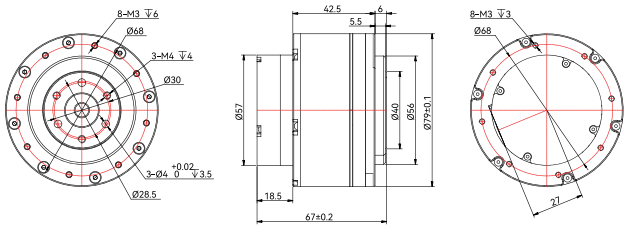
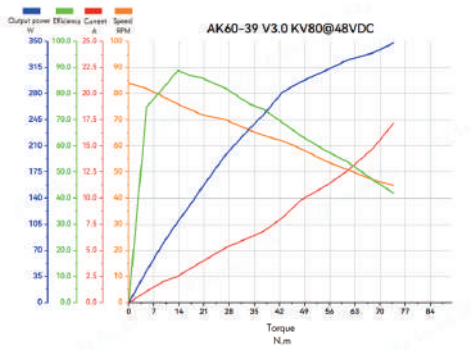
AK60-39 V3.0 KV80, Φ79*48.5mm

PRODUCT DRAWING



ANALYTICAL GRAPH OF MOTOR OPERATION



BASIC SPECIFICATIONS

Application	Legged Robot,Exoskeleton,AGV	Peak torque (Nm)	72
Driving way	FOC	Peak current (ADC)	17
Operation ambient temperature	-20℃~50℃	No-load speed (rpm)	98
Winding Type	Star	KV (rpm/V)	80
Insulation Level	C	KT (Nm/A)	0.12
Insulation High-voltage	AC 500V5mA/2s	KE (V/krpm)	12.5
Insulation resistance	DC 500V 10mΩ	Phase to phase resistance (mΩ)	600
Number of Slots	24	Phase to phase Inductance (μH)	670
Pole Pairs	14	Rotor Inertia (gcm^2)	305
Reduction Ratio	39:1	Motor constant (Nm/√W)	0.15
Back drive (Nm)	1.4	Mechanical Time Constant (ms)	2.39
Backlash (arcmin)	15	Maximum Torque Density (Nm/kg)	96
Temperature sensor	NTC MF51B 103F3950	CAN connector	A1257WR-S-3P
Noise dB away the motor	65cm	UART connector	XT30PW-M
Basic dynamic load rating Cr(N)	2000	Inner loop encoder type	Magnetic MT6835
Basic static load rating Cor(N)	2520	Inner ring encoder resolution	21bit
Rated voltage (V)	48	Outer ring encoder type	Magnetic MT6835
Rated torque (Nm)	24	Outer ring encoder resolution	21bit
Rated speed (rpm)	70	Number of encoder	2
Rated current (ADC)	4.5	Weight (g)	750