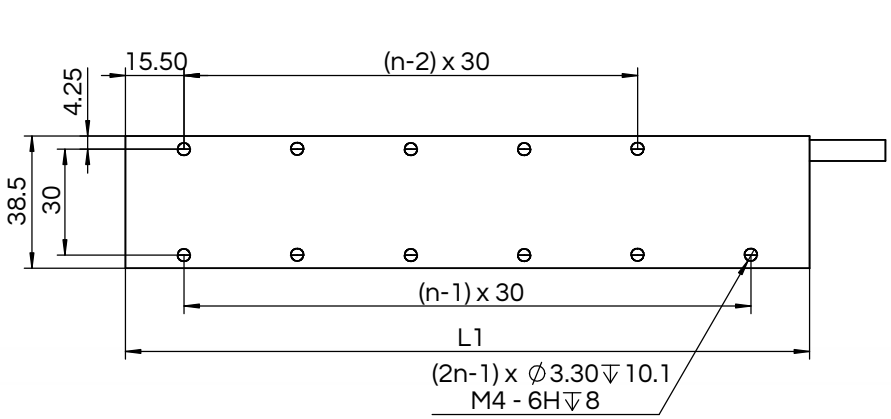
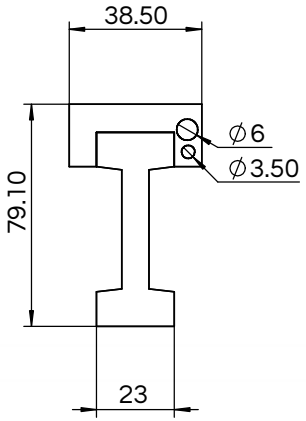
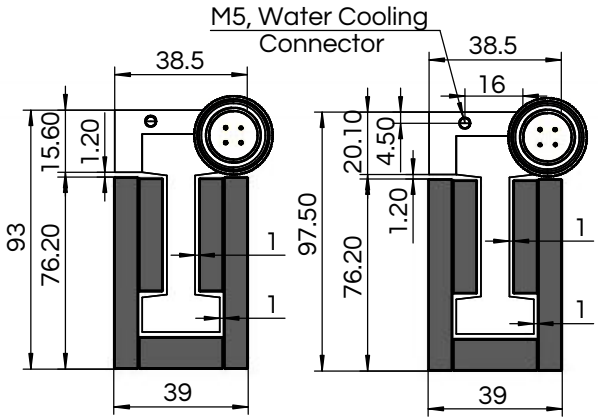



| Technical data | Unit | TUM4-S1 Series | TUM4-S2 Series | TUM4-S3 Series |
|---|---|---|---|---|
| Continuous force | N | 67.4 | 134.7 | 202.1 |
| Continuous force (Water-cooled) | N | 77.7 | 155.4 | 233.1 |
| Peak force | N | 336.8 | 673.5 | 1010.3 |
| Force constant ±10% | N/Arms | 25.9 | 51.8 | 77.7 |
| Back EMF constant | Vpeak/(m/s) | 21.2 | 42.5 | 63.7 |
| Motor constant at 25°C | N/Sqrt(w) | 9.3 | 13.3 | 16.4 |
| Resistance at 25°C | Ω | 3.9 | 7.6 | 11.3 |
| Inductance ±35% | mH | 3.5 | 6.8 | 10 |
| Electrical time constant | ms | 0.9 | 0.9 | 0.9 |
| Continuous current | Arms | 2.6 | 2.6 | 2.6 |
| Continuous current ( Water-cooled ) | Arms | 3 | 3 | 3 |
| Peak current | Arms | 13 | 13 | 13 |
| Continuous power dissipation at 100°C | W | 52.7 | 102.6 | 152.2 |
| Max. winding temperature | °C | 100 | 100 | 100 |
| Thermal dissipation constant | W/°C | 0.6 | 1.2 | 1.8 |
| Max. DC bus voltage | V | 310 | 310 | 310 |
| Magnetic period | mm | 60 | 60 | 60 |
| Attraction force | kN | 0 | 0 | 0 |
| Weight of forcer | kg | 0.3 | 0.6 | 0.9 |
| Length of forcer | mm | 61 | 121 | 181 |
| Unit mass of stator | kg/m | 15 | 15 | 15 |
| Insulation class | - | B | | |
| Protection class | - | IP00 | | |
| Operating temperature | °C | 0 to 45 | | |
| Storage temperature | °C | -15 to 75 | | |

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.

## Motor Assembly




| Forcer | Dimensional Variations | |
|---|---|---|
| | $L_1$ | n |
| TUM4-S1 | 61 | 2 |
| TUM4-S2 | 121 | 4 |
| TUM4-S3 | 181 | 6 |

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

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

| | | | | | |
|---|---|---|---|---|---|
| TKL | SCALE 1:X | UNIT mm | | Model | TUM4-S1/S2/S3 |
| | | | | Desc | Forcer unit |
| | GENERAL TOLERANCE | | | Surface | DRN Tang |
| | Up to 6: ±0.1; 6 to 30: ±0.2; 30 to 120: ±0.3; 120 to 300: ±0.4; 300 to 600: ±0.5 | | | DWG.NO | CHK Chen |
| | | | | Sheet 1-1 | APPD Le |
| TKOOLLE MOTION CONTROL INTERNATIONAL CO.,LIMITED | | | | DATE | 17-Jul-25 |