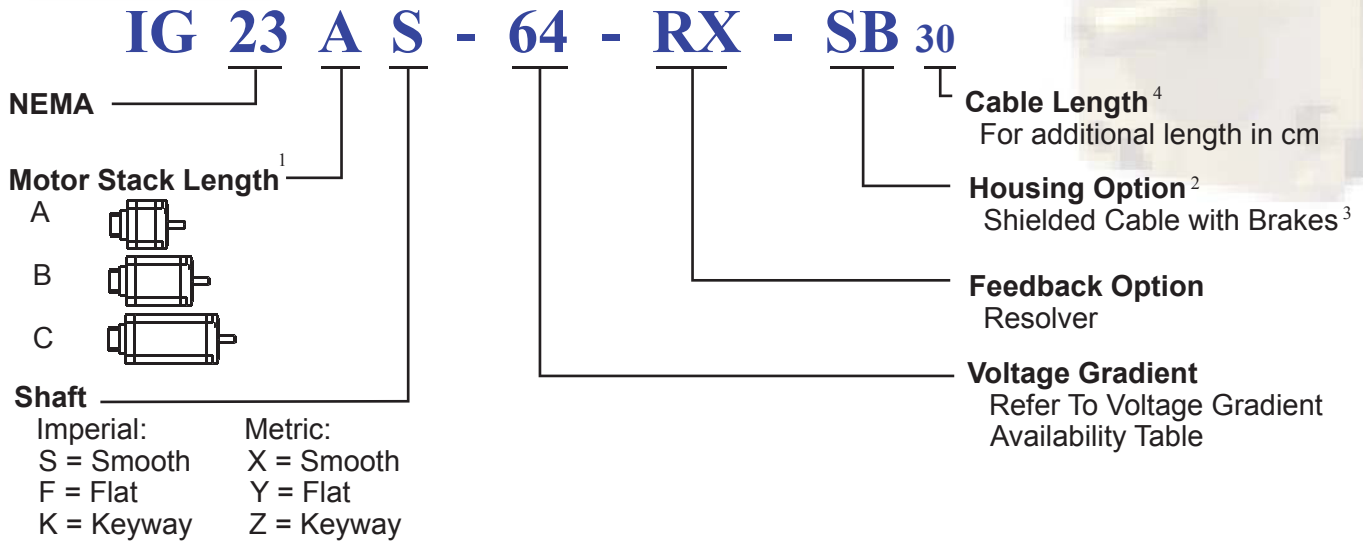


# IG 23 with SB Housing and RX Feedback

## Model Numbering

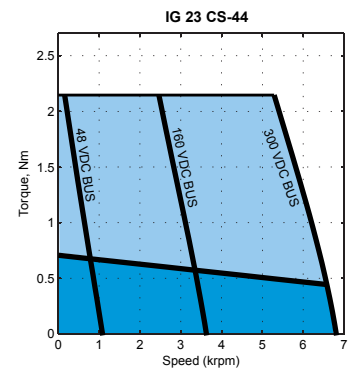
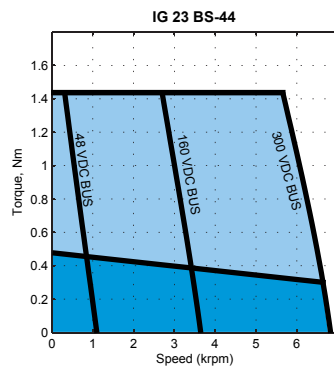
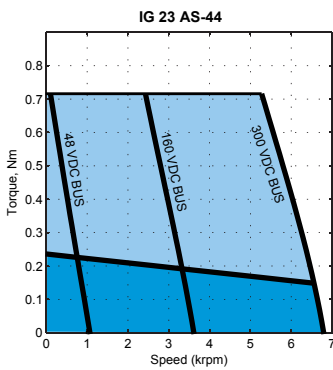


1. Refer to Dimensions for the exact length and shaft options
2. All the motors are rated IP64 and by adding front shaft seal it's rating becomes IP65
3. The motor comes with 18 inches (46 cm) shielded cable
4. Blank For Standard length (18 inches = 46 cm)

## 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

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# IG 23 with SB Housing and RX Feedback

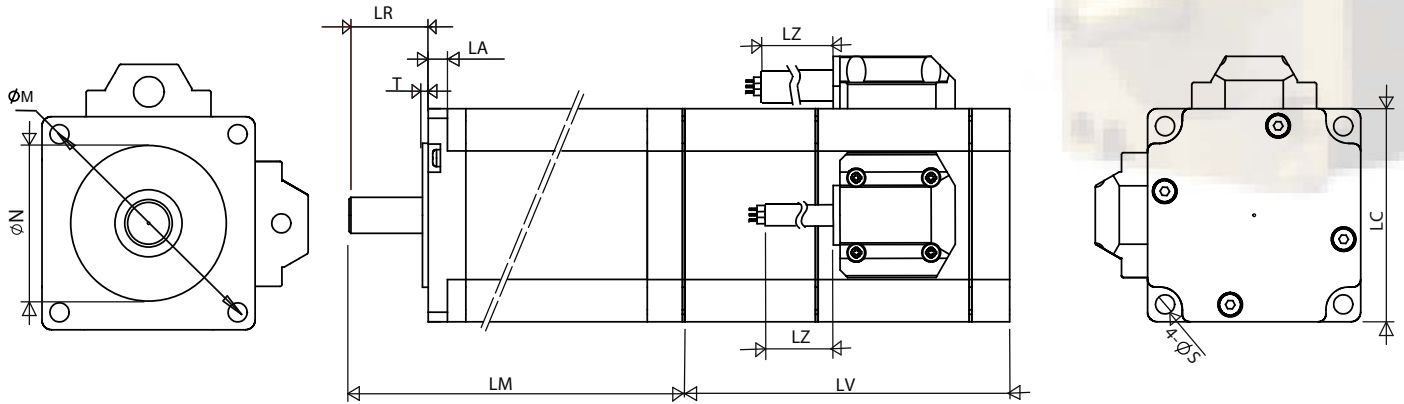
## Electrical Specifications

| 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 <sup>2</sup> | lb-in-sec <sup>2</sup> |
| 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                   |

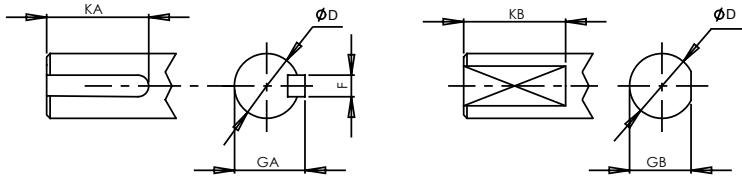
L2L: Line-to-Line

# IG 23 with SB Housing and RX Feedback

## Motor Drawing



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

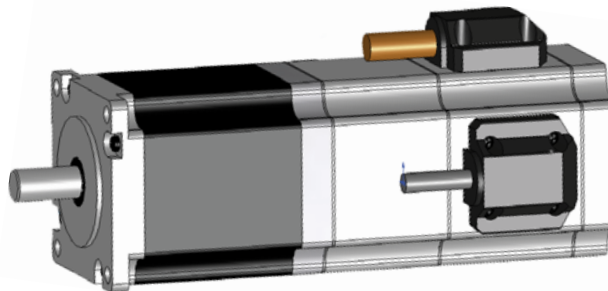


NOTE:  
 ALL THE MOTORS ARE RATED IP64 AND BY ADDING FRONT  
 SHAFT SEAL, IT'S RATING BECOMES IP65

Units: inches (mm)

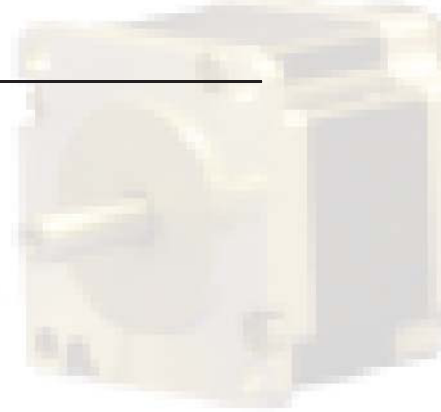
| IG |   | LM          | LV             | LA            | T              | LR            | LC              | LZ            | N  | S              | M                |
|----|---|-------------|----------------|---------------|----------------|---------------|-----------------|---------------|--|----------------|------------------|
| 23 | A | 2.795 (71)  | 3.38<br>(85.9) | 0.20<br>(5.1) | 0.060<br>(1.5) | 0.825<br>(21) | 2.220<br>(56.4) | 18<br>(457.2) | 1.500 <sup>0</sup> <sub>-0.002</sub><br>(38.10 <sup>0</sup> <sub>-0.05</sub> ) | 0.200<br>(5.1) | 2.625<br>(66.68) |
|    | B | 3.858 (98)  |                |               |                |               |                 |               |  |                |                  |
|    | C | 4.921 (125) |                |               |                |               |                 |               |  |                |                  |

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



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# IG 23 with SB Housing and RX Feedback



## Power Supply

### Power Cable for Brake Wire Code

| Wire Code | Function |
|-----------|----------|
| WIRE #1   | PHASE U  |
| WIRE #2   | PHASE V  |
| WIRE #3   | PHASE W  |
| WIRE #4   | Brake 1  |
| WIRE #5   | Brake 2  |
| GRN/YEL   | Ground   |
| Shield    | Shield   |

SAB CC600CYT, 7 Pins, AWG16/20 (depending on current), 600V, 105C, UL, CE, CSA

### 24vdc Fail-Safe Brake Data

| IG | Supply Power (mA) | Holding Torque lb-in (Nm) |
|----|-------------------|---------------------------|
| 23 | 375               | 5 (0.56)                  |

## Resolver

### Resolver Cable

| Cable Code | Description  |
|------------|--------------|
| BLK        | SIN-(S4)     |
| BRN        | SIN+(S2)     |
| GRN        | EXCT-(R2)    |
| RED        | Thermistor 1 |
| ORN        | Thermistor 2 |
| YEL        | EXCT+(R1)    |
| VIO        | COS+(S1)     |
| BLU        | COS-(S3)     |
| N.C.       | -            |

Olflex 027715, AWG24, 4 Pairs 30V, 80C, UL, CE, CSA

