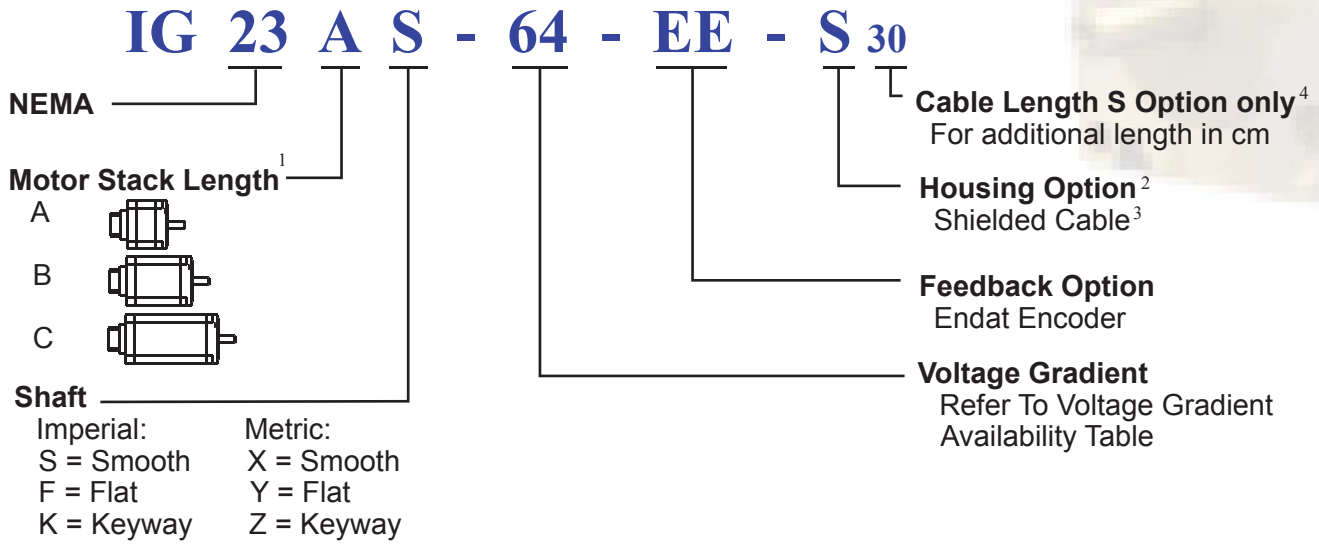


IG 23 with S Housing and EE Feedback

Model Numbering

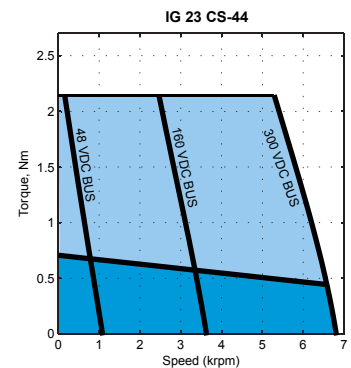
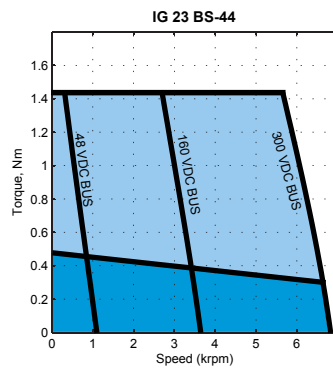
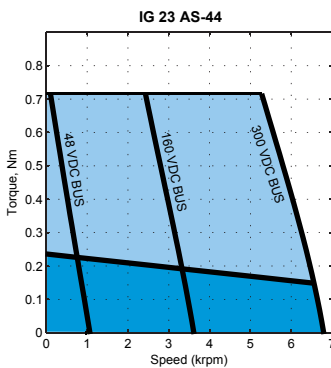


1. Refer to Dimensions for the exact length and shaft options
2. All the motors are rated IP64 and by adding front shaft seal it's rating becomes IP65
3. The motor comes with 18 inches (46 cm) shielded cable
4. Blank For Standard length (18 inches = 46 cm)

Voltage Gradient

Voltage Constant K_E (V/kRPM)	8	11	16	22	32	44	64	88	130	180
Frame Size IG 23										

Performance Curves



Contact factory for torque-speed curves of other motors

Feb, 11, 06

IG 23 with S Housing and EE Feedback

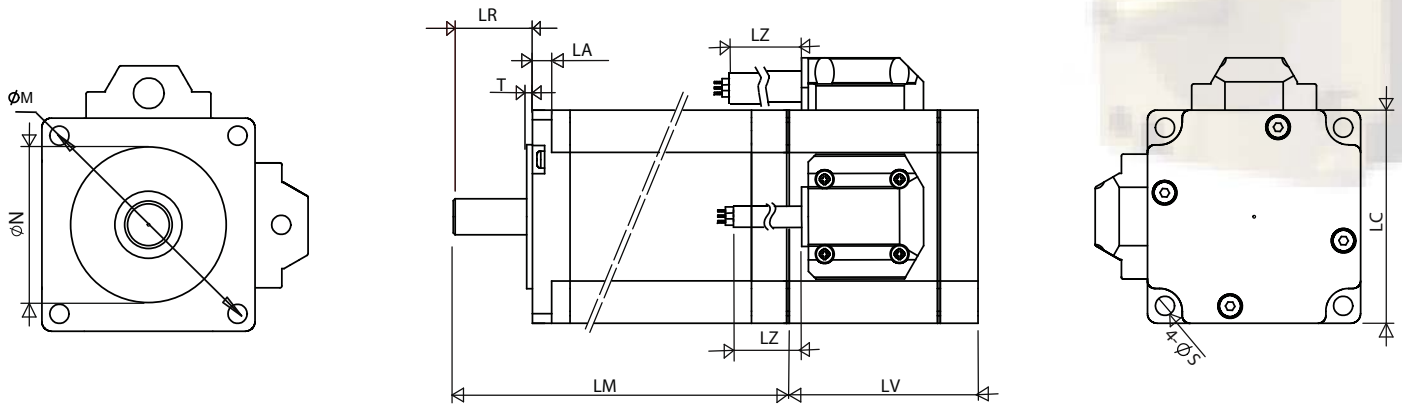
Electrical Specifications

NEMA 23																		
Index	Model Number	Weight		Torque Constant (Peak) (L2L)		Voltage Constant	Cont. Stall Torque		Cont. stall current	Peak Stall Torque		Peak Stall Current	Max BEMF (Peak) (L2L)	Max Speed	L-to-L Resistance	L-to-L Inductance	Rotor Inertia	
		W		K_T		K_E	T_{cs}		I_{cs}	T_P		I_P	U_{max}	n_{max}	R	L	J	
		kg	lb	Nm/A	lb-in/A	V/krpm	Nm	lb-in	A	Nm	lb-in	A	V	rpm	Ohms	mH	kg-cm ²	lb-in-sec ²
13	IG 23 AS - 8	0.62	1.37	0.09	0.78	8.00	0.24	2.12	2.72	0.72	6.37	8.16	64.00	8000	0.60	0.72	0.30	0.00
14	IG 23 BS - 8	0.96	2.12	0.09	0.78	8.00	0.48	4.25	5.44	1.44	12.75	16.32	64.00	8000	0.28	0.35	0.60	0.00
15	IG 23 CS - 8	1.20	2.65	0.09	0.78	8.00	0.72	6.37	8.16	2.16	19.12	24.48	64.00	8000	0.21	0.24	0.90	0.00
16	IG 23 AS - 11	0.62	1.37	0.12	1.07	11.00	0.24	2.12	1.98	0.72	6.37	5.94	88.00	8000	1.40	1.90	0.30	0.00
17	IG 23 BS - 11	0.96	2.12	0.12	1.07	11.00	0.48	4.25	3.96	1.44	12.75	11.87	88.00	8000	0.55	0.75	0.60	0.00
18	IG 23 CS - 11	1.20	2.65	0.12	1.07	11.00	0.72	6.37	5.94	2.16	19.12	17.81	88.00	8000	0.45	0.60	0.90	0.00
19	IG 23 AS - 16	0.62	1.37	0.18	1.56	16.00	0.24	2.12	1.36	0.72	6.37	4.08	128.00	8000	2.65	3.20	0.30	0.00
20	IG 23 BS - 16	0.96	2.12	0.18	1.56	16.00	0.48	4.25	2.72	1.44	12.75	8.16	128.00	8000	1.00	1.35	0.60	0.00
21	IG 23 CS - 16	1.20	2.65	0.18	1.56	16.00	0.72	6.37	4.08	2.16	19.12	12.24	128.00	8000	0.78	1.10	0.90	0.00
22	IG 23 AS - 22	0.62	1.37	0.24	2.15	22.00	0.24	2.12	0.99	0.72	6.37	2.97	176.00	8000	5.90	9.30	0.30	0.00
23	IG 23 BS - 22	0.96	2.12	0.24	2.15	22.00	0.48	4.25	1.98	1.44	12.75	5.94	176.00	8000	2.20	2.90	0.60	0.00
24	IG 23 CS - 22	1.20	2.65	0.24	2.15	22.00	0.72	6.37	2.97	2.16	19.12	8.90	176.00	8000	1.80	2.40	0.90	0.00
25	IG 23 AS - 32	0.62	1.37	0.35	3.12	32.00	0.24	2.12	0.68	0.72	6.37	2.04	256.00	8000	15.20	18.20	0.30	0.00
26	IG 23 BS - 32	0.96	2.12	0.35	3.12	32.00	0.48	4.25	1.36	1.44	12.75	4.08	256.00	8000	6.20	7.10	0.60	0.00
27	IG 23 CS - 32	1.20	2.65	0.35	3.12	32.00	0.72	6.37	2.04	2.16	19.12	6.12	256.00	8000	4.60	5.70	0.90	0.00
28	IG 23 AS - 44	0.62	1.37	0.49	4.29	44.00	0.24	2.12	0.49	0.72	6.37	1.48	352.00	8000	28.50	35.60	0.30	0.00
29	IG 23 BS - 44	0.96	2.12	0.49	4.29	44.00	0.48	4.25	0.99	1.44	12.75	2.97	352.00	8000	11.50	14.10	0.60	0.00
30	IG 23 CS - 44	1.20	2.65	0.49	4.29	44.00	0.72	6.37	1.48	2.16	19.12	4.45	352.00	8000	9.10	12.30	0.90	0.00
31	IG 23 AS - 64	0.62	1.37	0.71	6.25	64.00	0.24	2.12	0.34	0.72	6.37	1.02	512.00	8000	67.20	80.90	0.30	0.00
32	IG 23 BS - 64	0.96	2.12	0.71	6.25	64.00	0.48	4.25	0.68	1.44	12.75	2.04	512.00	8000	26.90	33.10	0.60	0.00
33	IG 23 CS - 64	1.20	2.65	0.71	6.25	64.00	0.72	6.37	1.02	2.16	19.12	3.06	512.00	8000	21.30	27.60	0.90	0.00
34	IG 23 AS - 88	0.62	1.37	0.97	8.59	88.00	0.24	2.12	0.25	0.72	6.37	0.74	704.00	8000	107.00	134.50	0.30	0.00
35	IG 23 BS - 88	0.96	2.12	0.97	8.59	88.00	0.48	4.25	0.49	1.44	12.75	1.48	704.00	8000	43.30	54.50	0.60	0.00
36	IG 23 CS - 88	1.20	2.65	0.97	8.59	88.00	0.72	6.37	0.74	2.16	19.12	2.23	704.00	8000	35.80	45.20	0.90	0.00
37	IG 23 AS - 130	0.62	1.37	1.43	12.69	130.00	0.24	2.12	0.17	0.72	6.37	0.50	1,040.00	8000	170.20	212.50	0.30	0.00
38	IG 23 BS - 130	0.96	2.12	1.43	12.69	130.00	0.48	4.25	0.33	1.44	12.75	1.00	1,040.00	8000	68.50	86.84	0.60	0.00
39	IG 23 CS - 130	1.20	2.65	1.43	12.69	130.00	0.72	6.37	0.50	2.16	19.12	1.51	1,040.00	8000	56.70	71.80	0.90	0.00
40	IG 23 AS - 180	0.62	1.37	1.98	17.57	180.00	0.24	2.12	0.12	0.72	6.37	0.36	1,440.00	8000	307.40	406.50	0.30	0.00
41	IG 23 BS - 180	0.96	2.12	1.98	17.57	180.00	0.48	4.25	0.24	1.44	12.75	0.73	1,440.00	8000	131.00	166.10	0.60	0.00
42	IG 23 CS - 180	1.20	2.65	1.98	17.57	180.00	0.72	6.37	0.36	2.16	19.12	1.09	1,440.00	8000	101.00	136.70	0.90	0.00

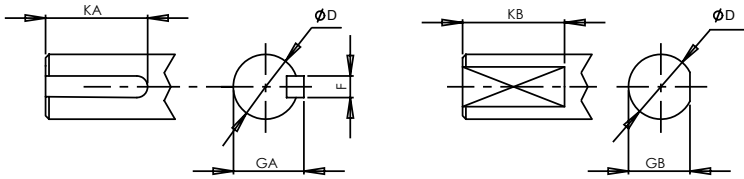
L2L: Line-to-Line

IG 23 with S Housing and EE Feedback

Motor Drawing



FRONT SHAFT OPTIONS
 (1) SMOOTH SHAFT, AS SHOWN IN THE VIEWS
 (2) KEYWAY SHAFT
 (3) FLAT SHAFT

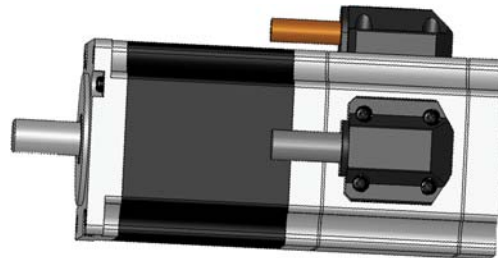


NOTE:
 THE MOTOR IS RATED IP64 AND BY ADDING FRONT
 SHAFT SEAL IT'S RATING BECOMES IP65

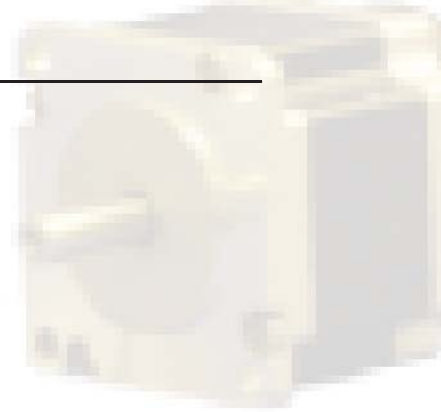
Units: inches (mm)

IG		LM	LV	LA	T	LR	LC	LZ	N	S	M
23	A	2.795 (71)	2.00 (50.7)	0.20 (5.1)	0.060 (1.5)	0.825 (21)	2.220 (56.4)	18 (457.2)	1.500 ⁰ _{-0.002} (38.10 ⁰ _{-0.05})	0.200 (5.1)	2.625 (66.68)
	B	3.858 (98)									
	C	4.921 (125)									

Imperial Shaft Option (S/F/K), Units: Inches							Metric Shaft Option (X/Y/Z), Units: mm					
IG	D	F	GA	KA	GB	KB	D	F	GA	KA	GB	KB
23	0.3750 ⁰ _{-0.0005}	0.0938 ⁰ _{-0.001}	0.416 ⁰ _{-0.002}	0.50	0.340 ⁰ _{-0.004}	0.50	10 ⁰ _{-0.013}	3 ⁰ _{-0.025}	11.2 ⁰ _{-0.051}	15	9.0 ⁰ _{-0.1}	15.0



Mar, 14, 06



Power Cable Wire Code

Power Cable for Non-Brake Wire Code

Wire Code	Function
WIRE #1	PHASE U
WIRE #2	PHASE V
WIRE #3	PHASE W
GRN/YEL	Ground
Shield	Shield

SAB CC600CYT, 4 Pins, AWG16/20 (depending on current), 600V, 105C, UL, CE, CSA

Endat Encoder

EnDat Encoder Data ECI 1116

Parameter	Values
Power Supply	5 VDC \pm 5% max. 260 mA
Electrical Connection	PCB connector, 12-pin
Absolute position values	65536 positions per revolution
Interface	EnDat 21 (purley serial data transmission)
Code	Pure Binary
Electrically permissible speed	\leq 12000 rpm
Incremental signals	2 sinusoidal signals A and B, typically 0.5 Vpp to 1.1 Vpp (0.77 V at PWT 18)
Signal period/System accuracy	16/ \pm 480 ^o (typ. \pm 310 ^o)
Maximum cable length	150 m (492 ft)
Moment of inertia for rotor	0.76 x 10 ⁻⁶ kgm ²
Permissible axial motion of measured shaft	\pm 0.2 mm
Vibration 55 to 2000 Hz	\leq 300 m/s ² (IEC 60 068-2-6)
Shock 6 ms	\leq 1000 m/s ² (IEC 60 068-2-27)
Operating Temperature	-20 ^o C to 115 ^o C

EnDat Encoder Cable

Wire Code	Function
BRN/BLK	A+
BLK/BRN	A-
BLU/BLK	B+
BLK/BLU	B-
ORN/BLK	DAT-
BLK/ORN	DATA-
YEL/BLK	CLK
BLK/YEL	CLK-
GRN/BLK	+5V Sensor
BLK/GRN	GND Sensor
WHT/BLK	+5V Power
BLK/WHT	GND Power
RED/WHT	Thermistor 1
WHT/RED	Thermistor 2
Shield	Shield