoder

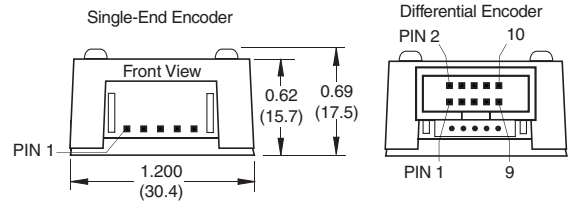
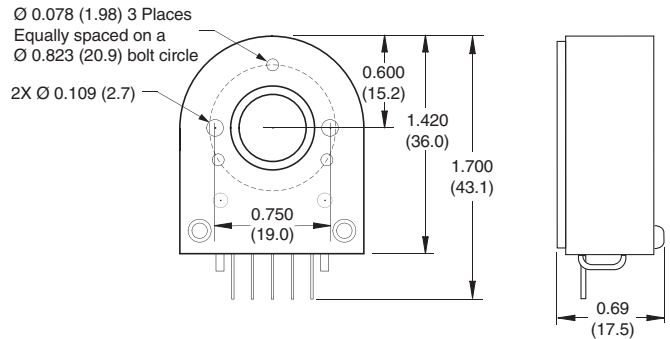
<sup>1</sup> Not available for IOS 34 & 42

<sup>2</sup> No index mark for IOS 34 & 42

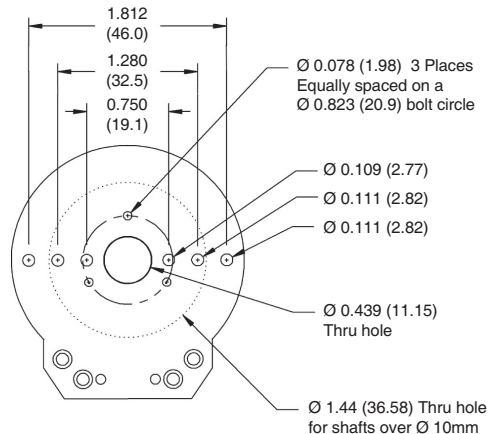
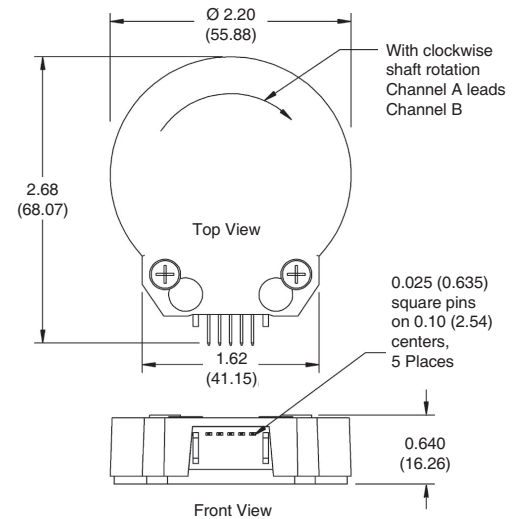
<sup>3</sup> No index mark for IOS 23

### Encoder for IOS 23

Dimensions in Inches (mm)



### Encoder for IOS 34 & 42



### BALL SCREWS

#### Axial Play

4 and 6 mm diameters ..... 20 microns max.

8, 10 and 14 mm diameters ..... 50 microns max.

Cummulative Lead Error ..... ± 0.05 microns/300 mm

Ball Screw Part No.	Compatible Motors	Lead Pitch inches (mm)	Max. Linear Force Dynamic lbs (n)			Screw Diameter inches (mm)	Length inches (mm)
			IOS 17	IOS 23	IOS 34		
0401	IOS 17	0.0394 (1)	75 (333)	—	—	0.158 (4)	3.94 (100)
0601	IOS 23	0.0394 (1)	—	149 (663)	—	0.236 (6)	7.87 (200)
0802	IOS 23 IOS 34	0.0787 (2)	—	200 (890)	528 (2350)	0.315 (8)	15.75 (400)
0812	IOS 23 IOS 34	0.4724 (12)	—	28 (129)	112 (499)	0.315 (8)	15.75 (400)
1020	IOS 23 IOS 34	0.7874 (20)	—	17 (75)	67 (300)	0.394 (10)	15.75 (400)
1402	IOS 34	0.0787 (2)	—	—	704 (3132)	0.551 (14)	27.56 (700)

### ADAPTER PLATES

Some IOS motor/ball screw combinations require the use of an adapter plate. These are detailed in the following table.

Adapter Plate	AP0601	AP0802	AP0812	AP1402
IOS Motor	IOS 23	IOS 23	IOS 34	IOS 34
Ball Screw #	0601	0802 1020	0812	1402