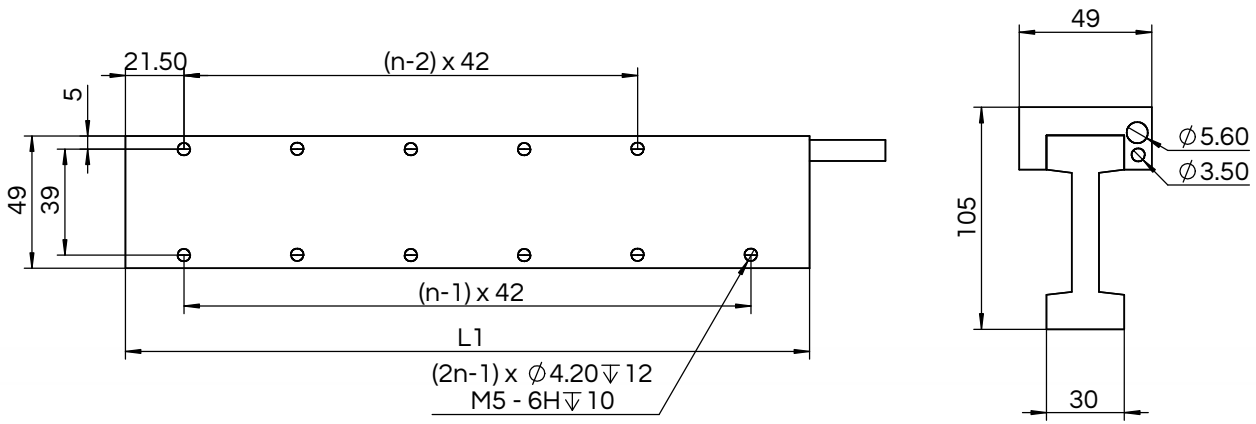
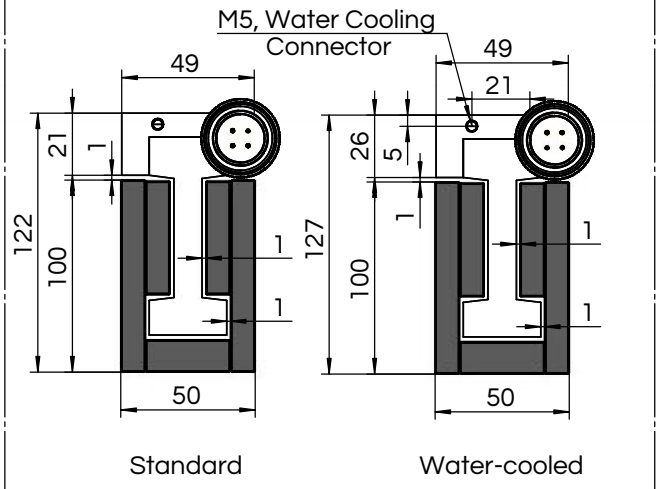


Motor Assembly



Forcer	Dimensional Variations	
	L_1	n
TUM5-S1	85	2
TUM5-S2	169	4

Technical data	Unit	TUM5-S1 Series	TUM5-S2 Series
Continuous force	N	116.8	233.5
Continuous force (Water-cooled)	N	128.4	256.9
Peak force	N	700.5	1401
Force constant ±10%	N/Arms	38.9	77.8
Back EMF constant	Vpeak/(m/s)	32.7	65.4
Motor constant at 25°C	N/Sqrt(w)	13.4	19.2
Resistance at 25°C	Ω	4.2	8.2
Inductance ±35%	mH	7	14
Electrical time constant	ms	1.7	1.7
Continuous current	Arms	3	3
Continuous current (Water-cooled)	Arms	3.3	3.3
Peak current	Arms	18	18
Continuous power dissipation at 100°C	W	75.6	147.6
Max. winding temperature	°C	100	100
Thermal dissipation constant	W/°C	0.6	1.2
Max. DC bus voltage	V	310	310
Magnetic period	mm	84	84
Attraction force	kN	0	0
Weight of forcer	kg	0.7	1.5
Length of forcer	mm	85	169
Unit mass of stator	kg/m	24.9	24.9
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.

Wiring Definition	Installation Instructions	Maintenance Instructions

ITEM	DATE	MODIFIED	DESCRIPTION	APPD

TKL	SCALE	UNIT		Model	TUM5-S1/S2
	1:X	mm		Desc	Forcer unit
	GENERAL TOLERANCE			Surface	DRN Tang
	Up to 6 / 6 30 / 30 120 / 120 300 / 300 600			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