

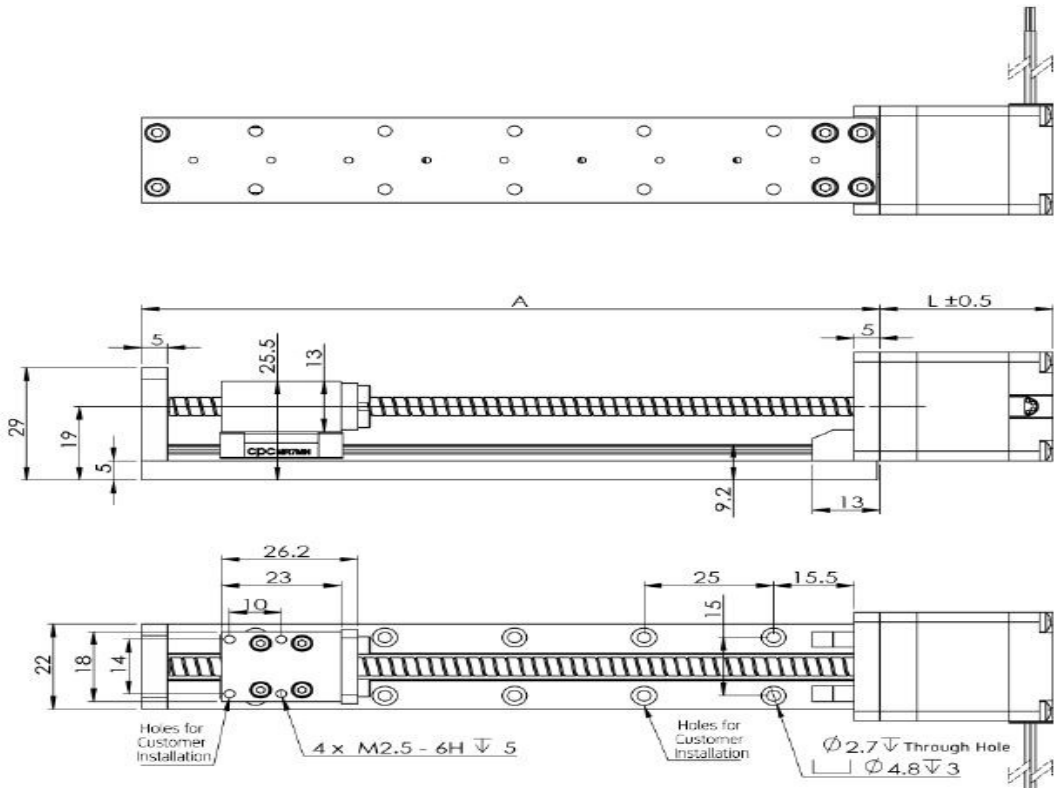
Lead Screw Driven Stages-NEMA11

Continuous thrust to 33 lbf (150N)



Optional Screw and Step Motor Size

| Size A | Stroke B | Motor Length L (mm) | |
|--------|----------|---------------------|----|
| 62.5 | 20 | 33.35 | 45 |
| 82.5 | 40 | 33.35 | 45 |
| 102.5 | 60 | 33.35 | 45 |
| 122.5 | 80 | 33.35 | 45 |
| 142.5 | 100 | 33.35 | 45 |
| 192.5 | 150 | 33.35 | 45 |
| 242.5 | 200 | 33.35 | 45 |
| 292.5 | 250 | 33.35 | 45 |
| 342.5 | 300 | 33.35 | 45 |



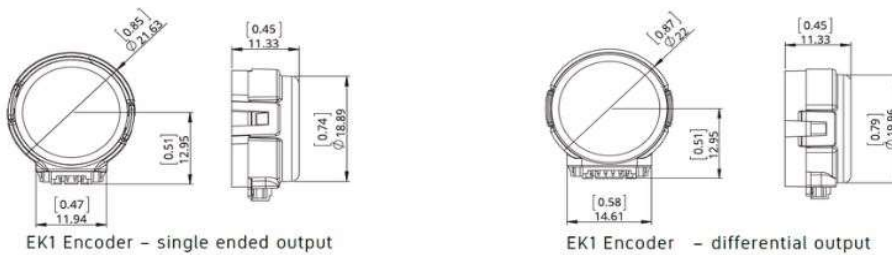
NEMA 11 Motor Characteristics

| Motor | Voltage (V) | Current (A) | Resistance (Ω) | Inductance (mH) | Lead Wire No. | Motor Length (mm) |
|---------|-------------|-------------|-------------------------|-----------------|---------------|-------------------|
| 11-2105 | 4.5 | 0.5 | 9.1 | 6.0 | 4 | 34 |
| 11-2110 | 2.2 | 1.0 | 2.2 | 1.5 | 4 | 34 |
| 11-2209 | 3.9 | 0.95 | 4.1 | 4.0 | 4 | 45 |

Available Lead Screws and Travel per Step

| Screw Diameter (inch) | Screw Diameter (mm) | Lead (inch) | Lead (mm) | Lead Code | Travel Per Step (mm) |
|-----------------------|---------------------|-------------|-----------|-----------|----------------------|
| 0.188 | 4.7752 | 0.025 | 0.635 | A | 0.0032 |
| 0.188 | 4.7752 | 0.05 | 1.27 | D | 0.0063 |
| 0.188 | 4.7752 | 0.1 | 2.54 | K | 0.0127 |
| 0.188 | 4.7752 | 0.2 | 5.08 | R | 0.0254 |
| 0.188 | 4.7752 | 0.4 | 10.16 | X | 0.0508 |

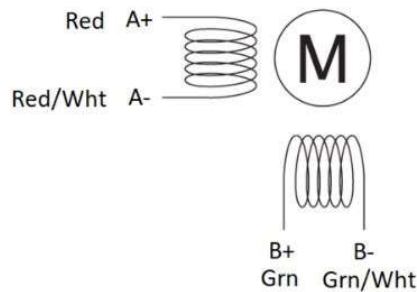
NEMA 11 ENCODER OPTIONS



- **EK1 Encoder (Used for Size 8, 11, 14, 17 Motor)*No Index**

| | | | | | | | | | | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Resolution(CPR) | 100 | 108 | 120 | 125 | 128 | 200 | 250 | 256 | 300 | 360 | 400 | 500 | 1000 | 512 | 720 | 800 |
| Single ended output | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Differential output | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |

2 Phase, 4 Wires - Wiring Diagram



Size 11 (28mm) Performance Curves

