



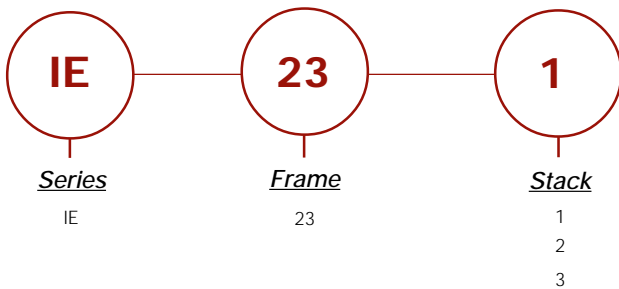
## Integrated Step Motor and Microstepping Drive

The Integral E combines a high-performance stepper motor with a microstepping drive in a single integrated package. This integrated design reduces the required panel space and eliminates the motor-to-drive cabling. Setup is quick and easy with the four DIP switches – no programming or RS232 communication required.

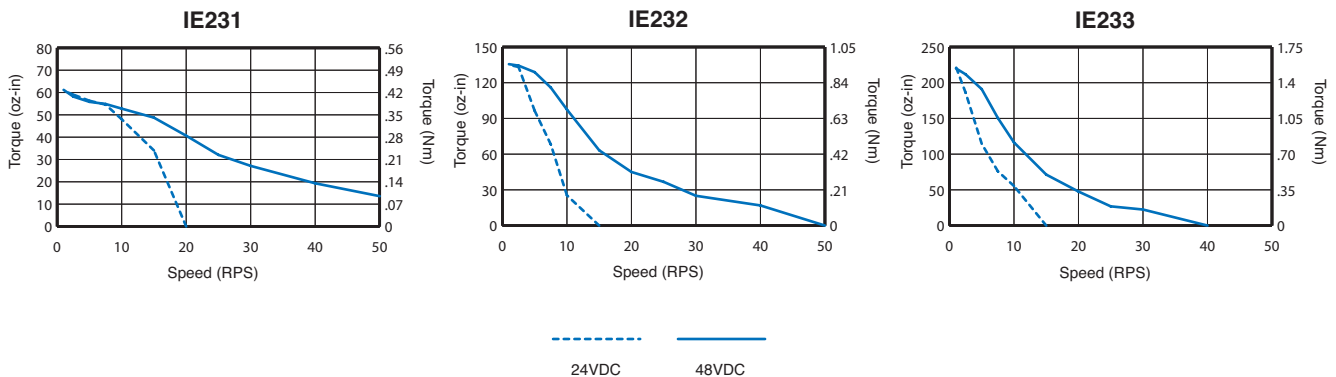
### Integral E Features

- Industry standard step-and-direction inputs
- Industry standard NEMA 23 mounting
- Integrated drive eliminates panel space
- Eliminates motor-to-drive cable, lowering cost and increasing system reliability
- Quick and easy 4-DIP-switch setup – no communications required
- 24-48 VDC power input
- Auto current reduction
- Anti-resonance circuitry
- Static torques from 67-244 oz-in.
- Speeds to 3000 RPM

### Part Numbering System

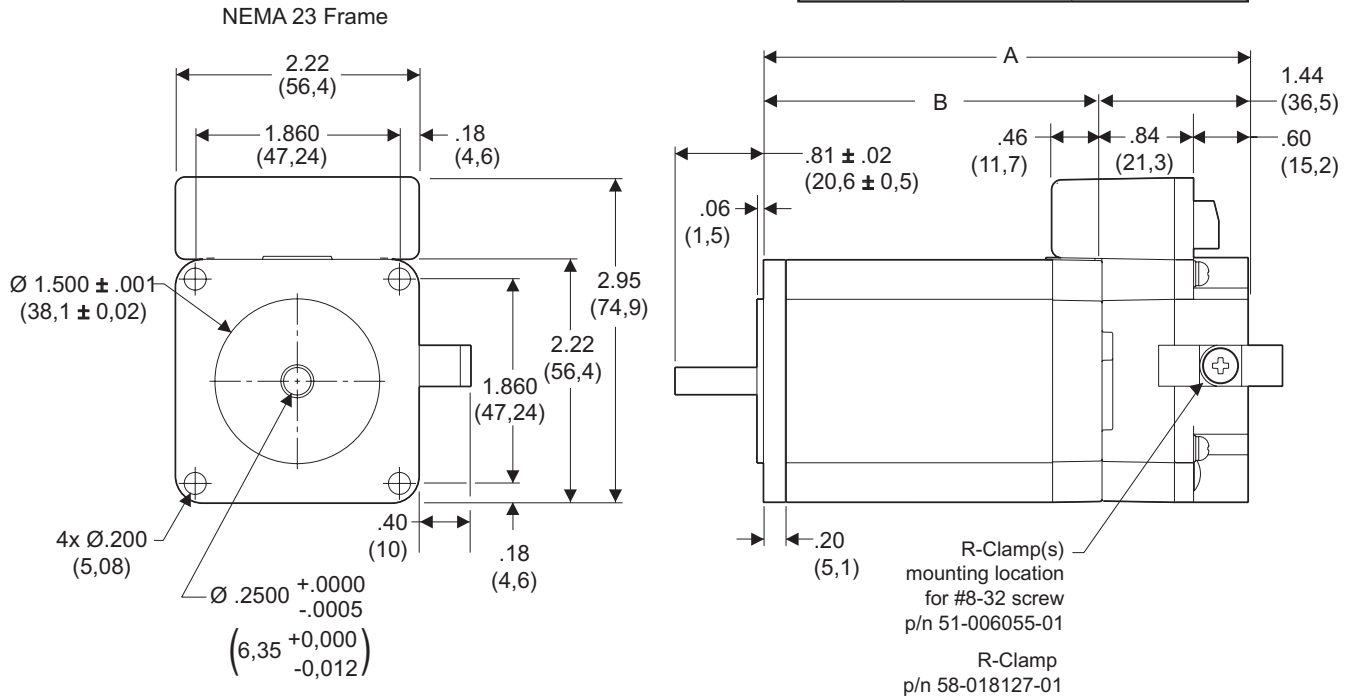


### Motor Speed-Torque Performance Curves



Dimensions

Model	Dimension A Inch (mm)	Dimension B Inch (mm)
IE231	3.17 (80,5)	1.73 (44)
IE232	3.61 (91,7)	2.17 (55)
IE233	4.54 (115,3)	3.10 (78,7)



Integral E Technical Specifications

Parameters	Units	IE231	IE232	IE233
Static Torque	oz-in	67.1	148.5	244.2
	(Nm)	0.47	1.05	1.72
Rotor Inertia	oz-in <sup>2</sup>	0.7	1.5	2.6
	(kg-cm <sup>2</sup> )	0.13	0.27	0.48
Max Current Draw	24 V	A	1.65	1.65
	48 V	A	1.36	1.44
Detent Torque	oz-in	2.63	5.90	8.38
	(N-m)	0.019	0.042	0.059
<b>Bearings</b> Thrust Load	lb	13.00	13.00	13.00
	(kg)	5.91	5.91	5.91
Radial Load (0.79 inches from face)	lb	15.00	15.00	15.00
	(kg)	6.82	6.82	6.82
Motor weight	lb	1.3	1.8	2.6
	(kg)	.59	.82	1.18
<b>Certifications</b>		UL pending	UL pending	UL pending
		CE (EMC)	CE (EMC)	CE (EMC)

Integral E Accessories

Description	Part Number
<b>Controller Cables*</b>	
6K to flying leads	71-017003-10
ACR to flying leads	71-022344-10
<b>DC Power Supplies</b>	
500W, 120 VAC in, 48 VDC out	PS500W120-48
500W, 240 VAC in, 48 VDC out	PS500W240-48
1000W, 120 VAC in, 48 VDC out	PS1000W120-48
1000W, 240 VAC in, 48 VDC out	PS1000W240-48

NOTE: A power cord *does not* ship with the unit.

\* Cable comes in a 10-foot length (3 m)