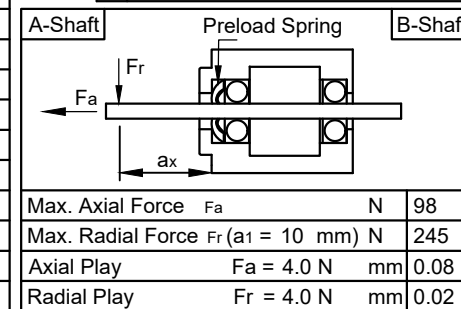
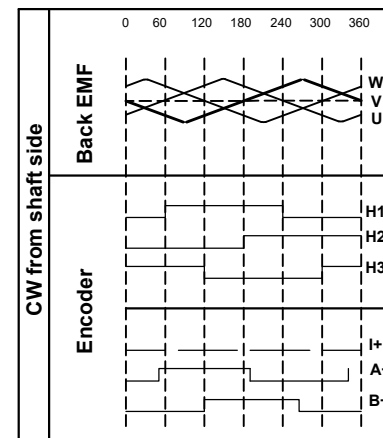
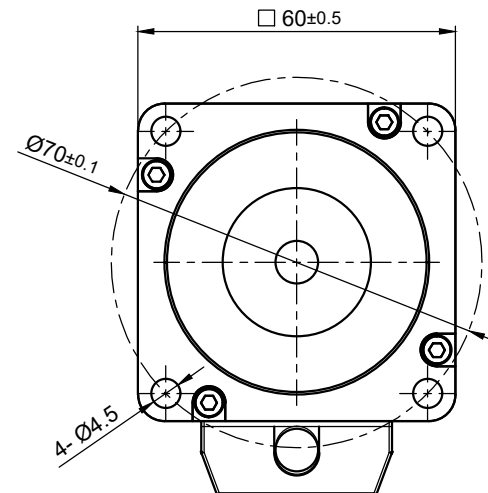
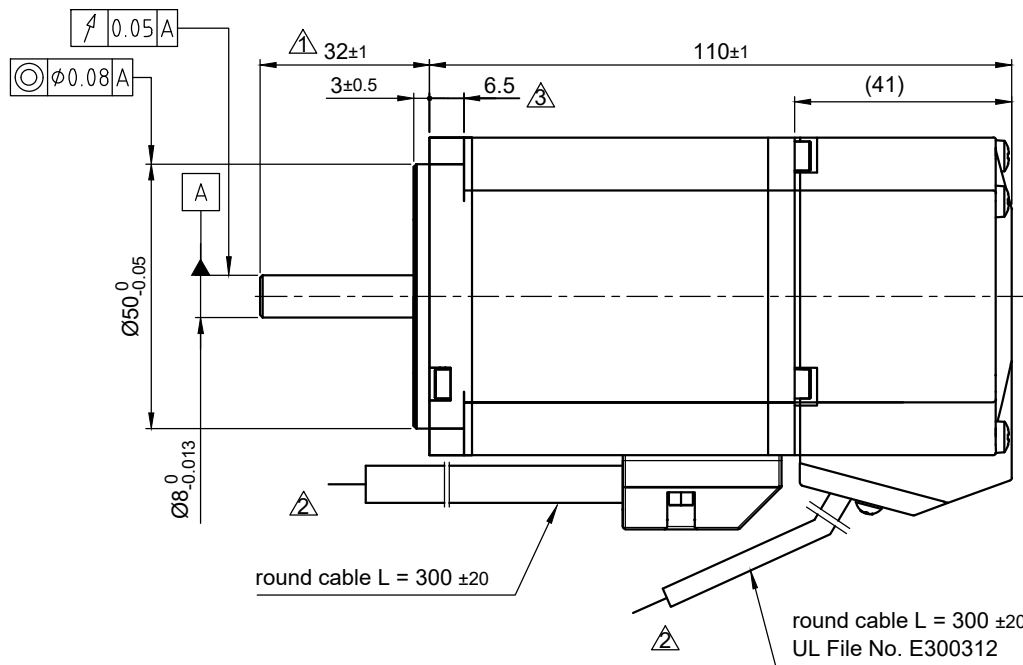
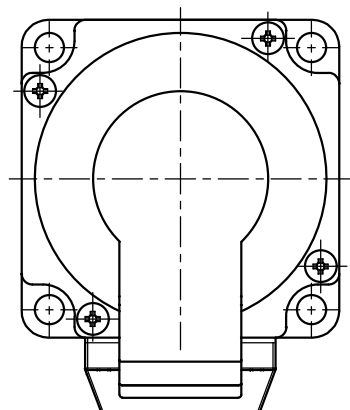




### MOTOR SPECIFICATION

|                                  |                   |                      |
|----------------------------------|-------------------|----------------------|
| No. of Poles                     |                   | 8                    |
| Rated Voltage                    | V DC              | 48                   |
| Current - No Load / Rated / Peak | A                 | 1.27 / 6 / 18        |
| Resistance Line to Line          | ±10% Ω            | 0.56                 |
| Inductance Line to Line (1kHz)   | ±20% mH           | 1.2                  |
| Torque - Rated / Peak            | Nm                | 0.64 / 1.92          |
| Torque Constant                  | Nm/A              | 0.107                |
| Rated Power                      | W                 | 200                  |
| Speed - No Load / Rated          | ±10% rpm          | 5200 / 3000          |
| Rotor Inertia                    | kg m <sup>2</sup> | 21 x10 <sup>-6</sup> |

### GENERAL MOTOR SPECIFICATION

|                                                |      |            |
|------------------------------------------------|------|------------|
| Ambient Temperature                            | °C   | -20 ... 40 |
| Max. Temperature Rise (at standstill)          | °C   | 90         |
| Max. Ambient Humidity (non condensing)         | %    | 90         |
| Insulation Class                               |      | B          |
| Insulation Resistance                          | MΩ   | 100        |
| Dielectric Strength (for 1 min - coil to case) | V AC | 500        |
| Protection Class                               | IP   | 65         |

### WIRING DIAGRAM

|       | Colour | Function | Lead Gauge     |
|-------|--------|----------|----------------|
| Motor | YE     | U        | UL758<br>AWG16 |
|       | RD     | V        |                |
|       | BK     | W        |                |

### ENCODER SPECIFICATION

|                                  |             |       |
|----------------------------------|-------------|-------|
| Operating Voltage                | ±5% V DC    | +5 V  |
| Resolution                       | cpr         | 2500  |
| Resolution (cpr with quadrature) | ppr         | 10000 |
| No. of Channels                  |             | 3     |
| Signal Type                      | incremental |       |
| Index / Line Driver              | yes / yes   |       |

### PIN Assignment Encoder

| Colour | Function |
|--------|----------|
| RD     | +5V      |
| BK     | GND      |
| -      | -        |
| BN/BK  | H1+      |
| BN     | H1-      |
| YE     | I+       |
| GN     | B+       |
| BU/BK  | A+       |
| GY/BK  | H3+      |
| WH/BK  | H2+      |
| YE/BK  | I-       |
| GN/BK  | B-       |
| BU     | A-       |
| GY     | H3-      |
| WH     | H2-      |
| -      | Shield   |

| ISO 8015 |                | ISO 1302  |            | ISO 2768 cK                                                                           |            | ISO 13715 |           |
|----------|----------------|-----------|------------|---------------------------------------------------------------------------------------|------------|-----------|-----------|
|          |                |           |            |                                                                                       | Date       |           | Name      |
| 03       | add. dimension | Schneid_A | 20.12.2023 | Drawn                                                                                 | 26.03.2020 |           | Schneid_A |
| 02       | revise drawing | Schneid_A | 24.11.2020 | Reviewed                                                                              | 05.01.2024 |           | Reith_S   |
| 01       | change A-shaft | Schneid_A | 07.05.2020 | Released                                                                              | 05.01.2024 |           | Reith_S   |
| REV      | Rev. Text      | Name      | Date       |  |            |           |           |

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State: Released

Rev: 03

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