

ACCESSORIES

IOS MOTOR ACCESSORIES

IOS 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		
MRB0401	IOS 17	0.0394 (1)	75 (333)			0.158 (4)	3.94 (100)
MRB0601	IOS 23	0.0394 (1)		149 (663)		0.236 (6)	7.87 (200)
MRB0802	IOS 23, IOS 34	0.0787 (2)		200 (890)	528 (2350)	0.315 (8)	15.75 (400)
MRB0812	IOS 23, IOS 34	0.4724 (12)		28 (129)	112 (499)	0.315 (8)	15.75 (400)
MRB1020	IOS 23, IOS 34	0.7874 (20)		17 (75)	67 (300)	0.394 (10)	15.75 (400)
MRB1402	IOS 34	0.0787 (2)			704 (3132)	0.551 (14)	27.56 (700)

IOS ADAPTER PLATES

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

Adapter Plate Part No.	Motor Size	Ball Screw
APO601	IOS23	MRB0601
APO802	IOS23	MRB0802
APO802	IOS23	MRB1020
APO812	IOS34	MRB0812
AP1402	IOS34	MRB1402

ACCESSORIES

ENCODERS

DUAL CHANNEL INCREMENTAL OPTICAL ROTARY ENCODERS

Encoders for closed loop position control are available in both single ended and differential type outputs. These come standard with quadrature style outputs (Channels A & B) and an index mark, except where noted.

Available line counts:
100, 200, 250, 400, 500, 1000, 2000

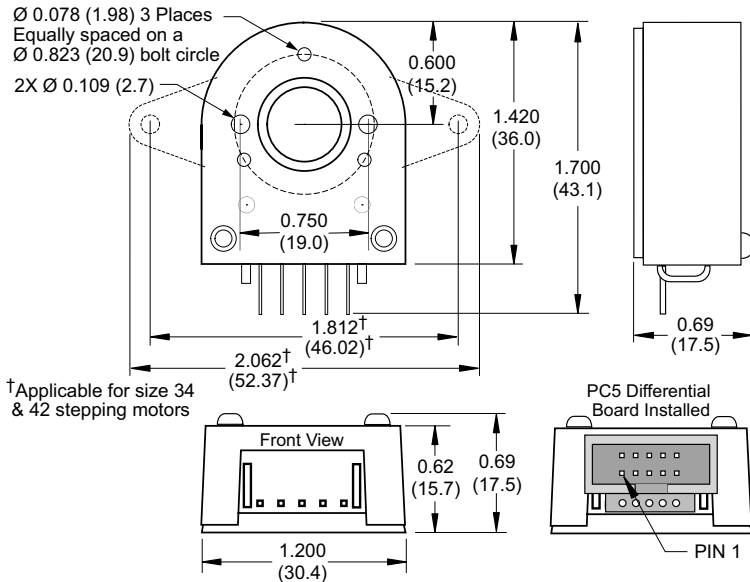
Encoders may be ordered factory-mounted to the motor or as separate ready-to-mount encoder kits.*

*IOS size 42 motor available with encoder factory-mounted only.

MECHANICAL

Dimensions in Inches (mm)

Encoder for Stepping Motors and IOS Size 23



ORDERING

FACTORY-MOUNTED ENCODERS		
Line Count	Stepping Motors	IOS Motors ¹
100	X* E (S/D**) - 100	X* E (S/D**) - 100
200	X* E (S/D**) - 200	X* E (S/D**) - 200
250	X* E (S/D**) - 250	X* E (S/D**) - 250 ³
400	X* E (S/D**) - 400	X* E (S/D**) - 400 ⁴
500	X* E (S/D**) - 500	X* E (S/D**) - 500
1000	X* E (S/D**) - 1000 ²	X* E (S/D**) - 1000 ⁵
2000	X* E (S/D**) - 2000	not available

SEPARATE ENCODER KITS

Line Count	Stepping Motors	IOS Motors ¹
100	E (S/D**) XX* - 100 - K	E (S/D**) I XX* - 100 - K
200	E (S/D**) XX* - 200 - K	E (S/D**) I XX* - 200 - K
250	E (S/D**) XX* - 250 - K	E (S/D**) I XX* - 250 ³ - K
400	E (S/D**) XX* - 400 - K	E (S/D**) I XX* - 400 ⁴ - K
500	E (S/D**) XX* - 500 - K	E (S/D**) I XX* - 500 - K
1000	E (S/D**) XX* - 1000 ² - K	E (S/D**) I XX* - 1000 ⁵ - K
2000	E (S/D**) XX* - 2000 - K	not available

* X Motor Part Number, i.e. M-1713-1.5 for size 17 frame stepping motor

XX Motor Frame Size, i.e. 14, 17, 23, 34 or 42

** S/D S=Single Ended Encoder, D=Differential Encoder

¹ No encoder options for IOS size 17, and IOS size 42 available with encoder factory-mounted only

² Not available with index mark

³ Not available for IOS sizes 34 & 42

⁴ Not available with index mark for IOS sizes 34 & 42

⁵ Not available with index mark for IOS size 23

Encoder for IOS Sizes 34 and 42

