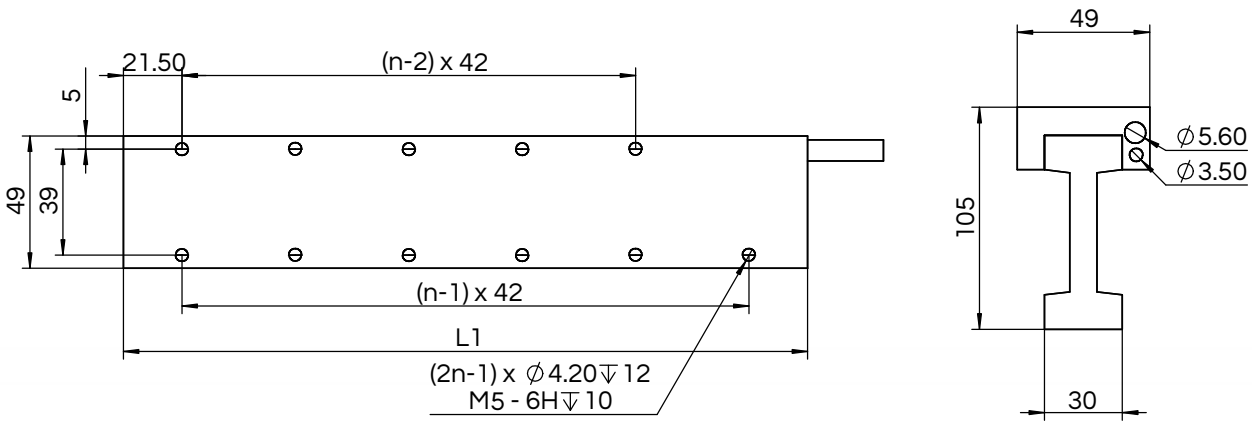
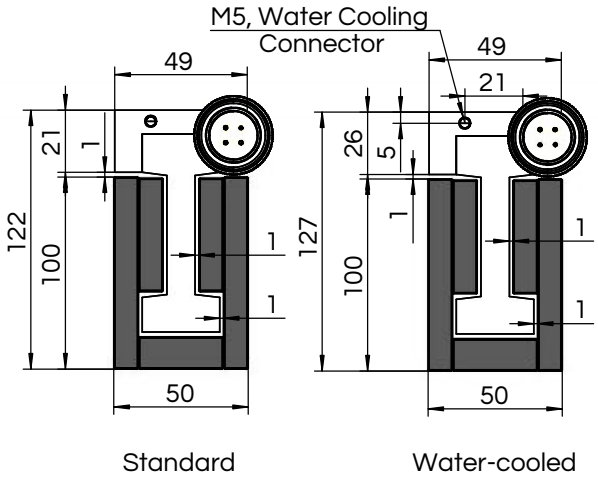


Motor Assembly



Forcer	Dimensional Variations	
	L_1	n
TUM5-S3	253	6
TUM5-S4	337	8

Technical data	Unit	TUM5-S3		TUM5-S4	
		Series	Parallel	Series	Parallel
Continuous force	N	350.3	350.3	467	467
Continuous force (Water-cooled)	N	385.3	385.3	513.7	513.7
Peak force	N	2101.5	2101.5	2802	2802
Force constant ±10%	N/Arms	116.8	58.4	155.7	77.8
Back EMF constant	Vpeak/(m/s)	98.1	49	130.8	65.4
Motor constant at 25°C	N/Sqrt(w)	23.6	23.8	27.3	27.3
Resistance at 25°C	Ω	12.2	3	16.2	4.1
Inductance ±35%	mH	21	5.3	27.8	7
Electrical time constant	ms	1.7	1.7	1.7	1.7
Continuous current	Arms	3	6	3	6
Continuous current (Water-cooled)	Arms	3.3	6.6	3.3	6.6
Peak current	Arms	18	36	18	36
Continuous power dissipation at 100°C	W	219.6	216	291.6	291.6
Max. winding temperature	°C	100	100	100	100
Thermal dissipation constant	W/°C	1.8	1.8	2.4	2.4
Max. DC bus voltage	V	310	310	310	310
Magnetic period	mm	84	84	84	84
Attraction force	kN	0	0	0	0
Weight of forcer	kg	2.2	2.2	2.9	2.9
Length of forcer	mm	253	253	337	337
Unit mass of stator	kg/m	24.9	24.9	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

SCALE	UNIT		Model	TUM5-S3/S4	
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	