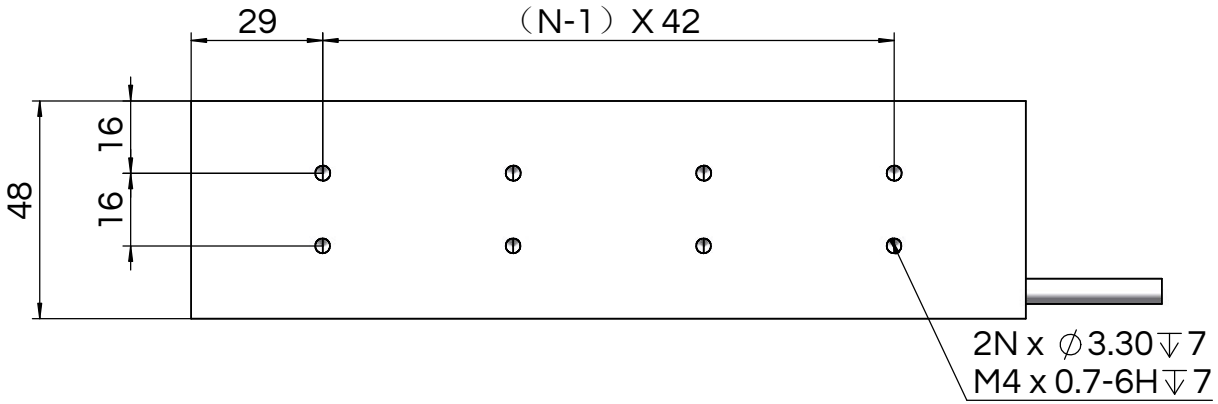
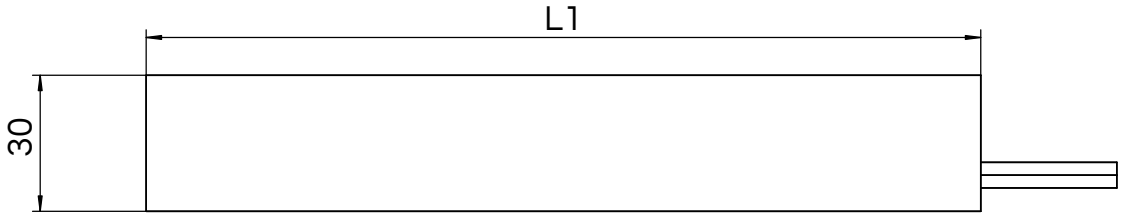
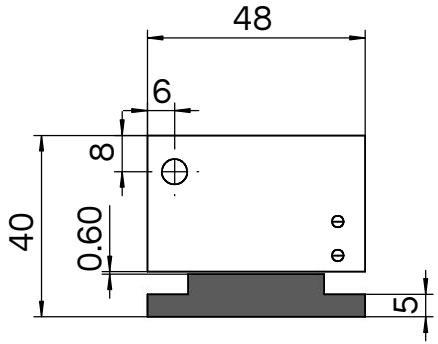



## Motor Assembly




| Forcer | Dimensional Variations | |
|---|---|---|
| | $L_1$ | N |
| TPM48-S1 | 100 | 2 |
| TPM48-S2 | 184 | 4 |
| TPM48-S3 | 268 | 6 |

| Technical data | Unit | TPM48-S1 Series | TPM48-S2 Parallel | TPM48-S3 Parallel |
|---|---|---|---|---|
| Peak force | N | 206.4 | 434.1 | 656.4 |
| Continuous force | N | 68.8 | 144.7 | 218.8 |
| Motor constant at T_max | N/Sqrt(w) | 7.9 | 11.6 | 14.5 |
| Winding code | - | S1 | S2 | S3 |
| Peak current | Arms | 9 | 18 | 18 |
| Continuous current | Arms | 2.3 | 4.6 | 4.6 |
| Maximum continuous power dissipation | W | 76.2 | 156.5 | 228.5 |
| Resistance | Ω | 7.2 | 3.7 | 5.4 |
| Inductance | mH | 30 | 15 | 22.9 |
| Back EMF constant | Vpeak/(m/s), L-L | 23.9 | 25.2 | 38.1 |
| Force constant | N/Arms | 29.9 | 31.5 | 47.6 |
| Electrical time constant | ms | 4.2 | 4.1 | 4.2 |
| Max. DC bus voltage | V | 330 | 330 | 330 |
| Attraction force | kN | 0.5 | 1 | 1.5 |
| Magnetic period | mm | 24 | 24 | 24 |
| Weight of forcer | kg | 0.67 | 1.23 | 1.82 |
| Length of forcer | mm | 100 | 184 | 268 |
| Unit mass of stator | kg/m | 2 | 2.7 | 2.7 |
| Stator length | mm | 96/144/288 | | |
| Insulation class | - | B | | |
| Protection class | - | IP56 | | |
| Operating temperature | °C | 0 to 60 | | |
| Storage temperature | °C | -15 to 70 | | |

Note:
1.Specifications are measured at an ambient temperature of 25°C and depend on the heat dissipation conditions.
2.Resistance is measured with DC current and includes a standard cable length of 0.5 m.
3.Inductance is measured at a frequency of 1 kHz.
4.Specifications are subject to change without prior notice.
5.Standard cable lengths: 0.5 m and 3 m. Custom lengths on request.

| Wiring Definition | Installation Instructions | Maintenance Instructions |
|---|---|---|
| | | |

| ITEM | DATE | MODIFIED | DESCRIPTION | APPD |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TKL | SCALE | UNIT | | | | | | | Model | TPM48-S1/S2/S3 | | | |
| | 1:X | mm | | | | | | | Desc | Forcer unit | | | |
| | GENERAL TOLERANCE | | | | | | | | Surface | | | DRN | Tang |
| | Up to 6 | 6 to 30 | 30 to 120 | 120 to 300 | 300 to 600 | | | | DWG.NO | | | CHK | Chen |
| | ±0.1 | ±0.2 | ±0.3 | ±0.4 | ±0.5 | | | | Sheet | 1-1 | | APPD | Le |
| TKOOLLE MOTION CONTROL INTERNATIONAL CO.,LIMITED | | | | | | | | | DATE | 17-Jul-25 | | | |