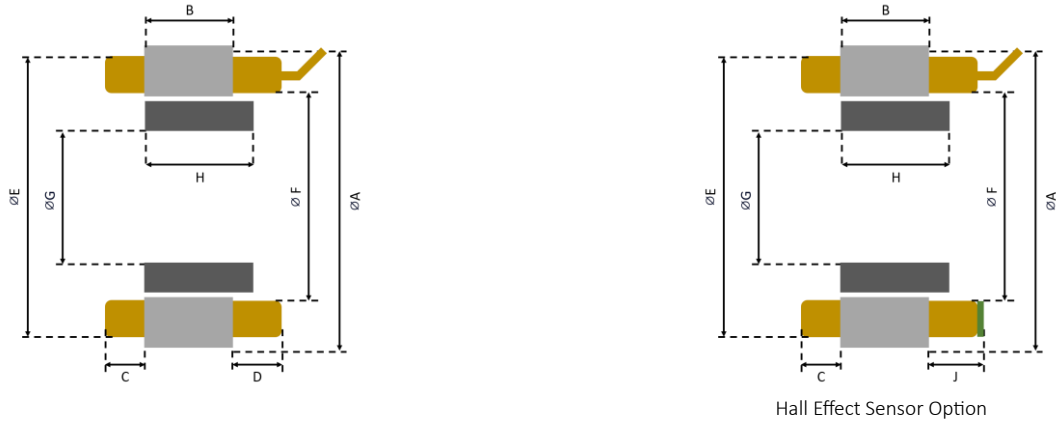


	Motor Parameters	Symbols	Units	UT-TML-130-012		UT-TMH-130-012
PERFORMANCE	DC Bus Voltage	V_{DC}	V	24	48	310
	Rated Torque	T_r	Nm	3.35		3.3
	Peak Torque	T_p	Nm	6.65		7.65
	Rated Speed	N_r	rpm	245	620	3160
	No-Load Speed	$N_{no-load}$	rpm	420	850	3780
	Torque Constant	K_t	Nm/A	0.64		0.95
	Voltage Constant	K_v	V/rpm	0.056		0.082
	Max. Cogging Torque	T_{cog}	%			<1
	Torque Ripple	T_{ripple}	%			<1
	Number of Pole	$2p$	--			24
ELECTRICAL	Rated Current	I_r	A_{rms}	5.3		3.5
	Peak Current	I_p	A_{rms}	13.25		12.25
	Line Resistance	$R_{LL}@25^{\circ}C$	Ohm	1.1 ($\pm 20\%$)		2.4 ($\pm 20\%$)
	Line Inductance	$L_{LL}@60Hz$	mH	4.1 ($\pm 30\%$)		9.2 ($\pm 30\%$)
MECHANICAL & THERMAL	Stator Weight	W_s	kg	0.96		0.96
	Rotor Weight	W_r	kg	0.28		0.28
	Total Weight	W_{total}	kg	1.24		1.24
	Mech. Time Constant	K_{mech}	ms	1.23		1.2
	Thermal Resistance ⁽²⁾	R_{th}	$^{\circ}C/W$	1.07		0.86
	Inertia	J	$kg.m^2$			3.32E-4
	Motor Constant	K_m	Nm/\sqrt{W}	0.36	0.23	0.1
	Rotor ID		mm			55
Stator OD		mm			130	

1. All performance and electrical specifications are obtained at 25°C ambient and may change $\pm 10\%$. 2. Housed version of motor mounted to 250 mm sq. x 10 mm aluminum heat sink (maximum winding temperature is 120°C). 3. Higher torque and speed values as well as dimensions on request.

UT-TM(L/H)-130 Outline Drawing



Model	A	B	C	D	E	F	G	H	J
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
UT-TRM-130-012	130	12.5	11	13	124	82.4	55	15.1	16

Notes:

MOTOR LEADS:

UT-TM(L/H)-130-012: #14 AWG Teflon® insulated, 500 mm (optional) length, 1-Red, 1-White, 1-Black.

THERMISTOR LEADS:

#26 AWG Teflon® insulated, 500 mm (optional) length, 2-Brown or Blue

SENSOR LEADS:

#23 AWG Teflon® insulated, 500 mm (optional) length, 1-Blue, 1-Green, 1-Brown, 1-White, 1-Yellow.

UT-TM(L/H)-130 Torque-Speed Curves

Tr: Rated Torque
Tp: Peak Torque

