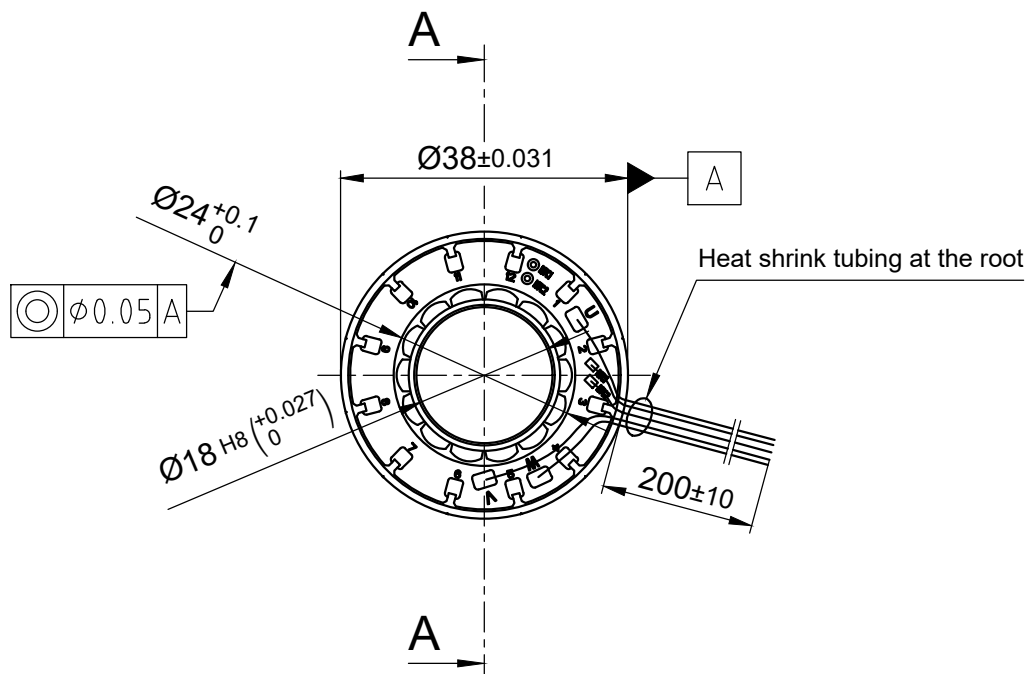
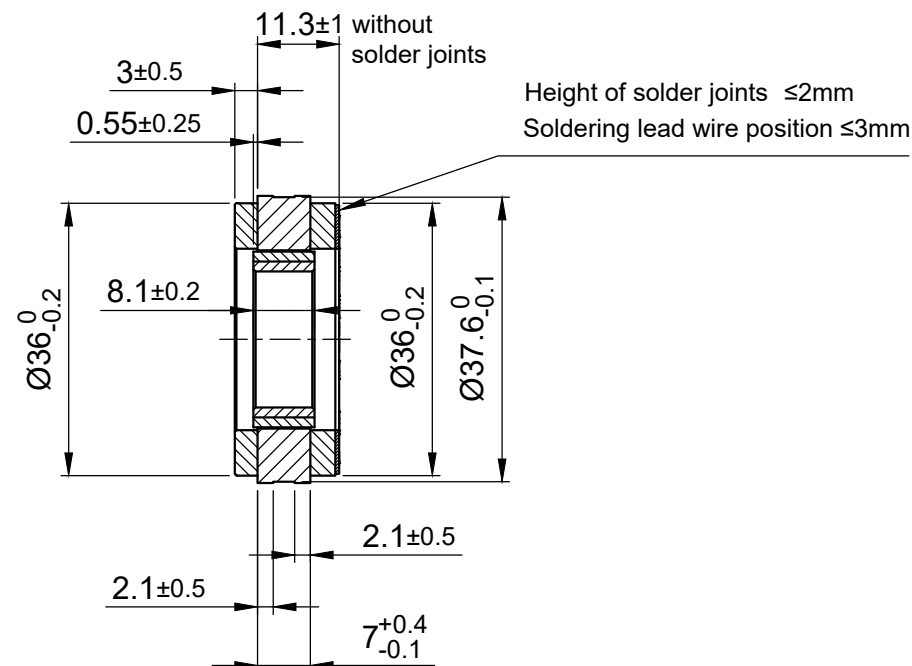




View A-A



#### MOTOR SPECIFICATION

|                                |                                        |
|--------------------------------|----------------------------------------|
| No. of Poles                   | 14                                     |
| Rated Voltage                  | V DC 24                                |
| Current - Rated / Peak         | A 5.5 / 13.5                           |
| Resistance Line to Line        | $\pm 10\% \Omega @ 20^\circ$ 0.365     |
| Inductance Line to Line (1kHz) | $\pm 20\% \text{ mH}$ 0.32             |
| Torque - Rated / Peak          | Nm 0.1 / 0.3                           |
| Torque Constant                | Nm/A 0.02548                           |
| Rated Power                    | W 83                                   |
| Speed - No Load / Rated        | $\pm 10\% \text{ rpm}$ 11000 / 8000    |
| Rotor Inertia                  | $\text{kg m}^2$ 0.968 $\times 10^{-6}$ |

#### WIRING DIAGRAM

|            | Colour | Function | Lead Gauge                       |
|------------|--------|----------|----------------------------------|
| Motor      | YE     | U        | AFR250<br>0.5mm <sup>2</sup>     |
|            | RD     | V        |                                  |
|            | BK     | W        |                                  |
| Thermistor | WH     | NTC1     | AFR250-SY<br>0.15mm <sup>2</sup> |
|            | WH     | NTC2     |                                  |

Thermistor (NTC): R25: 100k $\Omega \pm 5\%$ ; B25/50: 3950 $\pm 1\%$

#### GENERAL MOTOR SPECIFICATION

|                                                |                  |              |
|------------------------------------------------|------------------|--------------|
| Ambient Temperature                            | $^\circ\text{C}$ | -20 ... 50   |
| Storage Temperature                            | $^\circ\text{C}$ | -20 ... 85   |
| Max. Temperature Rise (at standstill)          | $^\circ\text{C}$ | 80           |
| Max. Ambient Humidity (non condensing)         | %                | 85           |
| Insulation Class                               |                  | B            |
| Insulation Resistance                          | M $\Omega$       | 100 @ 500VDC |
| Dielectric Strength (for 1 sec - coil to case) | V AC             | 600          |

| ISO 8015 |                  | ISO 1302  |            | ISO 2768 cK                                                                           |            | ISO 13715       |  |              |  | Weight: ±10% 0.058 kg |  |
|----------|------------------|-----------|------------|---------------------------------------------------------------------------------------|------------|-----------------|--|--------------|--|-----------------------|--|
|          |                  |           |            |                                                                                       | Date       | Name            |  | DKA38M024080 |  |                       |  |
|          |                  |           |            | Drawn                                                                                 | 07.11.2024 | Schneid_A       |  |              |  |                       |  |
|          |                  |           |            | Reviewed                                                                              | 10.02.2025 | Reith_S         |  |              |  |                       |  |
|          |                  |           |            | Released                                                                              | 10.02.2025 | Reith_S         |  |              |  |                       |  |
| 01       | CR_Nr. 2025-0043 | Schneid_A | 23.07.2025 |  |            | 20002687        |  |              |  | A4 Page 1             |  |
| REV      | Rev. Text        | Name      | Date       |                                                                                       |            | State: Released |  | Rev: 01      |  | CONFIDENTIAL          |  |