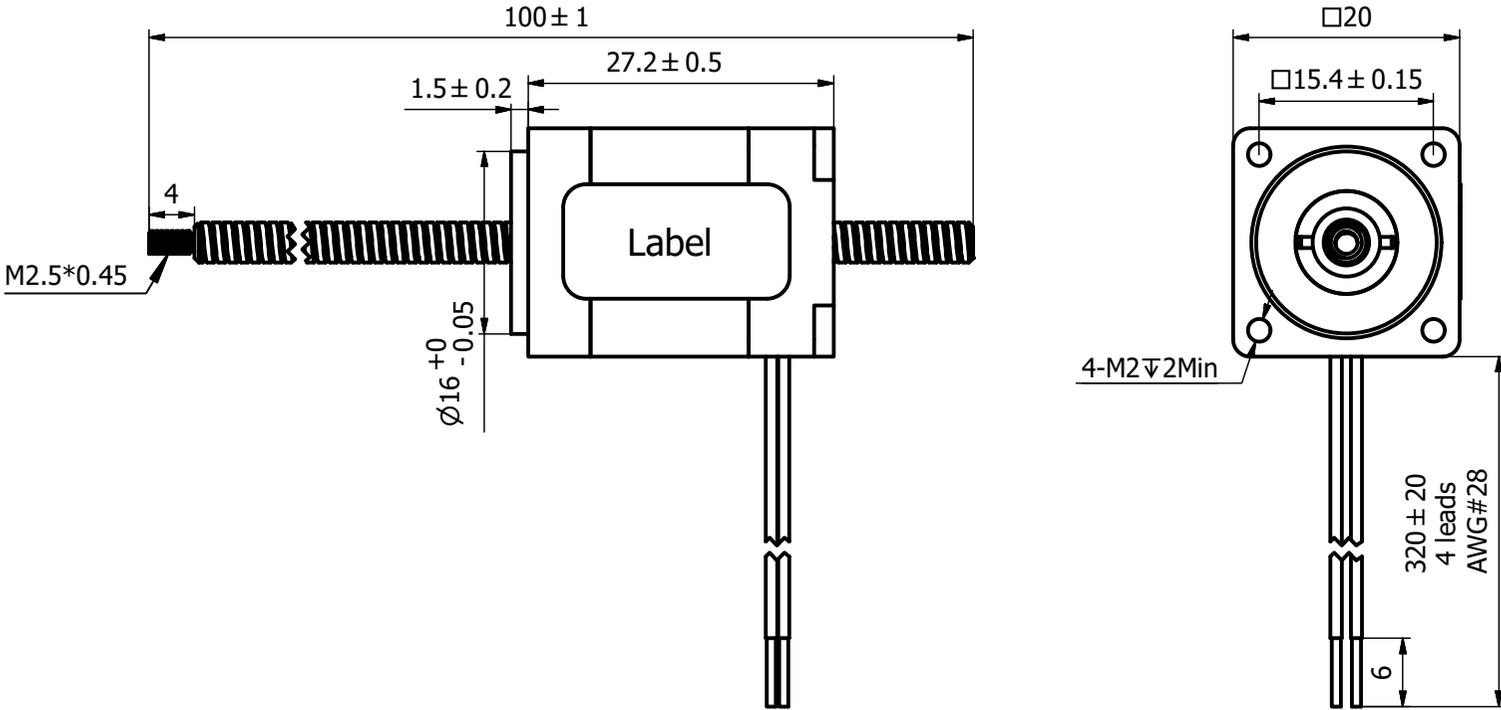


| REVISION |      |             |          |
|----------|------|-------------|----------|
| REV.     | DATE | DESCRIPTION | DRAWN BY |



**Notes,**  
 1. To maximize output force and life of linear actuators, radial load on lead screws should be avoided or be kept at a minimum.

| <b>CUSTOMER</b>     |      | NOTICE TO PERSONS RECEIVING THIS DRAWING<br><small>THIS DRAWING IS ONLY CONDITIONALLY ISSUED, AND FOR THE SOLE PURPOSE OF INFORMING LICENSEES AND ASSOCIATE CONTRACTORS OF DINGS' MOTION, AND VENDORS THERE TO AND CUSTOMERS THEREOF, RECEIPT OR POSSESSION THEREOF DOES NOT CONFER TO TRANSFER ANY RIGHT IN THE SUBJECT MATTER OF THE DRAWING. THE DESIGN, CONSTRUCTION, TECHNICAL INFORMATION AND ALL OTHER SUBJECT MATTER SHOWN IN THIS DRAWING ARE AND REMAIN, EXCEPT AS MAY BE OTHERWISE INDICATED BY WRITTEN NOTICE HEREON, THE EXCLUSIVE PROPERTY OF SAID CORPORATION. THIS DRAWING MAY BE REPRODUCED ONLY BY LICENSEES AND ASSOCIATE CONTRACTORS OF SAID CORPORATION AND ONLY FOR LICENSED MANUFACTURE, AND BY VENDORS MANUFACTURING FOR SAID CORPORATION AND ONLY FOR LICENSEES AND ASSOCIATE CONTRACTORS.</small> |       |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
|---------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|--|----------------------------------------------------------------------------------------------------------|---|-----------------------------|--|--------------|--|--------|---|--|---|--|------------|---|--|---|--|----------|--|---|--|---|------------|--|---|--|---|-----|---|--|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|--|---------|--|-----|------|------|-------|-----|------|-------|-----|------|------|--------|------|--------|------|---------|------|--------|--|------|
| <b>WIRING CHART</b> |      | <b>EXCITATION SEQUENCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |   |  | UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MILLIMETERS AND TOLERANCES ARE AS BELOW PER ISO2768-ck. |   | DRAWN Alice DATE 2020/11/12 |  | <b>DINGS</b> |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
|                     |      | <table border="1"> <tr> <td>CW</td> <td colspan="4">→</td> </tr> <tr> <td>Red A+</td> <td>+</td> <td></td> <td>-</td> <td></td> </tr> <tr> <td>Red/wht A-</td> <td>-</td> <td></td> <td>+</td> <td></td> </tr> <tr> <td>Green B+</td> <td></td> <td>+</td> <td></td> <td>-</td> </tr> <tr> <td>Grn/wht B-</td> <td></td> <td>-</td> <td></td> <td>+</td> </tr> <tr> <td>CCW</td> <td colspan="4">←</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                      |       |   |  | CW                                                                                                       | → |                             |  |              |  | Red A+ | + |  | - |  | Red/wht A- | - |  | + |  | Green B+ |  | + |  | - | Grn/wht B- |  | - |  | + | CCW | ← |  |  |  | <table border="1"> <thead> <tr> <th colspan="2">LINEAR</th> <th colspan="2">ANGULAR</th> </tr> </thead> <tbody> <tr> <td>0~3</td> <td>±0.2</td> <td>0~10</td> <td>±1.5°</td> </tr> <tr> <td>3~6</td> <td>±0.5</td> <td>10~50</td> <td>±1°</td> </tr> <tr> <td>6~30</td> <td>±0.8</td> <td>50~120</td> <td>±30'</td> </tr> <tr> <td>30~120</td> <td>±1.5</td> <td>120~400</td> <td>±15'</td> </tr> </tbody> </table> |  | LINEAR |  | ANGULAR |  | 0~3 | ±0.2 | 0~10 | ±1.5° | 3~6 | ±0.5 | 10~50 | ±1° | 6~30 | ±0.8 | 50~120 | ±30' | 30~120 | ±1.5 | 120~400 | ±15' | APPRVD |  | DATE |
| CW                  | →    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| Red A+              | +    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -     |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| Red/wht A-          | -    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | +     |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| Green B+            |      | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       | - |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| Grn/wht B-          |      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       | + |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| CCW                 | ←    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| LINEAR              |      | ANGULAR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| 0~3                 | ±0.2 | 0~10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ±1.5° |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| 3~6                 | ±0.5 | 10~50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ±1°   |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| 6~30                | ±0.8 | 50~120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±30'  |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
| 30~120              | ±1.5 | 120~400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ±15'  |   |  |                                                                                                          |   |                             |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
|                     |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |   |  | MODEL 8N21-100                                                                                           |   | SIZE A3 SHEET 1 OF 1        |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |
|                     |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |   |  | SCALE 1: 1                                                                                               |   | REV 00                      |  |              |  |        |   |  |   |  |            |   |  |   |  |          |  |   |  |   |            |  |   |  |   |     |   |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |  |         |  |     |      |      |       |     |      |       |     |      |      |        |      |        |      |         |      |        |  |      |